

ATTACHMENT A: PROPOSAL REQUIREMENTS & SPECIFICATIONS EQUALIS GROUP: SCOREBOARDS, DIGITAL DISPLAYS, AND AUDIO SYSTEMS WITH RELATED SERVICES & SOLUTIONS PROGRAM

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Section 1. General Guidelines

1.1. Instructions for Completing Attachment A

The specific requirements and proposal specifications for this Program are detailed in this <u>Attachment A – Technical Proposal Requirements & Proposal Specifications</u>. <u>Attachment A</u> is provided to Bidders in an editable Microsoft Word form so that it can easily serve as the base document for a Bidder's Technical Proposal. Bidders should incorporate their Technical Proposal responses directly into this document and include referenced attachments separately.

Use the following electronic file naming convention for naming your Technical Proposal prior to uploading your completed Technical Proposal to Bonfire: *Technical Proposal – Bidder Name.docx*.

For sections of <u>Attachment A</u> structured like the example below, simply click in the green cell on the "Click here to enter response" text and either type in or paste (using the *Paste Special > Merge Formatting* function in Microsoft Word) your response.

1.1.1.	Formation. In what year was the company formed? For how long has your company been operating under its present business name? If your company has changed its business name, include the most recent prior business name and the year of the name change.
Click here	to enter response.

For sections of <u>Attachment A</u> structured like the example below, click on the "Yes" checkbox if your solution <u>fully provides</u> the defined requirement. Click on the "No" checkbox if your solution does not provide or only provides part of the defined requirement. The green cell is included for Bidders to provide any additional information or capabilities relating to that defined requirement. For example, if your solution i) provides more capabilities around that requirement, ii) meets some, but not all of that requirement, or iii) does not meet the defined requirement, but provides an alternative solution for the Proposal Review Team's ("PRT's") consideration, click in the green cell on the "Click here to provide additional commentary, if necessary." text and either type in or paste (using the *Paste Special > Merge Formatting* function in Microsoft Word) clarifying or additional information as appropriate.

1,1,2.	Design-Build. If yes, describe your design-build capabilities or services.	Yes No
Click here t	o provide additional commentary, if necessary.	

1.2. Trade Secrets

Bidders are encouraged to review <u>RFP Section 3.4 – Trade Secrets Prohibition; Public Information Disclaimer</u> in conjunction with developing their responses to this RFP. Any information provided by a Bidder in its proposal that is not marked as trade secret information shall be deemed to be public records in accordance with Ohio law.

1.3. Attachments

Bidders may incorporate additional documents by reference as part of their response to Attachment A - Technical Proposal Requirements & Proposal Specifications. For example, you may want to include brochures, charts, or graphs in response to specific questions included in this Attachment A. Bidders should clearly state in their response to questions in Attachment A whether any specific documents are incorporated in their proposal by reference. In the event the attached documents are not references or referenced correctly, the PRT may exclude those attachments from consideration when scoring proposals.

The file names of such referenced documents that are included in a Bidder's electronic Technical Proposal submissions and uploaded to Bonfire should include, in the following order: i) Technical Proposal, ii) Bidder's name, iii) the Section number of the question for which the file is included as part of the response, and iv) a brief description of what is included in the electronic file. For example, if a Bidder references an attachment that includes financial statements in response to **Section 3.2.1.**, the following electronic file name would be appropriate: **Technical Proposal – Bidder Name – Section 3.2.1. – Financial Statements.pdf**.

Section 2. Initial Qualifying Criteria

2.1. Completing & Submitting Initial Qualifying Criteria Documentation

As described in <u>RFP Section 5 – Criteria for Proposal Evaluation & Selection</u>, Bidders must complete and provide executed originals of the following documents as part of the proposal Bidders submit. <u>Equalis Group will not consider a Bidder's Technical and Cost Proposals unless these forms are properly completed and submitted as part of the Bidder's proposal.</u>

2.1.1.	Attachment C – Required Bidder Information & Certifications. This document includes information about the Bidder key points of contact for proposal and legal questions that may arise during Equalis Group's review of the response, minoring business enterprise and certifications, required affirmations subject to Ohio Revised Code guidelines, equal employment opportunity questions, questions regarding the subcontracting of certain elements of a Bidder's service delivery the Members, and confirmation that Bidder has reviewed and annotated, if applicable, the Equalis Group model i) Master Agreement, and ii) Administration Agreement entered into with Winning Suppliers.		
Confirmed	d – No Additional Comments		
2.1.2.	Attachment D – W-9. Bidders must complete the W-9 form and include the completed W-9 form in their response.		
W-9 is Att	W-9 is Attached and Submitted.		
2.1.3.	Does your proposal include the properly completed and executed <u>Attachment C</u> and <u>Attachment D</u> ? \boxtimes Yes \square No		
Confirmed – No additional Comments			



Section 3. Bidder Overview & Qualifications

3.1. Company Information

3.1.1.	Company Nam	e & Address.	
Company Name: NevcoSports, LLC			
Headquarters Street Address: Nevcosports, EEC 301 East Harris Ave.			
City, State	& Zip Code:	Greenville, IL 62246	
Main Telep	hone Number:	618-664-0360 or 800-851-4040	
Website:		www.nevco.com	
3.1.2. Formation. In what year was the company formed? For how long has your company been operating under its present business name? If your company has changed its business name, include the most recent prior business name and the year of the name change. Nevco was established in 1934. We have operated under Nevco Scoreboard Company, Nevco, Inc and in 2017 we changed our name to Nevco Sports. Legal Structure. Check the box next to the option that best describes the company's legal structure. Include requested narrative in the space provided.			
	Corporation – provide the State of incorporation and Deleware – Private LLC Corporation Owned by Dominus Capital		Deleware – Private LLC Corporation Owned by Dominus Capital LLC
	Partnership – pronames of all partnership	rovide the State of registration and the rtners.	Click here to enter response.
		ship – provide the State of registration nd title of the principal.	Click here to enter response.
		provide the State of registration and titles of all principals.	Click here to enter response.
	Other – provio	le detailed description of corporate wnership.	Click here to enter response.

3.2. Financial Strength & Legal Considerations

	Financial Strength. Provide three (3) years of company and any parent company financial statements or other documents
	that speak to the financial strength of the company, such as the most recent Annual Report to Shareholders and 10K
	Report (if applicable) or audited financial statements, including income statement and balance sheet. Note: you may mark
3.2.1.	this information as a "Trade Secret" per the terms of RFP Section 3.4 – Trade Secrets Prohibition; Public Information
	<u>Disclaimer</u> and provide your response to this question in a separate electronic file that includes a "Trade Secret"
	watermark. Any company financial information provided should be included as part of the Technical Proposal. The proposal
	scoring of this Section 3.2.1. for Bidders that do not provide any financial information will be zero/fails to meet.



Because we are a privately held corporation we do not dislose our private financial information. Our financial stability is demonstrated by our 80 + years in business and hundreds of thousands of installations worldwide. We have well established and long-term relationship will all of our vendors. We have included a letter from our lender BMO Bank to validate our financial stability. Should you require specific details that you may need please contact our corporate controller Nicole McGrievy at nmcgrievy@nevco.com or 618-664-0360.

3.2.2. **Bankruptcy & Insolvency.** Describe any bankruptcy or insolvency for your organization (or its predecessors, if any) or any principal of the firm in the last three (3) years.

None

3.2.3. Litigation. Describe any litigation in which your company has been involved in the last three (3) years and the status of that litigation.

None

3.2.4.

3.2.5.

Mandatory Contract Performance Disclosure. Pursuant to RFP Section 3.13, disclose whether the your company's performance and/or the performance of any of the proposed subcontractor(s) under contracts for the provision of services that are the same or similar to those to be provided for the Program which is the subject of this RFP has resulted in any "formal claims" for breach of those contracts. For purposes of this disclosure, "formal claims" means any claims for breach that have been filed as a lawsuit in any court, submitted for arbitration (whether voluntary or involuntary, binding or not), or assigned to mediation. For any such claims disclosed, fully explain the details of those claims, including the allegations regarding all alleged breaches, any written or legal action resulting from those allegations, and the results of any litigation, arbitration, or mediation regarding those claims, including terms of any settlement. While disclosure of any formal claims will not automatically disqualify a Bidder from consideration, at the sole discretion of Equalis Group, such claims and a review of the background details may result in a rejection of a Bidder's proposal. Equalis Group will make this decision based on the Proposal Review Team's determination of the seriousness of the claims, the potential impact that the behavior that led to the claims could have on the Bidder's performance of the work, and the best interests of Members.

No formal claims for any breach of contracts.

Mandatory Disclosure of Governmental Investigations. Pursuant to RFP Section 3.14, indicate whether your company and/or any of the proposed subcontractor(s) has been the subject of any adverse regulatory or adverse administrative governmental action (federal, state, or local) with respect to your company's performance of services similar to those described in this RFP. If any such instances are disclosed, Bidders must fully explain, in detail, the nature of the governmental action, the allegations that led to the governmental action, and the results of the governmental action including any legal action that was taken against the Bidder by the governmental agency. While disclosure of any governmental action will not automatically disqualify a Bidder from consideration, such governmental action and a review of the background details may result in a rejection of the Bidder's proposal at Group's sole discretion. Equalis Group will make this decision based on the Proposal Review Team's determination of the seriousness of the claims, the potential impact that the behavior that led to the claims could have on the Bidder's performance of the work, and the best interests of Members.

No governmental actions or investigations.

3.3. Industry Qualifications

Company Identification. How is your organization best identified? Is it a manufacturer, distributor/dealer/reseller, or service provider? Based on your answer, please provide a response to question **3.3.1.1** or **3.1.1.2**.



Manufacturer

Authorization. If your company is best described as a distributor/dealer/reseller (or similar entity), please provide your written authorization to act as a distributor/dealer/reseller for the manufacturer of the products proposed in this RFP. If applicable, is your dealer network independent or company owned?

Click here to provide additional commentary, if necessary.

3.3.1.2. Network Relationship. If your company is best described as a manufacturer or service provider, please describe your direct sales and service force and how your dealer network operates to sell and deliver the Products & Services proposed in this RFP. Is your direct sales force employed by your company or by a third party? Please explain.

We have a comprehensive sales organization that covers North America. 15 years ago all of our sales were conducted through indepent reps and dealers. Today 95 % of our salesforce are company employees. We have a few remaining geographic areas (5%) where are sales are conducted through an independent sales person. These few independents have all been representing Nevco products for 20 years and the focus of their business is exclusively scoring and display solutions. We have over 50 sales people throughout North America

Industry Experience. For how long has your company been in the scoreboards, digital displays & audio systems and/or related products and services industry? What percentage of your company's revenue in each of the last three (3) full calendar years was generated from the provision of scoreboards, digital displays & audio systems and/or related products and services?

We have been doing scoreboards, digital displays and audio systems since 1934. 100 % of our revenue is from these categories.

3.3.3. Geographic Reach. Describe your company's service area in the United States (e.g., nationwide, the continental United States, or specific states or regions). If your company does not currently provide services nationwide, describe your plans/timeframes to achieve nationwide service provision, if applicable.

We cover 100 % of North America. A very small percentage of our business is international but the overwhelming majority is in North America.

3.3.4. Certifications and Licenses. Provide a detailed explanation outlining the licenses and certifications that are i) required to be held, and ii) actually held by your organization (including third parties and subcontractors that you use). Has your company maintained these certifications on an ongoing basis? If not, when and why did your company lose any referenced certifications?

We have longstanding relationship with installation companies all over North America. These companies typically hold general contractor and electrical liscenses in the markets they serve. We have DSA plans for work in California which allows us to pre-check projects verusus running all projects through the full DSA process. We have over 20 engineers and project managers on staff in all disciplines: mechanical, electrical, structural, software, etc. We use structural engineers throughout North America to "stamp" our projects.

3.4. Public Sector Focus

3.4.1. **Public Sector Contract Vehicles.** What Public Sector contract vehicles (e.g., state term contracts, General Services Administration schedules, group purchasing organization contracts, etc.) does your company have in place to provide



scoreboards, digital displays & audio systems and/or related products and services to public sector entities under an exemption from the standard public sector bid/RFP process? For each contract vehicle, when was the contract established, what is the expiration date, and is the award sole source or multi-source (i.e., is your company the only supplier for the spending category or are multiple competing suppliers included in the contract vehicle), and how much annual revenue your company generated through the contract(s) in each of the last three (3) calendar years?

Sourcewell / NJPA \$1.1 M Per Year (3 Year Avg.) Awarded to 2 companies (Nevco and 1 other)

BuyBoard \$2.3 M Per Year (3 Year Avg.) Multiple Awards

CoStars \$650 K M Per Year (3 Year Avg.) Multiple Awards

Public Sector Success. What is the i) total dollar amount, and ii) percentage of your company's total annual revenue

generated by sales to educational institutions (i.e., K-12 schools & school districts and high education) and local governments (i.e., municipalities, counties, special districts, and state agencies)?

We only sell to Educational Institutions and local governments. We do not do business in the commercial space. In 2019 our total revenue was just under \$50,000,000. 100 % of this revenue was to the aforementioned entities.

Public Sector Strategic Growth Plan. Describe your company's three to five-year local government, K-12, and higher education sales objectives and the key elements of your strategic plan to achieve those objectives. What is the total annual dollar value of your company's revenue generated by sales to local governments and educational institutions in each of the last three (3) calendar years? What percentage of your company's total annual revenue is generated by sales to local governments and educational institutions?

Our 3-5 year strategic growth plans can be broken down in a couple of strategic initiative: aquistions, technology, training, leads, quality, coverage and product development. Everyones goals in the company are aligned with these strategic initiatives. The last 3 years of sales to these markets was \$126,000,000. . 100 % of this was to the aforementioned entities.

3.5. Customer References

Provide references of at least five (5) local government or educational institution customers for which your company has provided products and services similar in nature and scope to those defined in this RFP in the last three (3) years. Your references should include a mix of types and sizes of public sector entities such as municipalities, K-12 schools or schools districts, and colleges and universities. Each reference should include:

- Customer name and location;
 - Customer contact person and their title, telephone number, and email address;
 - A brief description of the products and services provided by your company;
 - Customer relationship starting and ending dates; and,
 - Notes or other pertinent information relating to the customer and/or the products and services your company provided.

3.5.1.



2.)University of Saskatchewan – 11 Innovation Blvd. – Saskatoon, SK S7N5B2 – Michael Jenkins – Associate Athletics Officer – Program Development – Michael jenkins@usask.ca 306-966-1108 (O) 306-281-6555 (M) Over the past 5 years we have installed a center hung video display with a ring and two additional video displays and scorers tables in their arena. We are currently working on a new video display for their football stadium.

- 3.)Little League International 570 East Central Avenue South Williamsport, PA 17702 Andrew Frederick Sr. Director -Information Services <u>afrederick@littleleague.org</u> 570-326-1921 (O) 570-850-8073 (M) We installed 3 new video displays and a few new
- scoreboards at the LLWS in 2018. We also installed new control system to integrate with their broadcast and connection to ESPN. We also created a ton of digital content for their new displays through our HYPE division.
- 4.) Missouri Southern State University 3950 Newman Road Joplin, MO 64801 Jared Bruggeman Director of Athletics 417-625-9317(O) <u>Bruggeman-j@mmsu.edu</u> We have worked with MSSU over the past 8 years. We have installed new baseball and softball scoreboards. We also installed a center hung video display, scoreboards and LED tables in their arena. Two years ago we installed one of the largest video displays in division 2 athletics on their football field. It was a 30' x 66' Video Display.
- 5.Effingham High School 1301 W. Grove Ave. Effingham, IL 62401- David Woltman Athletics Director woltmand@u40qw.effingham.k12.il.us 217-540-1269. All of the scoreboard at Effingham High School are Nevco. We have had a relationship there for 20 + years. Most recently we added new stat panels, locker room clocks and an indoor video to their gymnasium.

3.6. Insurance Coverage

U.U.	modranice Goverage	
3.6.1.	General Liability, Property & Automobile Insurance. If your company is selected as the Winning Supplier, during the term of any agreements between your company and Equalis Group, and for two (2) years following expiration or termination of such agreements, your company, at its own expense, will maintain and will require that its agents, subcontractors, or suppliers engaged in your company's performance of its duties under such agreements, maintain general liability insurance, property insurance, and automobile insurance (at a minimum, in the amount of \$1,000,000 per occurrence/\$5,000,000 annual aggregate) applicable to any claims, liabilities, damages, costs, or expenses arising out of its performance under such agreements. Confirm that your company either a) has, or b) will purchase insurance coverage as described herein.	⊠ Yes □ No
No addi	tional comments.	
	Employee Dishonesty – Members. The Winning Supplier shall be held fully liable for any and all dishonest	
3.6.2.	acts of its employees and/or its subcontractor's employees. Coverage must be provided for Third Party Employee Dishonesty, covering all employees and all officers of your company and any subcontractors, in an amount not less than \$100,000 per occurrence. Confirm that your company either a) has, or b) will purchase insurance coverage as described above covering all employees and all officers of your company, in an amount not less than \$100,000 per occurrence for each Equalis Group Member utilizing the Program.	⊠ Yes □ No
No addi	tional comments	
3.6.3.	Third Party Employment Practice Liability – Members. The Winning Supplier shall be held fully liable for any and all employment practice acts of its employees and/or its subcontractor's employees, such as, but not limited to, sexual harassment and discrimination. Coverage must be provided for employment practice liability, covering all employees and all officers of your company and any subcontractors, in an amount not less than \$1,000,000 per occurrence. Confirm that your company either a) has, or b) will purchase insurance coverage as described above covering all employees and all officers of your company,	⊠ Yes □ No



	in an amount not less than \$1,000,000 per occurrence for each Equalis Group Member utilizing the Program.	
No addit	tional comments.	



Section 4. Products and Services

4.1. Products

Note: The products priced and included in <u>Attachment B – Cost Proposal</u> will be used to define the products that will be offered to Equalis Group Members.

4.1.1. **Product Description(s).** Provide a detailed description of the products you are offering as a part of your proposal.

Nevco is a single source manufacturer for all below items:

Traditional Scoreboards: Scoring for (including but not limited to) Baseball/Softball, Basketball, Volleyball,

Wrestling, Football, Hockey, Soccer, Swimming, Cricket, Tennis, Track/Field, Lacrosse.

LED Message Centers: Offer both full color and monochrome options in a variety of sizes. Uses for these (but not lirnted to): Sports Facilities, Church/Community centers, Transportation Displays, Billboards, and Advertisting Displays.

LED Video Displays: Offer multiple pixel pitch options and sizes. Customizable to the client's needs. Displays all items used in a Sports Video Display board (Live Video, Instant Replay, Advertising Commercials, DVD clips, etc).

LED Marquees: Offer both full color and monochrome options in a variety of sizes.

Proprietary Software: LED products (mentioned above) are operated through our proprietary software. Software is the "brains" behind LED displays allowing operators to control what's shown to crowds.

Graphic Design Creative Services: Develop and create numerous custom branded graphics, fan prompts, virtual scoring, important messages, etc to showcase on LED displays.

Stadium Sound Systems: Offer options of superior quality in outdoor venues. Integrated stadium sound system for multiple sized venues. We offer 2 sizes/types of systems in order to fit all our customer's needs.

Scorer's Tables: Options for static, rear-lit, or LED scorer's tables. LED Scorers Tables integrate seamlessly with indoor video displays through our software.

Signage and Decorative Trusswork: Options for adding sponsor/team information. These can be integrated with the scoreboard/video displays or stand alone displays.

Mobile Scoring App: Facilities with Nevco scoreboards can provide real-time scoring data to fans who cannot be there in person through our mobile device app.

4.1.2. Differentiators. Describe what differentiates your company's products from your competitors.

We are a vertically integrated single source JIT manufacturer. We manufacture, service and support everything we sell. All of our products are manufactured to UL standards which are the highest in the industry. We have an incredibly low failure rate which makes our products some of the lowest total cost of ownership products of any products in the marketplace today. We are a hands on company we supports our product for the life of the product. Many of our competitors quit supporting models after 10 years. We still supports boards in the field that are over 30 years old. We have a 99.9 % on time shipment history and we have the fastest lead times in the industry. Most importantly, we are always accessible and we are easy to do business with.

4.1.3. **Public Alert System.** Describe the functionality of your equipment or products in integrating with public alert system or applications (automated weather, emergency, public safety notifications, etc.).

Yes our equipment can work with all public alert systems.

4.1.4. Software & Controls. Describe the controls and software used in support of your product offering.



All of our controls and software and manufactured and supported in-house. We have several different types of controls for operations of scoreboards. We have both handhelp and desktop versions. We have a cloud based software called mycloud to operate our led tables and marquees. Lastly, we have Display Director Software to operate our video display equipment. This is a comprehensive game management clip server software. Again, all software in developed, manufactured and supported by Nevco. We have enclosed our manual for the primary control most people use along with the manuals for our My Cloud and Display Director software as well. In Q1 - 2021 we are launching a game-changing new cloud based software platform to control every product we make with any device you want. This new platform will give us the best operating and control system in the industry. We have worked on this for over 3 years and have invested over \$2M to bring this new technology to the market. We are in the final development and testing stage currently. We have attached several attachments of the manuals for our controls and software for your review.

4.2. Manufacturing

Manufacturing. Describe your manufacturing operations including, but not limited to, any ISO certifications or operational advantages.

Nevco products are designed and manufactured at locations in Greenville and Highland Illinois, shipping out of Highland with best-inclass lead times and on-time shipment. Nevco products are UL listed and as a member of the UL certification program, UL independently makes 26 unannounced visits to both locations and inspects manufacturing for safety and quality. Nevco products are also designed and tested to regulatory conformance of UL, CE, FCC, OSHA, CSA, and Industry Canada. Nevco products are built and shipped to environmental Green initiatives ROHS, ICCP, and utilize raw materials that are GreenCircle certified and conform to Low VOC standards. Nevco products and installation standards meet requirements of IBC and ASCE exceeding a basic design wind speed of 180MPH at a height of over 50 feet.

4.2.2. **Testing.** Describe any quality control, reliability or durability testing on the equipment and products included in your proposal.

Nevco has the highest quality standards ensured by our ASQ certified quality technicians who meticulously inspect incoming material and manufacturing processes to engineering specifications. Components are tested in production at each stage of assembly and also as a system in the culmination of the final product. All of Nevco's designs are tested in accordance to our own proprietary performance requirements for stadium sports equipment and indoor/outdoor signage as well as formalized testing including, but not limited to the latest releases of UL48, NEC article 600, FCC CFR 47 PART 15, ICES-003, EN 55032:2015 (CISPR 32), EN 55022:2010, AS/NZS CISPR 32:2015 and EN 61000-6-3:2007/A1:2011, CAN ICES-3(A) / NMB-3(A), CE, ASCE7-10, and International Building Code (IBC).



Section 5. Services

5.1. Turnkey Capabilities
Note: The capabilities priced and included in <u>Attachment B – Cost Proposal</u> will be used to define the capabilities that will be offered to Equalis Group Members.
5.1.1. Turnkey Capabilities. Describe the capabilities available through your company and, if applicable, your authorized network of dealers and resellers that support your ability to provide turnkey solutions for Equalis Group Members. Identify which of those capabilities are provided by your company and which are provided by your network of dealers and resellers.
We want to the all and the theta and the decrease third and a spirit fault of the fall with the second decrease in the latter 200
We manufacture all products that we sell and we use third party services for the following things: stamped drawings, installation, 3 rd party control room equipment (like switchers, camera, and instant replay devices). We have the ability to do full turnkey projects for everything that we sell.
5.2. Installation
Note: The services priced and included in <u>Attachment B – Cost Proposal</u> will be used to define the services that will be offered to Equalis Group Members.
5.2.1. Installation. Is installation available as a part of your proposal? If yes, continue answering the remaining questions in 5.2.
Installation is available for everything we sell.
Installars to the installation consider performed by a company surged installation team or one of your
5.2.2. Installers. Is the installation service performed by a company owned installation team or one of your dealers or resellers?
All installations would be preferred by an authorized News factory trained installer. Our installers are not News employees
All installations would be preformed by an authorized Nevco factory trained installer. Our installers are not Nevco employees.
5.2.3. Qualifications. Describe the qualification of your installation crews. Your response may include, but is not limited to, training and certification requirements.
All of our installers have to go through a detailed certification process with our factory. We then support them with on-site project management and installation technicians in the field. We offer on-going product training and actively seek their feedback in ways to improve our products and how they are installed. We have long term relationship with hundreds of installers throughout North America. We also have the unique position that since are products are easy to install many customers actually install them with their own employees. We have detailed manuals and prints for everything we manufacturer available on our website. We attached a sample so you could see an example.
5.3. Other Services
5.3.1. Design-Build . If yes, describe your design-build capabilities or services.
We are well versed and complete hundreds of design build projects each year ranging from \$25 K to \$2 M dollars. We have multiple projects managers with over 60 years of combined experience executing design build projects ranging from Scoreboards to Video Display Systems to New Facilities. Please see the attachment for an overview of our design build process.



Training . If yes, provide a description of the training services offered. <i>Note: Training services are not limited to those provided to the members but can also extend to the training you provide you dealers, distributors, and resellers.</i>	⊠ Yes □ No
We as a company believe in the importance of training. We do offer all of the aforementioned trainings including:	
product, equipment, maintenance and operator. All of our training is standard. Our sales resources are very well train	ned
and conduct the majority of the training for our customers. We do all forms of customer training depending on the	
customer and the Nevco products they purchase.	
many cases our training is done in person, at the customer's facility.	
We do also offer virtual (remote) training sessions as well as self-paced learning through electronic channels such as	3
YouTube and our website. We also have an on-site technical team that travels to and trains customers on our video	
display projects. Our comprehensive training is always included (at no additional cost) with the purchase of our	
equipment.	
Maintenance Services. If yes, provide a description of the maintenance services included in your	
5.3.3. proposal.	⊠ Yes ☐ No
We offer both extended warranty for the products we sell and well as on-site service agreements. Our standard is 5 y	ears of parts and
5 years of bench labor. The pricing for extended warranties and on-site services are custom quoted based on the va	lue of the job and
based on the scope of services requested.	
5.3.4. Other Services. Does your company offer other services related to the scope of this RFP?	
We own a sports marketing company. We can help customer create marketing programs and or sell sponsorships of	
also own a graphics company and can help customers create custom content for their Nevco marquees and video di	spiays.



Section 6. Business Operations

6.1. Customer Service

6.1.1. Customer Service Department. Describe your company's customer service department & operations. Your description may include, but is not limited to, hours of operation, number and location of service centers, parts outlets, number of customer service representatives. Clarify if the service centers are owned by your company of if they are a network of subcontractors.

We have a lot of people at Nevco that are part of "Customer Service". Our 50 + sales people in the field are actively engaged in providing customer service by working with customers in their markets on a daily basis. Many customers utilize their sales person as a single point of contact for everything they may need. We also have a service department at our facility staffed from 8-5 M-F and extended hours during peak seasons. We also offer after hours support and have an online ticketing system and numerous self-help resources. As I previously indicated we are easy to get ahold of. We answer ourt phones on the weekends and at night. We have technicians who log into customers systems at all hours of the day and night if someone needs help.

Expedited Orders. Describe your approach to handling emergency orders and/or service. Your description may include, but is not limited to, response time, breadth of service coverage, and service level.

Since we manufacture most of our equipment in 2-6 weeks we do not have a lot of requests to expedite orders. We can and do from time to time move orders up to meet a customers request. Normally if we can work it into the normal production schedule we will do so at no additional charge. In the rare case if we have to work overtime or on Holiday additional charges would apply and those would be based on the value of the order. As an example we just completed an 18' x 40' video display system with a sound system and LED ribbon board for a Division 1 College in 3 weeks from PO to Shipping. They paid no additional charge for this. We do have the ability to overnight parts for emergency situations as well. The customer only pays for the increase in shipping costs (ground versus air).

Complaint Resolution. Describe your customer complaint resolution process. Describe how unresolved complaints are handled.

We empower our front line employees to make decisions and solve customer issues without the need to excalate them. However in the rare instance where they can not resolve something it is easy to talk to a member of our senior leadership team should our local support teams be unable to resolve an issue. We pride ourselves on being fair, honest and responsive if an issue ever arises. We would much rather take care of a customer to have a long term reference than to argue over policies, procedures or simple issues. You can even call our CEO and he will take your call or call you right back.

6.1.4. Product Returns. Describe your product return policy and procedures.

Since 100% of the products we manufacture are made to order we have very few instances where a return is requested. We have a detailed sign off off process to make sure the customer is getting exactly what they want color, image, digit color, etc. In the rare event there is a return we charge a return fee based on the value of the order. On average the retuen fee would be about 30 % of the value of the order. The reason this is a large percentage is that we make custom products so the odds are very low we could resell the product. We normally scrap out the return of any new product we sold. I would say this happens less than 2 times per year.

6.2. Order & Invoice Processing; Payment

Purchasing Options. Describe the different channels in which this contract will be made available to Equalis Group
 Members. Your response should include, but is not limited to, whether your organization will serve as the single point of contact or if the contract will be made available to your dealers and reseller to serve as the single point of contact.



Click here to enter response.	
6.2.2. Order Process. Describe your company's proposal development and order submission process.	
Our proposal process varies depending on the equipment the customer is purchasing. For a simple scoreboard p nothing more than a custom proof of the equipment they are buying and a quote. For a large complex video display a 50 + page proposal presentation with tons of detail, drawings and connection schedmatics. For large projects we have steps like signing a Project Responsibilities Document so there is not miscommunication about who is doing what have a very simple order submission process. Once we get the PO or contract in house we have an team of order process the order through our SF.com system. Once the order is released in the system it loads the information into Once the order is in the ERP system triggers are sent to engineering and manufacturing to schedule the work for process the order is entered in the system we provide the customer with an order acknowledgment and a ship date.	y system if may be ve a few additional on the project. We rentry people that o our ERP system.
6.2.3. Invoice Process. Describe your company's invoicing process.	
When we get a purchase order we run it through our order entry process to schedule it for production. After the orgenerate a shipment date and an invoice that will be sent to the customer. Our invoices breakdown all the equipment the cost of the equipment and the payment terms / remittance instructions.	
6.2.4. Payment. What is your standard payment terms? What methods of payment do your company accept?	
Our payment terms vary based on the value of the order placed and the organization that we are selling to. When s government customer we typically offer net 30 days. On very large orders we may ask for a down payment or devolutes to pay as portions of work are completed. Since we are well capitalized we are both creative and flexible valueds a little help with payment terms.	elop a schedule of
6.2.5. Financing. Does your company offer any financing options or programs?	☐ Yes ☐ No
We do offer short term financing covered by Nevco Sports. If long term financing is involved we have several 3 rd part with on the customers behalf. All of these lenders specialize in this industry and are familiar with the equipment we	
6.3. Members Contracting for Services	
6.3.1. Customer Set Up. Once an Equalis Group Member decides to accept your company's proposal for set RFP, what is the process for the Member to become a customer?	ervices as described in th
Nearly all k-12 and governmental customers are already a customer of ours. Since we have been in business for or all these institutions have done business with us at some point during this time. In the event they have not we create system which takes just a few minutes. There is really nothing to setting up a new customer in our system.	•
6.3.2. Customer Agreements. Does your company have standard customer agreements? If yes, please provide copies of any standard customer agreements and provide a response to question 6.3.3.	☐ Yes ⊠ No
We normally just work off customer purchase orders or customer contracts that they provide to us.	



6.3.3. Contracting. What is the process for reviewing, negotiating, and finalizing any customer-specific contract terms or requirements? Approximately how long does the contracting process take to complete (i.e., secure a fully executed contract document)? What is the typical term length of your customer agreements?

All contracts are reviewed by the VP of Sales and Marketing, Corporate Controller, Project Manager and COO. Normally this takes less than 5 days unless we have to involve legal in the review process. 90 % of contracts are approved without have legal review. We have been in business forover 80 years so there are not many contract terms we have not dealt with before. Typically our contracts only cover the length of time to make and install our prouducts. With regards to our GPO contracts and sponship agreements most of those are 2-5 years in length.

6.4. Bonding Capabilities

6.4.1.	Bonding. Describe your company's bonding capacity.	
Our bond	ing capacity is \$1 million single project and \$3 million aggregate.	
6.4.2.	Rating. Is your bonding obtained from a surety with an "A" rating from AM Best?	
North Am	erican Speciality Insurance Company	



Section 7. Warranty

7.1. Warranty

7.1.1.

Warranty. Provide a copy of the manufacturer's warranty. If required, please attach the warranty as an attachment as instructed in <u>Section 2.3</u> of this document. Describe notable features and/or characteristics of the warranty that a public sector customer would find interesting or appealing. How long is the warranty? Please indicate, and describe if applicable, if there are any optional extended warranty coverage available to Members. How does your warranty coverage compare to that of your competitors? Pricing related to the any extended warranty options must be included in <u>Attachment B – Cost</u> **Proposal**.

Our warranty can be found at: https://nevco.com/warranty-limitation/ Our warranty cover 5 years of parts and factory labor for all of our products. Many of our competitors offer less then 5 years or 5 years on some but not all of their products. Also many competiors also charge for bench labor.

7.1.2. Claims. Describe your warranty claims process.

We have many ways to access our service department to file a claim. We have a toll free number and we also have an on-line ticketing system on our website. We are very generous with our claims process because we are in the business of having our equipment work and having delighted customers. Our warranty claims process is described in our warranty document at:: https://nevco.com/warranty-limitation/.



Section 8. Additional Features & Other Offerings

8.1. Additional Features

Value Add. Describe any other features or capabilities relating to scoreboards, digital displays, or audio systems that would improve or enhance the Program. Your response may include, but is not limited to, ecommerce capabilities, marketing capabilities, green initiatives, and technological advancements.

Nevco utilizes aluminum made with recycled content where possible that is GreenCircle Certified.

Nevco's electronics conform to ROHS standards

The Lumber used in the crating of our products is certified in accord with the International Plant Protection Convention's adoption of the International Standards for Phytosanitary Measures.

Nevco's acrylic paint is the lowest Volatile Organic Compounds (VOC) in the industry at 50g/L.

8.2. Additional Offerings

8.2.1. Other C

Other Capabilities. Identify and describe any other products and/or services your company offers outside the primary scope of this RFP that can be made available to Equalis Group Members. Include proposed pricing for any additional products or services your company offers in Attachment B - Cost Proposal in accordance with the directions provide in RFP Section 2.3 Cost Proposal & Acceptable Pricing Formats.

No additional service. We have a very defined business of providing scoring and display solutions to sports facilities. That is all we do!



Section 9. Partnering with Equalis Group

9.1. Bidder Organizational Structure & Staffing of Relationship

9.1.1. *Primary Point of Contact for Equalis Group.* Who is the individual that will serve as Equalis Group's primary point of contact for developing and implementing a go-to-market strategy to increase Program participation by local governments and educational institutions across the country? Include the individual's name, title, a description of their role, and a resume or biography.

Eric Light- Vice President of Sales and Marketing. Eric has been in this industry for over 13 years has the overall responsibility of Nevco Sport's Sales and Marketing organization. Eric was actively involved in all our current GPO relationships.

Key Staff. Provide the names, roles, and tenure with the company of other key staff members who will be working with Equalis Group in such areas as sales management, field sales, marketing, collateral development and approval, accounting, and reporting.

Mike Lane – CEO 6 Years

Eric Light – VP Sales and Marketing – 13 Years

Jim Johannpeter – COO – 5 Years

Abby England – VP Marketing – 8 Years

Mike Spiezio – Regional Sales Manager – 8 Years

Jeff Besserman- Regional Sales Manager – 3 Years

Shelly Childerson – Regional Sales Manager – 20 Years

Scott Butler - Regional Sales Manager 15 Years

Nicole McGrievy - Corporate Controller 6 Years

Kelly Stearns - VP Technology 5 Years

9.1.3. *Organizational Chart.* Provide an organizational chart describing the roles and reporting relationships of senior management and departments or divisions within your company.

Our organization is lead by Mike Lane – CEO. All Sales and Marketing operations are led by Eric Light. All Accounting / Finance and HR operations are led by Nicole McGrievy. All Manufacturing, Service, and Engineering operations are led by Jim Johannpeter.

Sales Organization. Provide a description of your sales organization, including key staff members, the size of the organization, in-house vs. third-party sales resources, geographic territories, vertical market segmentation, segmentation by account size, inside sales, field sales, and how sales representatives are compensated (e.g., on gross revenue, profitability, or some other formula).

Our sales organization is managed through 4 Regional Sales Managers. We have 50+ sales resources throughout North America. 95 % of the resources are company employees. 5 % are independent contractors in a few select markets. We also have dedicated teams to handle New Contraction and Sports Video projects.

9.2. Contract Implementation Strategy & Expectations

Five (5) Year Sales Vision & Strategy. A piggybackable Master Agreement with Equalis Group provides your company with an opportunity to win new and renew existing local government and educational institution business through an exemption to the traditional bid/RFP process. In other words, public sector entities that want to purchase your company's



products and services can do so without having to conduct a bid or RFP. Describe your company's vision and strategy to leverage a piggybackable Master Agreement with Equalis Group to win and retain local government and educational institution business over the next five (5) years.

Nevco marketing's sole purpose is to support our sales channel. By having a close relationship with our Sales Team, we recognize the importance of this contract and with some recent investments in marketing, we are positioned to provide our Sales Consultants with tools and resources specific to Equalis Group.

We recently implemented a marketing automation platform, Pardot, that will allow us to scale our marketing operations and support our Sales Consultants like never before. With this investment comes several opportunities for us to utilize marketing automation's features to more effectively create/provide resources for our sales channel.

Develop several Nevco branded e-mails explaining Equalis Group and its benefits to member-entities.

We can target schools who are both known Equalis Group members and non-members and communicate different messages to each segment.

We can segment our database and talk to stakeholders differently. For example, an Athletic Director may not have heard of Equalis Group, but a Purchasing agent may have. Whether the school is a member or not, we can speak to these segments differently about the key points that are most important for their consideration of a project and how Equalis Group makes the process easier for all stakeholders.

Based on target prospect's interest (i.e. behaviors/actions taken on these e-mails), we can develop engagement campaigns (i.e. drip campaigns) to nurture these prospects leading them to fill out specific forms to receive more information on Equalis Group Develop unique landing pages

We can easily create landing pages to reflect key points in our messaging. For example, if an Athletic Director wants to check whether his school is an Equalis Group member, we could either point him/her to the Equalis Group website or we could develop a landing page where it will generate as a lead and one of our Sales Consultants can personally follow up and have a conversation with the AD. You can reference on our current website how we promote sourcewell. https://nevco.com/sourcewell/

Forms can also be used for non-members. By filling out a form on our landing page, we can then provide these non-members information back to Equalis Group for follow-up.

Develop internal pages on our website

One of our goals is to develop an internal website page explaining our partnership with Equalis Group and what it means for schools/organizations.

We would like to work with Equalis Group on developing these pages and get their thoughts on the "best of the best" of their member organizations' websites

By developing an Equalis Group internal page, it provides Nevco with brand credibility and wemaintain consistent language amongst our Sales Consultants.

Content / Press Releases / Case Studies / Internal Communications

Nevco writes a lot of content on the various projects we win. These provide credible references and stories for our Sales Consultants to share with prospects in the consideration phase.

9.2.2. **Driving Program Participation & Revenue.** What geographies and public sector vertical markets will be targeted and in what timeframe?

We would utilize this GPO to all geographies and focus on targeted marketing efforts in the markets you are the strongest to start with. We would then follow that up with a wider reaching marketing effort.

9.2.3. **Master Agreement Deployment with Sales Team.** How will the piggybackable Master Agreement be deployed with your public sector sales team?

With sourcewell we did a national rollout, communication and training meeting with our entire company. We would do the same with Equalis Group.



	Sales Team Incentives. How will your sales team be incentivized to leverage the Equalis Group piggyl	hackahle Master
9.2.4.	Agreement when pursuing public sector business?	backable Mastel
Our sales team is already trained to ask about GPO opportunities. We have a pretty seasoned sales organization that understands the role GPO's can play in helping them win new business. Our sales team is accustomed to helping customers buy through this method and assisting procument departments work through the process.		
· · · · · · · · · · · · · · · · · · ·		
9.2.5. Revenue Objectives. What are your revenue objectives in each of the five (5) years of the piggybackable Master Agreement?		
Since we sell scoreboards for a few thousand dollars up to video displays in the millions of dollars this would be hard to say specifically. In the past 5 years we have done well over \$10,000,000 with BuyBoard primarily in Texas because the buy lots of large video display systems. I would estimate / target a range from \$1M to \$3 M per year depending on how widely accepted and marketed the GPO contract is.		
9.3. Administrative Fee & Reporting		
9.3.1.	Administrative Fee. Equalis Group generates revenue as a percentage of the Winning Supplier's revenue from local government and educational institutions purchasing products and services from Winning Supplier through the piggybackable Master Agreement between the Winning Supplier and Equalis Group. The Administrative Fee is designed to align the interests of the Winning Supplier and Equalis Group – Equalis Group only generates revenue when the Winning Supplier generates revenue based on Program utilization by current and future Members. The Administrative Fee for this Program is two percent (2%) of the Winning Supplier's Program revenue, payable upon invoice issued by the Winning Supplier to participating Equalis Group Members. Confirm that, if selected as the Winning Supplier of this RFP process, Bidder agrees to this Administrative Fee structure.	⊠ Yes □ No
No additional comments.		
9.3.2.	Sales & Administrative Fee Reporting. Equalis Group requires monthly reports detailing sales invoiced the prior month and associated Administrative Fees earned by the 15th of each month and reports detailing the prior calendar year's sales invoiced and Administrative Fees earned within thirty (30) days following the end of the calendar year. Confirm that your company will meet or exceed this reporting requirement. If your company cannot meet this reporting requirements schedule, explain why and propose an alternative time schedule for providing these reports to Equalis Group.	⊠ Yes □ No
No additional comments		



BMO Sponsor Finance

111 West Monroe Street Chicago, IL 60603

January 22, 2020

Nevco Sports, LLC 1 Horticultural Lane Edwardsville, IL 62025

Re: Nevco Reference Letter

Nevco Sports, LLC ("Nevco") is a valued customer of BMO Sponsor Finance ("BMO"). This letter is to verify that Nevco's senior credit facilities, and all related accounts, are in good standing with BMO and the underlying Credit Agreement.

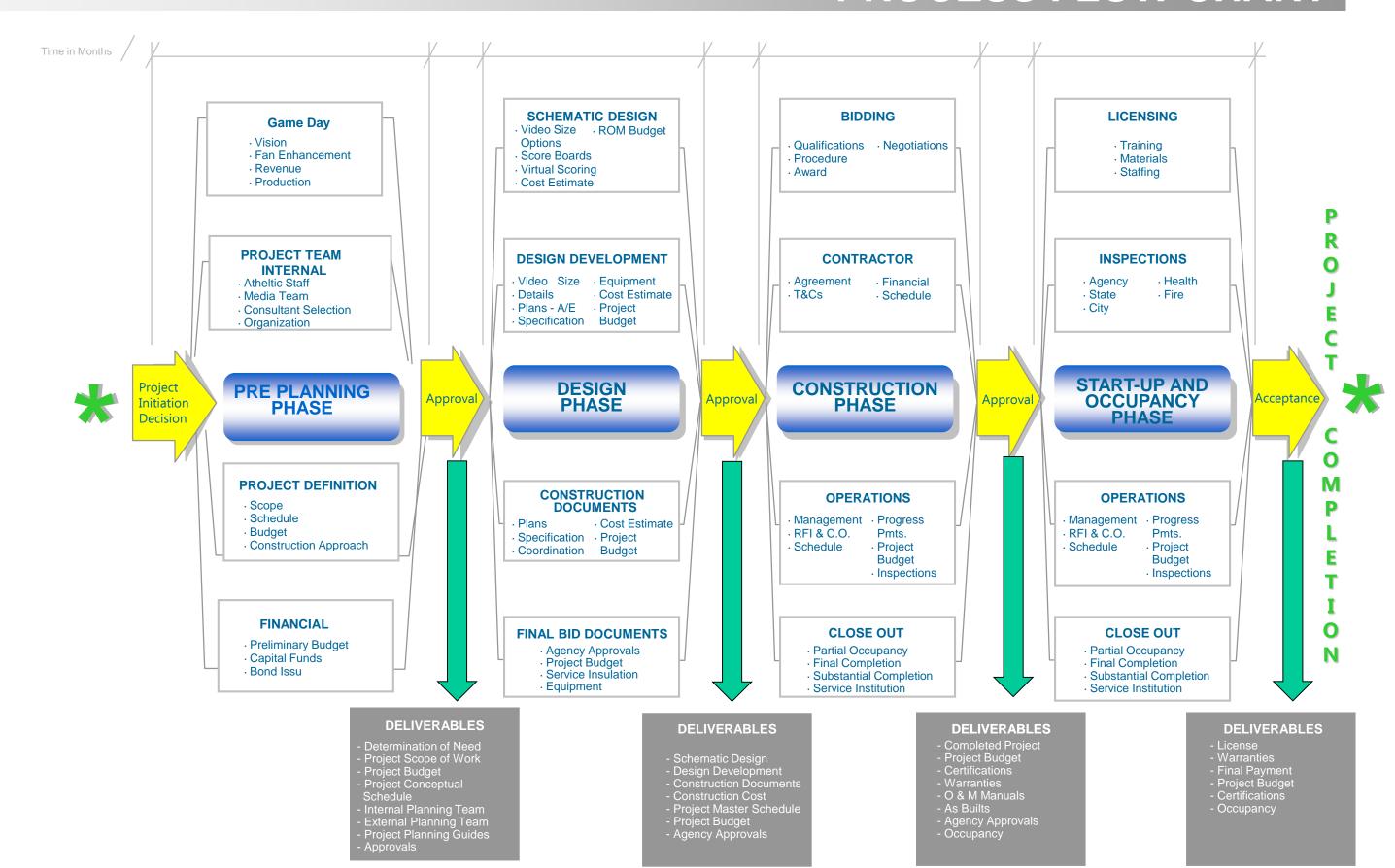
Respectfully,

Dan Weeks

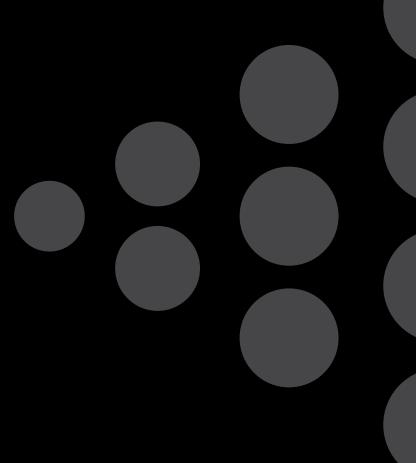
Managing Director BMO Sponsor Finance

312-461-1533

PROCESS FLOW CHART



INTEGRATED DISPLAY AND SCORING SOLUTIONS





MAXIMIZE YOUR IMPACT



WHY CHOOSE NEVCO?



For over eight decades, Nevco has provided technologically advanced products and transformed the way millions of fans experience sporting events world wide.



PROJECT PARTNER

From concept and design, to installation and training, when you choose Nevco, you get a dedicated partner who is with you every step of the way.



SUPERIOR QUALITY

All required Nevco products are UL Listed to ensure your equipment is always built with quality, safety, and durability in mind.



All Nevco products are designed with serviceability in mind, which allows us to get you up and running with minimal downtime.



INDUSTRY LEADER

Innovative technologies like virtual scoring and remote access diagnostics provide you with cutting-eduge solutions that maximize efficiency, mobility, content and visibility.



STATE-OF-THE-ART DESIGN

Nevco's products are designed for integration amongst our entire product line, which allows us to be your single-source provider for all of your scoring & display needs.



ON-TIME DELIVERY

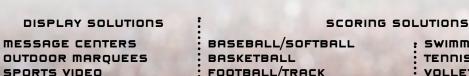
With a 4 week turnaround time and a 99% on-time delivery rate, no competitor can match Nevco's commitment to deliver you a quality product, every time.



REVENUE GENERATION

Products like static signage, message centers, and video displays provide you with ways to promote your supporters and bring new revenue streams into your facility.

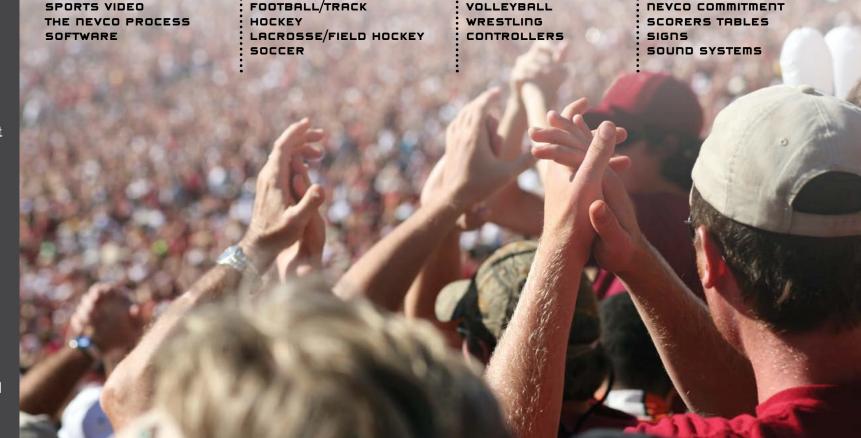
MAXIMIZE YOUR IMPACT.



FOOTBALL/TRACK

SWIMMING TENNIS VOLLEYBALL WRESTLING

ADDITIONAL SOLUTIONS ACCESSORIES HYPE CREATIVE SERVICES *NEVCO COMMITMENT* SCORERS TABLES SIGNS SOUND SYSTEMS



MAXIMIZE YOUR VALUE:

NEVCO INTEGRATED DISPLAY AND SCORING SOLUTIONS FOR EVERY AUDIENCE

From marguees and message centers to video displays and scoreboards, Nevco's innovations allow for flexibility and integration to keep you informed, aware and entertained. We're proud to be such an integral part of communities everywhere. No matter the message, no matter the sport, no matter the campus, customer or congregation, we can show you all the ways that your system can work for you.

NEVCO MAXIMIZE YOUR IMPACT

Your system can be customized to deliver specific information and reach customers with relevant messages like special offers, promotions, brand messages, featured products, etc. Our commercial clients utilize integrated signage as a key component to increasing business.

BUSINESS APPLICATIONS

- Street-side marquees
- Lobby signage
- Waiting area displays
- Sales/promotions
- Employee of the month
- Promote services offered
- Highlight products offered
- Community events
- Upcoming entertainment
- Time and temperature

Don't miss your opportunity to convey an important message to current members of your congregation or to attract potential new members to be part of your services.

PLACE OF WORSHIP APPLICATIONS

- Upcoming events
- Volunteer opportunities
- Service times
- Messages to the community
- Mission statements
- Motivational messages
- Holiday schedules
- Highlighting an upcoming speaker
- Wedding announcements

SCHOOL CAMPUS:

No matter the size of your campus, you can deliver key information to your students, faculty, parents and passers-by.

CAMPUS APPLICATIONS

- Upcoming events
- Sponsor messages

Reminders

- Weather advisories
- Educational tool
- School closing
- Holiday schedules
- Emergency announcements
- Teacher of the month
- Parent communication

perfect way to make sure they come away with the important details and information that you want to communicate. You can also utilize your system to generate revenue for your school by promoting your sponsors' messages.

Increase revenue by converting to digital and turn good locations into great locations. Nevco manufactures a full line of industry standard billboard sizes making conversion easy. Nevco also custom manufactures to any unique outdoor display size requirement.

Third party advertising Daypart advertising Amber alerts Time / Temperature Support local charities

News headlines Weather updates / warnings RSS / Data feeds Sponsorship opportunities

Self promotion

Street-side marquees

- Entrance/exit signage
- Fan excitement
- Local sponsorship
- Communicate events
- Ticketing displays
- Concession area boards Player information/profile
- Live statistics
- Upcoming games

SPORT APPLICATIONS

- Stadium sound
- Sporting event in-game graphics

NEVCO SPORTS VIDEO SOLUTIONS

Are you ready to give your fans that big league experience? Do you want to maximize revenue? Don't know where to begin? Contact your Nevco Display and Scoring Consultant to get the conversation started!





UNIVERSITY OF NORTH FLORIDA

(Fort Myers, FL)

- 4-Sided 6mm Full Color LED Video Display with (2) 10mm 360 Degree Full Color LED Video Rings
- 40' 10mm Full Color LED Scorers Tables
- Two (2) Custom Scoreboards
- End of Period (EOP) Lights
- Eight (8) Locker Room Clocks
- SSC-T5 Shot Clocks
- Nevco's proprietary Display Director™ Software

FORT HAYS STATE UNIVERSITY (Hays, KS)

- 19'H x 34'W 16mm Full Color LED Video Display
- Custom Split Scoreboard with ETN's and Timer
- Stadium Pro™ 2000 Sound with Custom Imprinted Sound Scrim
- Decorative Arch Truss with Rear-Lit Letters & Logo
- Revenue Generating Sponsorship Signage











BINGHAMTON UNIVERSITY

(Binghamton, NY)

- 19'H x 31'W 16mm Full Color LED Video Display
- Stadium Pro™ 2000 Sound with Custom Imprinted Sound Scrim
- Arched Sign with Custom Imprinted Graphics
- Virtual Scoring Overlay

THE NEVCO DIFFERENCE

When you choose the Nevco Difference for your facility, you're choosing a partnership that lasts far longer than then length of your project. Every Nevco video display comes with the highest quality software, graphics, and a dedicated team to ensure your project is a success from start to finish. When you invest in a Nevco video display, here's what you can expect:

Vision, Scope, Budget

In the beginning, you will be assigned to an experienced Sports Video Consultant who will serve as your primary partner through the entirety of the project.

A Consultant will work with you to better understand your vision, scope, and budget; and may be able to recommend simply upgrading your existing scoreboard to a video display. This will save time and money during the installation phase.

EASY & AFFORDABLE UPGRADE



Valley Christian High School in Chandler, AZ quickly transformed their old scoreboard to an-all virtual 16mm full color video display by utilizing their existing structure.

Finalizing Designs and Project Approval

Your Sports Video Consultant will work with you to finalize the design of your specific video board as well as be present at any stakeholder meetings to explain in detail the scope of the project. You'll also receive:

- Customized designs with optimal video size for your facility (based on your goals and budget constraints)
- Control Room expertise
- Marketing assets to help you gain buy-in from other stakeholders

Manufacturing & Installation

Once your key objectives are identified and the design of your display is finalized, your Consultant will:

- Develop all comprehensive specifications with accompanying mechanical and electrical drawings and installation plan
- Construct manufacturing and installation timeline, with on-time delivery
- Arrange planning meeting with all functional departments so that all elements are in place prior to installation



Project Completion r display's installation.

After successful completion of your display's installation, your Sports Video Consultant and the Nevco ensure your team's success by:

- Conducting on-site training for all staff using the equipment, and first game support to ensure operators' comfort with the system
- Providing complete lifetime service support
- Serving as your partner and informational resource

CONTACT A DISPLAY AND SCORING CONSULTANT: 1.800.851.4040 • www.nevco.com

SCORING AND DISPLAY SOLUTIONS TO TRANSFORM YOUR GAME-DAY ATMOSPHERE

Thinking about upgrading your facility with a Video Display but not sure what design or features you want? Check out some of our customer's scoring & display solutions below for inspiration. No matter the size, sport, or budget, your dedicated Sports Video Consultant will help you design the scoring solution of your dreams!





GRAMBLING STATE UNIVERSITY



HARGRAVE HIGH SCHOOL



MISSOURI SOUTHERN STATE UNIVERSITY - Joplin, MO



SNOW COLLEGE Ephraim, UT



EAST CHAMBERS ISD Winnie, TX



LYCOMING COLLEGE Williamsport, PA



UNIVERSITY OF ARKANSAS PINE BLUFF - Pine Bluff, AR



WASHINGTON UNIVERSITY St. Louis, MO

BASKETBALL



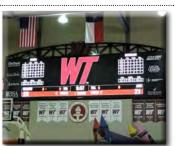
NOVA SOUTHEASTERN UNIVERSITY



FORT HAYS STATE UNIVERSITY Hays, KS



MIDLAND UNIVERSITY



WEST TEXAS A&M UNIVERSITY



JUNEAU-DOUGLAS HIGH SCHOOL



FORT LEWIS COLLEGE



LAMAR UNIVERSITY



BASEBALL/SOFTBALL



LITTLE LEAGUE® BASEBALL WORLD SERIES - Williamsport, PA



UNIVERSITY OF NORTH FLORIDA



EARLHAM COLLEGE Richmond, IN



BINGHAMTON UNIVERSITY Binghamton, NY



UNIVERSITY OF NORTH FLORIDA Fort Myers, FL



COLUMBUS STATE UNIVERSITY



LITTLE LEAGUE® BASEBALL WORLD SERIES - Williamsport, PA



LOUISVILLE SLUGGER SPORTS COMPLEX - Peoria, IL





YALE UNIVERSITY



AUGSBURG COLLEGE



RANCHO SILVERADO STABLES





EDWARDSVILLE HIGH SCHOOL Edwardsville, IL



WASHINGTON UNIVERSITY



DUNCAN MCDONALD ARENA



BENTLEY UNIVERSITY

DISPLAY DIRECTOR™ SOFTWARE

HYPE CREATIVE SERVICES

GET SOCIAL WITH NEVCO



DISCOVER THE HOME FIELD ADVANTAGE

Nevco's proprietary Display Director™ software is the industry's most innovative, affordable, and easy-to-use video display software. With Display Director™, you can simplify your game-day operations and control your Video Displays, LED Fascia/Ribbon Boards, and LED Scorers Tables all from the touchscreen interface.



CUSTOMIZE YOUR GAME-DAY EXPERIENCE

Display Director™ Controls:



























Every venue has a different style and need. With this in mind, HYPE Creative Services, a division of Nevco, can create a custom package to best accommodate your venue. Fill your facility's seats for every game by providing your fans an exciting and engaging in-game atmosphere with the help of HYPE Creative Services!

FEATURE YOUR PLAYERS



ENGAGE YOUR FANS





When you invest in a Nevco Video Display, you can expect professionally designed, 3D graphics pre-loaded to your software so you're game-day ready.



A FEW OF OUR PARTNERS ...



What Can HYPE Create For You?

Branded Fan Prompts Dance Cam Races & Shuffles **Stat & Graphic Templates** Game Opens & Team Intro's Kiss Cam 3D Logo Animations

Interactive Flash Games

Interactive Sponsorship Games Noise Meters **Headshot Templates Team TV Commercials**

CELEBRATING OVER 80 YEARS OF EXCELLENCE CELEBRATING OVER 80 YEARS OF EXCELLENCE

INDUSTRY'S MOST VERSATILE SCORERS TABLE

MAXIMIZE YOUR COURTSIDE

Available in 6mm and 10mm, Nevco's LED Scorers Tables provide limitless inventory space while giving your courtside a professional look.

3 Size and Format Options

4ft, 8ft, 10ft, 12ft, 16ft, 20ft Non-Lit, Rear-Lit, Digital LED



Combine different styles and sizes of Nevco Scorers Tables by interlocking them to create a seamless, professional look at center-court



YPSILANTI COMMUNITY SCHOOLS, Ypsilanti, MI



GRANGER HIGH SCHOOL, Granger, WA 8' Rear-Lit Static Scorers Table flanked by 4' Rear-Lit Static Scorers Table:



CARMEL HIGH SCHOOL, Carmel, IN 8' 10mm Full Color LED Scorers Table flanked by 8' Rear-Lit Static Scorers Tables



WORCESTER STATE UNIVERSITY, Worcester, MA



CANTON HIGH SCHOOL, Canton, IL 10' 10mm Full Color LED Scorers Table flanked by 4' Rear-Lit Static Scorers Tables



HOBART AND WILLIAM SMITH COLLEGES, Geneva, NY 10' Rear-Lit Static Scorers Table flanked by 10' 10mm Full Color LED Scorers Tables

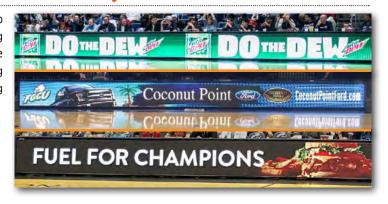
CROWD ENGAGEMENT



An LED Scorers Table can help engage your crowd from the starting line-up to the last seconds of the game by displaying fan prompts, virtual scoring, and endless sponsorship spots, which can also help generate revenue for your program.

SPONSORSHIP & REVENUE

Nevco's LED Scorers Tables allow you to make the most of your courtside by displaying virtually limitless inventory spots to promote school sponsors and donors, while also providing you with a platform to bring in new advertising opportunities.



SIMPLIFY GAME OPERATIONS



Run multiple video units (Scorers Table, Video Display, Fascia/Ribbon Boards), using Nevco's proprietary Display DirectorTM Software.

The simple design and touchscreen interface allows you to easily zone your video units as one large display, or divide into multiple zones giving you the ability to provide your sponsors with moments of exlusivity or feature multiple sponsors at once.

CONTACT A DISPLAY AND SCORING CONSULTANT: 1.800.851.4040 • www.nevco.com

GE 12 WWW.NEVCO.COM CELEBRATING OVER 80 YEARS OF EXCELLENCE 1.800.851.4040 PAGE 15

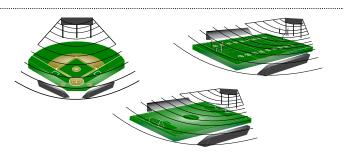
STADIUM PRO™ SOUND

NEVCO MARQUEE SIGNS AND MESSAGE CENTERS

Nevco designs message centers and LED marquee signs to complement every display and scoring solution. Whether you're integrating your message center into your scoreboard or placing a marquee sign in the front of your venue, they provide you with endless opportunities to increase sponsorships and ad revenue, while welcoming and engaging your fans.

DO YOUR FANS HEAR YOU LOUD & CLEAR?

Be loud and clear with **Nevco Stadium ProTM Sound** integrated with your scoreboard or video display. From the national anthem, to the final, nail biting play, the Nevco Stadium ProTM Sound System ensures that players, parents, and fans have the ultimate game-day experience.



WHICH STADIUM PRO™ IS RIGHT FOR YOU?





FEATURES OF STADIUM PRO™ SOUND

- Custom designed for the athletic market to provide complete coverage.
- Delivers clear, intelligible voice and concert quality music at high decibel levels throughout your facility.
- Single-point sound system located at the scoreboard with high-fidelity, full-range reproduction of music and speech, ensures sound clarity.
- Speakers housed in a weatherproof, lightweight aluminum, custom designed speaker cabinet with front mesh scrim.
- Industry's best 5 year warranty on loudspeakers and speaker cabinet.
- Perfect for any outdoor field or stadium.





OKAWVILLE HIGH SCHOOL, Okawville, II



WEST VALLEY COLLEGE, Saratoga, CA



WELLINGTON COMMUNITY CENTRE, Wellington, ON



AIDLAND UNIVERSITY, Fremont, NE





EDWARDSVILLE HIGH SCHOOL, Edwardsville, IL



BRENGLE TERRACE PARK, Vista, CA



BLOOMBURG UNIVERSITY, Bloomburg, IL



WWW.DEVCO.COM

CELEBRATING OVER 80 YEARS OF EXCELLENCE

OUTDOOR INTELLIGENT CAPTION™

Nevco's Intelligent Caption™ Scoreboards feature electronic team names and electronic caption plates for the most accurate scoring possible with no maintenance. Intelligent Caption™ scoreboards use LED caption matrixes to display sport specific captions. Just turn on your wired or wireless controller and the Intelligent Caption™ scoreboard automatically displays sport specific captions for whatever sport you're playing.

SMART SCOREBOARDS

Intelligent Caption™ scoreboards from Nevco automatically change team names and captions to match the sport you're playing. From down and yards, go to shots and saves, all with just the push of a button.





MODEL 3680

Intelligent Captions change automatically between football, soccer, lacrosse/field hockey or baseball/softball scoring information.

Size: 18' x 8' x 8" (5.49 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 590 lbs (268 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



BASEBALL



FOOTBALL



SOCCER

Choose Corner Kick, Penalty Kick, Shots, Saves, Player In, Player Out



LACROSSE/FIELD HOCKEY

Optional White LEDs shown



MODEL 3682

This larger version of the 3680 includes a large area under the clock for team mascots or sponsor logos.

Size: 20' x 8' x 8" (6.10 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 690 lbs (313 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



BASEBALL





SOCCER



LACROSSE/FIELD HOCKEY Optional White LEDs shown

MODEL 3685

This larger version of the 3680 includes a large area under the clock for team mascots or sponsor logos.

Size: 24' x 8' x 8" (7.31 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 740 lbs (336 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



BASEBALL



FOOTBALL



SOCCER



Optional White LEDs shown



MODEL 3688

Our largest Intelligent Caption Scoreboard for maximum visibility and impact.

Size: 32' x 8' x 8" (9.75 x 2.44 x 0.2 meters)

Digit Size/Color: 30" / 24" / 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 930 lbs (422 kg)

Controls Available: MPC (Wired), MPCW (Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



BASEBALL



FOOTBALL



SOCCER

Choose Corner Kick, Penalty Kick, Shots, Saves, Player In, Player Out



Optional White LEDs shown

CONTACT A DISPLAY AND SCORING CONSULTANT: 1.800.851.4040 • www.nevco.com

OUTDOOR INTELLIGENT CAPTION™

Outdoor Intelligent Caption™ scoreboards can score Football, Soccer, Field Hockey, Lacrosse, Baseball, Softball and Track.

OUTDOOR INTELLIGENT CAPTION™





MODEL 7680

The 7680 adds 3 more digits for track timing and moves the clock above the scoreboard, leaving room for sponsor or mascot logo.

Size: 18' x 10' 6" x 8" (5.49 x 3.20 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 710 lbs (322 kg)

Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only







Choose Corner Kick, Penalty Kick, Shots, Saves, Player In, Player Out



LACROSSE & FIELD HOCKEY



Finishlvnx® Interface

Finishlynx Interface



MODEL 7685

This larger version of the 7680 incorporates the extra digits for track timing into the main scoreboard area.

Size: 24' x 8' x 8" (7.31 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 740 lbs (336 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only







SOCCER



LACROSSE & FIELD HOCKEY





Our largest Intelligent Caption Scoreboard for maximum visibility and impact with a 1/1000 track timer.

Size: 32' x 8' x 8" (9.75 x 2.44 x 0.2 meters)

Digit Size/Color: 30" / 24" / 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 930 lbs (422 kg)

Controls Available: MPC (Wired), MPCW (Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



BASEBALL





SOCCER Choose Corner Kick, Penalty Kick, Shots, Saves, Player In, Player Out



TRACK



Optional White LEDs shown



MODEL 7685



MODEL 3685



MODEL 3682



MODEL 3680 with 5633 Penalty Timer

Optional White LEDs shown

CELEBRATING OVER 80 YEARS OF EXCELLENCE

INDOOR INTELLIGENT CAPTION™

Nevco's Intelligent Caption™ Scoreboards feature electronic team names and electronic caption plates for the most accurate scoring possible with no maintenance. Intelligent Caption™ scoreboards use LED caption matrixes to display sport specific captions. Just turn on your wired or wireless controller and the Intelligent Caption™ scoreboard automatically displays sport specific captions for whatever sport you're playing.





PUT YOUR LADDER AWAY

Always show the right status for the right sport without climbing ladders to change caption plates.



MODEL 2780 & 2781

Automatic and instant caption selection. Switch between basketball, volleyball and wrestling on the same scoreboard.

Basketball: Fouls and Player (Time Outs Left on Model 2781) Volleyball: Won and Set (Time Outs Left on Model 2781) Wrestling: Points and Weight or Advantage Time **Size:** 10' x 5' x 8" (3.05 x 1.53 x .20 meters) Digit Size/Color: 13"/9" High Intensity Red and Amber Approx. Hanging Weight: 135 lbs (61 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



BASKETBALL (MODEL 2781 SHOWN)



VOLLEYBALL (MODEL 2781 SHOWN)



WRESTLING (MODEL 2780 SHOWN)

MODEL 2785

A slightly larger version of the 2780/2781 with Time Outs Left (TOL) included.

Basketball: Fouls, Player and Time Outs Left Volleyball: Won, Set and Time Outs Left Wrestling: Points and Weight or Advantage Time Size: 12' x 7' x 8" (3.66 x 2.13 x .20 meters) Digit Size/Color: 18"/13" High Intensity Red and Amber Approx. Hanging Weight: 230 lbs (104.3 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



BASKETBALL



VOLLEYBALL



WRESTLING

SCOREBOARD CONFIGURATIONS

Combine a new or existing 2780, 2781 or 2785 model to make a 4-face version. Can also be combined with signage and/or message centers. See page 13 for more information on message center upgrades.

4-FACE

4-FACE WITH MESSAGE CENTER

MESSAGE CENTER ONLY



BASKETBALL



VOLLEYBALL







WRESTLING

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BASEBALL & SOFTBALL

Nevco has experience designing custom baseball scoreboards, video displays, and full scoring solutions for ball fields at Minor League Ballparks, Colleges & Universities, High Schools and community fields. Our baseball and softball scoreboards are designed with unparalleled weather resistant technology that ensures your scoreboard investment lasts, allowing you to focus on the game while your fans always stay informed.

1.800.851.4040

www.nevco.com



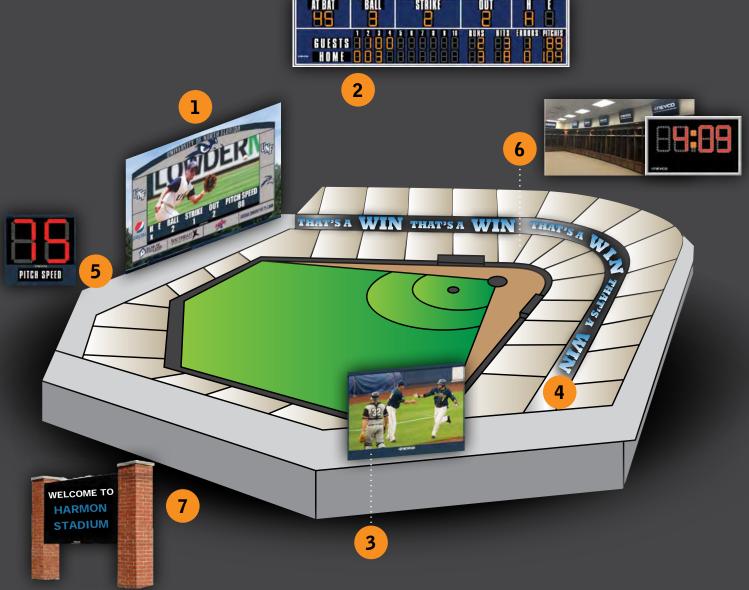


SWING FOR THE FENCES: NEVCO INTEGRATED DISPLAY AND SCORING SOLUTIONS

Step up to the quality and clarity of Nevco. Our integrated systems and innovations keep binoculars off the scoreboard and on the game. No matter the scoreboard or the distance, Nevco delivers a superior level of quality that satisfies even the toughest crowd.

- VIDEO DISPLAY WITH VIRTUAL SCORING
 OVERLAY
- 2 ANCILLARY SCOREBOARD WITH PITCH COUNT DISPLAY
- 3 OUTFIELD VIDEO DISPLAY
- 4 LED FASCIA OR RIBBON BOARD

- 5 PITCH SPEED DISPLAY & STALKER RADAR GUN
- 6 LOCKER ROOM CLOCK
- 7 FULL COLOR MARQUEE

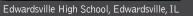


BASEBALL & SOFTBALL

1600 SERIES

- Wide range of models to select from; select the ideal model for your application
- Large digits easily seen from long distances
- White outline striping separates features for greatest readability—standard on all outdoor scoreboards
- Convenient, hand-held MPCX2 wireless control can be used to operate a majority of models Bright, long-lasting, energy-efficient LEDs





MODEL 1640

of team hits and team errors for home and guests.

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs. (219 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Dimensions: 18' x 8' x 8" (5.48 x 2.44 x 0.2 meters)



GET INSPIRED

Indoors or outdoors, you can see how Nevco display and scoring products look in their new homes across sports venues all over the world. To get inspired, visit the Nevco photo gallery at nevco.com where you can see hundreds of installations around the globe.



MODEL 1603/1603-PC

Big Scoreboard - for a Big Facility. Our largest inning-by-inning scoreboard that includes player at bat, balls, strikes, outs, team runs, team hits and team errors. 1603-PC model offers built in pitch count for both home and quest teams.

Size: 36' x 9' x 8" (10.97 x 2.74 x .20 meters)

Digit Size/Color: 24" / 18" High Intensity Red, Amber, or Translucent White **Approx. Hanging Weight:** 930 lbs (422 kg) **With ETN's:** 992 lbs. (450 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





MODEL 1604/1604-PC

Proven Popularity. A complete inning-by-inning scoreboard with space for a sponsor, logo or mascot. 1604-PC model offers built in pitch count for both home and guest teams.

Size: 28' x 8' x 8" (8.53 x 2.44 x .20 meters)

Digit Size/Color: 18" / 14" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 650 lbs (295 kg) With ETN's: 712 lbs. (323 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





MODEL 1609

Inning by Inning. Smaller scoreboard designed for softball facilities.

Dimensions: 16' x 6' x 8" (4.88 x 1.83 x 0.2 meters)

Digit Size/Color: 14" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 290 lbs (132 kg) With ETN's: 345 lbs. (156 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN







Caption Types Available: NL (shown), ETN

Double Digit Innings. The only scoring solution that has double digit innings. Our most popular baseball / softball scoreboard that includes the at-bat feature and displays balls, strikes, outs and team at bat indicators.

Counts Hits and Errors. Keeps basic score along with total count

Size: 18' x 8' x 8" (5.49 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs. (219 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





1 2 3 4 5 6 7 TOTAL

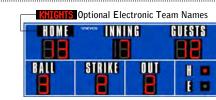


Indicates Hits or Errors. The standard baseball / softball scoreboard that includes balls, strikes and outs. Hits and errors are indicated with bulls-eye indicators.

Size: 16' x 6' x 8" (4.88 x 1.83 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 290 lbs (132 kg) With ETN's: 345 lbs. (157 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN



MODEL 1606/1606-PC

Full Features. The complete inning-by-inning scoreboard that includes player at bat, balls, strikes, outs, team runs, team hits and team errors. 1606-PC model offers built in pitch count for both home and guest teams.

Size: 24' x 8' x 8" (7.32 x 2.44 x .20 meters)

Digit Size/Color: 18" / 14" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 570 lbs (259 kg) With ETN's: 632 lbs. (287 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

MODEL 1608

Complete Inning-by-Inning Baseball Scoring. Our smallest inning-by-inning scoreboard with balls, strikes and outs.

Size: 18' x 6' x 8" (5.49 x 1.83 x .20 meters)

Digit Size/Color: 18" / 14" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 320 lbs (146 kg) With ETN's: 375 lbs. (170 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

1 2 3 4 5 6 7 8 9 TOTAL

Optional Electronic Team Names

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Caption Types Available: NL (shown), ETN

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CELEBRATING OVER 80 YEARS OF EXCELLENCE









GET SOCIAL WITH NEVCO





Binghamton University, Binghamton, NY

MODEL 1615



Scoreboard with Advanced Timing Features. This scoreboard indicates timing, (using a digital colon), balls, strikes, outs, hits and errors with bulls-eye indicators. Perfect for multisport facilities.

1600 SERIES CONTINUED

Size: 16' x 7' x 8" (4.88 x 2.13 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 350 lbs (160 kg) With ETN's: 405 lbs. (184 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





MODEL 1600

Standard Display up to 9 Innings. This scoreboard indicates balls, strikes, outs, hits and errors with bulls-eye indicators.

Size: 16' x 5' x 8" (4.88 x 1.52 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 260 lbs (118 kg) With ETN's: 315 lbs. (143 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





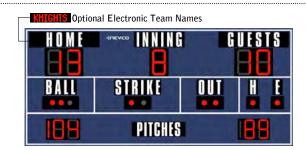
MODEL 1617-PC

Protect Your Players. This basic scoreboard includes balls, strikes, outs, and pitch counts for both home and guest teams.

Size: 16' x 7' x 8" (4.88 x 2.13 x .20 meters)

Digit Size/Color: 18"/14" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 370 lbs (167.8 kg) With ETN's: 425 lbs. (192.7 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN



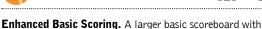


MODEL 1632

Electronic Team Name (ETN) capability.







Size: 12' x 5' x 8" (3.66 x 1.52 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 180 lbs (82 kg) With ETN's: 235 lbs. (170 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





Versatile. A flexible, basic scoreboard that includes both inning and the timing feature, which displays both minutes and seconds using digital colons. Balls, strikes and outs are indicated with bulls-eye indicators. Includes 3' x 2' blank sponsor panel; custom printing (shown) can be provided.

Size: 10' x 5' x 8" (3.05 x 1.52 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 160 lbs (73 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown)





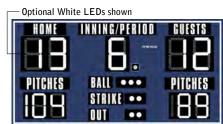
Track Pitches with Ease. Classic Baseball/Softball scoreboard with ball, strike, and out indicators and built-in pitch counts for both home and guest teams.

Size: 10' x 5' x 8" (3.09 x 1.52 x 0.2 meters)

Digit Size/Color: 18/14" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 160 lbs (73 kg) Controls Available: MPC (Wired, Wireless), MPCX2

Caption Types Available: NL (shown)



MODEL 1610

Classic Baseball / Softball Display. The basic scoreboard generally used for Little League® or junior high fields. Balls, strikes and outs are indicated with bulls-eye indicators.

Size: 10' x 4' x 8" (3.05 x 1.22 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 130 lbs (60 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown)







Versatile Time and Inning. The basic scoreboard that includes a twodigit timing feature which displays both minutes and seconds using digital colons. If time is not required, innings can be displayed. Balls, strikes and outs are indicated with bulls-eye indicators.

Size: 10' x 4' x 8" (3.05 x 1.22 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 130 lbs (60 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown)



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MODEL 1650

Compact and Powerful. The smallest basic scoreboard generally used for parks and recreation fields. Balls, strikes and outs are indicated with bulls-eye indicators.

Size: 8' x 3' x 8" (2.44 x .91 x .20 meters)

Digit Size/Color: 14" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 90 lbs (40 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL



MODEL 9620

Pitch Timer Display. Track time in between pitches to comply with collegiate or other rules and speed up rate of play. Easily viewed by the umpires, coaches, players and fans.

Size: 4' x 3.5' x 8" (1.22 x 1.07 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber,
or Translucent White

Approx. Hanging Weight: 45 lbs (20 kg)







Pitch Speed Display. True "digital" radar system provides superior performance and

system provides superior performance and accuracy. Peak hold feature allows gun to automatically hold or recall the peak speed.

Size: 4' x 4' x 8" (1.22 x 1.22 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber,
or Translucent White

Approx. Hanging Weight: 50 lbs (23 kg)





ADD-ON PITCH COUNT DISPLAYS

Protecting Young Pitchers. Designed to help support Little League® and school league pitch limit rules. Our Add-On Pitch Count displays can be incorporated into an existing scoreboard or stand alone and conveniently count pitches for both the home and guest teams.

Model PCD-01: 5' x 3' x 8" (1.52 x 0.91 x .20 meters)

Model PCD-08-1: 8' x 1' 6" x 8" (2.44 x 0.46 x .20 meters)

Model PCD-10-1: 10' x 2' x 8" (3.05 x 0.61 x .20 meters)

Model PCD-16-1: 16' x 2' x 8" (4.88 x 0.61 x .20 meters)

Model PCD-18-1: 18' x 2' x 8" (5.49 x 0.61 x .20 meters)



Model PCD-01



Model PCD-08-1



Model PCD-10-1



Shown with custom imprinting



Model PCD-18-1

















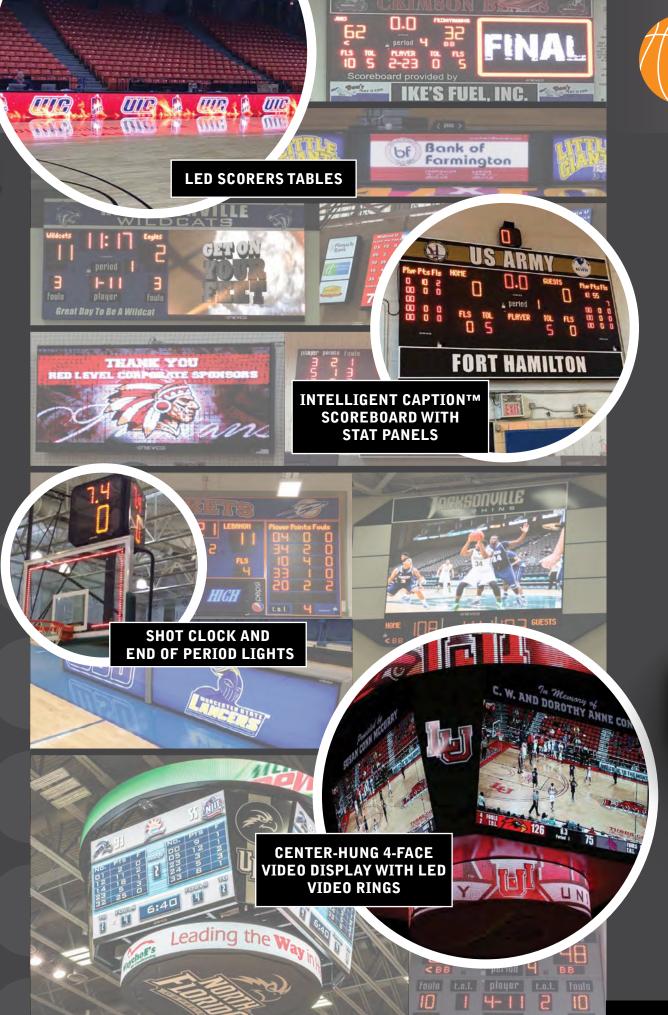
BASKETBALL

Here, every seconds counts. Every shot bears great significance. And the simple flash of a number or replay can bring a roar of boos or deafening cheers. Don't leave any game to chance. Take command with Nevco and bring every game to life.

Call your Display and Scoring Consultant to request a digital proof of your display and scoring solution.

1.800.851.4040

www.nevco.com





THE SUPREME COURT: NEVCO INTEGRATED DISPLAY AND SCORING SOLUTIONS

From center court to the hoop, fans want to follow all the action as clearly as possible from any seat in the house. Our Display and Scoring Consultants have the experience to do it right. No matter the scoreboards or the distance, Nevco delivers clarity and accuracy.

- CENTER-HUNG 4-FACE VIDEO DISPLAY
 WITH LED VIDEO RINGS
- 2 ANCILLARY SCOREBOARD WITH FULL COLOR MESSAGE CENTER AND STAT PANELS
- 3 LED FASCIA OR RIBBON BOARD
- 4 LED SCORERS TABLES

- 5 SET OF SHOT CLOCKS
- 6 END OF PERIOD LIGHTS
- 7 LOCKER ROOM CLOCK
- 8 FULL COLOR MARQUEE



ASKETBALL/VOLLEYBALL/WRESTLING SCOREBOARD

2700 SERIES

- Double bonus indicators
- Possession indicators
- Lighted time colon and decimal; automatically adjusts to 1/10th of a second
- Caption plates available for basketball,
- volleyball and wrestling
- Bright, long-lasting, energy-efficient LEDs





Harrisonville High School, Harrisonville, MO

GET SOCIAL WITH NEVCO









period BB> player fouls won won game

Shown with Optional











4-sided: Approx. 12' 1" square at top x 9' 8" square















Full-Featured Multisport. Our full-featured design. Similar to the 2750, but includes time outs left.

Deluxe 4-Sided Display. Our largest center-hung scoreboard that displays all the necessary game and player stats.

Size: 1-sided: 8' x 6' x 8" (2.44 x 1.83 x .20 meters) 4-sided: Approx. 12' 1" square at top x 9' 8" square

at bottom x 6' high (3.68 x 2.98 x 1.83 meters) Digit Size/Color: 13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 1-sided: 111 lbs (50 kg)

4-sided: 1250 lbs (478 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL, RL, ETN



Popular Multisport. The most popular scoring solution.

Most Popular 4-Sided Display. The most popular center-hung for multisport facilities. 1-sided: 8' x 6' x 8" (2.44 x 1.83 x .20 meters)

4-sided: 1250 lbs (567 kg)

at bottom x 6' high (3.68 x 2.90 x 1.83 meters) Digit Size/Color: 13" / 9" High Intensity Red and Amber Approx. Hanging Weight: 1-sided: 107 lbs (49 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL, RL, ETN



Shown with Optional 4-SIDED





4-SIDED



one-sport facilities.

and foul features.

Digit Size/Color:

Controls Available:

Size.

Size:

MODEL 2710

Approx. Hanging Weight: 1-sided: 94 lbs (43 kg)

Caption Types Available: NL, RL, ETN



1-sided: 8' x 5' x 8" (2.44 x 1.52 x .20 meters)

4-sided: Approx. 11' 8" square at top x 9' 8" square

MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

at bottom x 5' high (3.56 x 2.90 x 1.52 meters)

13" / 9" High Intensity Red and Amber





MODEL 2700





Basic Multisport with Low Clearance. Practical for any indoor sport with scoring. Perfect solution for small venues.

Basic Multisport 4-Sided Display with Low Clearance.

Basic center-hung multisport scoring solution.

1-sided: 8' x 3' x 8" (2.44 x .91 x .20 meters) 4-sided: Approx. 10' 10" square at top x 9' 6" square

at bottom x 3' high (3.30 x 2.90 x .92 meters)

Digit Size/Color: 13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 1-sided: 62 lbs (28 kg) 4-sided: 890 lbs (404 kg)

MMPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL, RL, ETN





fouls player 8+88 won game



4-SIDED

4-SIDED

MODEL 2772

Full-Featured Multisport. The full-feature multisport scoreboard

Deluxe 4-Sided Display. Our largest center-hung scoreboard that

4-sided: 1167 lbs (530 kg)

that includes time outs left for multisport compatibility.

displays all the necessary game and player stats.

Approx. Hanging Weight: 1-sided: 125 lbs (57 kg)

Caption Types Available: NL, RL, ETN

Size:

Digit Size/Color-

Controls Available:

scoreboards.

Digit Size/Color:

Controls Available:



1-sided: 10' x 6' x 8" (3.05 x 1.83 x .20 meters)

at bottom x 6' high (4.30 x 3.60 x 1.83 meters)

13" / 9" High Intensity Red and Amber

4-sided: Approx. 14' 1" square at top x 11' 9" square

MPC (Wired, Wireless), MPCX2 (Handheld Wireless)





MODEL 2752







Popular Multisport. The most popular multisport scoring solution that includes weight and matches won.

Popular 4-Sided Display. The most popular center-hung for multisport facilities.

1-sided: 10' x 6' x 8" (3.05 x 1.83 x .20 meters)

4-sided: Approx. 14' 1" square at top x 11' 9" square at bottom x 6' high (4.30 x 3.60 x 1.83 meters)

Digit Size/Color: 13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 1-sided: 125 lbs (57 kg)

4-sided: 1167 lbs (530 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL, RL, ETN





4-SIDED

MODEL 2712

Basic Multisport with Low Clearance. Practical for any indoor

Flexible 4-Sided Display. Flexible 4-Sided display. The standard

center-hung with player and foul features.

Approx. Hanging Weight: 1-sided: 112 lbs (51 kg)

Caption Types Available: NL, RL, ETN

sport with scoring. Perfect solution for small venues and auxiliary



1-sided: 10' x 5' x 8" (3.05 x 1.52 x .20 meters)

at bottom x 5' high (3.93 x 3.60 x 1.52 meters)

13" / 9" High Intensity Red and Amber

4-sided: 1073 lbs (487 kg)

4-sided: Approx. 13' 8" square at top x 11' 9" square

MPC (Wired, Wireless), MPCX2 (Handheld Wireless)



4-SIDED

Shown with Optional







MODEL 2702

Basic Multisport 4-Sided Display with Low Clearance. Basic center-hung multisport scoring solution.

1-sided: 10' x 3' x 8" (3.05 x .91 x .20 meters)

4-sided: Approx. 12' 11" square at top x 11' 9" square at bottom x 3' high (3.93 x 3.61 x .92 meters)

Digit Size/Color: 13" / 9" High Intensity Red and Amber Approx. Hanging Weight: 1-sided: 80 lbs (36 kg)

4-sided: 845 lbs (383 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL, RL, ETN

Display Game Stats. The standard scoring solution for

Flexible 4-Sided Display. The standard center-hung with player

4-sided: 930 lbs (422 kg)

CELEBRATING OVER 80 YEARS OF EXCELLENCE

CELEBRATING OVER 80 YEARS OF EXCELLENCE





GET INSPIRED

Indoors or outdoors, you can see how Nevco display and scoring products look in their new homes across sports venues all over the world. To get inspired, visit the Nevco photo gallery at nevco.com where you can see hundreds of installations around the globe.





MODEL 2775







Larger Version of the Full-Featured Multisport. The complete scoreboard for large facilities. Includes time outs left.

Size: 12' x 8' x 8" (3.66 x 2.44 x .20 meters)

Digit Size/Color: 18" / 13" High Intensity Red and Amber

Approx. Hanging Weight: 255 lbs (116 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), RL, ETN





MODEL 2760







Larger Version of the Popular Multisport. The top-selling

Size: 12' x 8' x 8" (3.66 x 2.44 x .20 meters)

Digit Size/Color: 18" / 13" High Intensity Red and Amber

Approx. Hanging Weight: 215 lbs (198 kg)

scoreboard for large facilities.

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), RL, ETN







MODEL 2715







Larger Version of the 2710. The standard basketball scoreboard for large facilities.

Size: 12' x 5' 6" x 8" (3.65 x 1.68 x .20 meters)

Digit Size/Color: 18" / 13" High Intensity Red and Amber

Approx. Hanging Weight: 195 lbs (89 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), RL, ETN





MODEL 2740







Larger Basic Multisport. Basic multisport for larger facilities.

Size: 12' x 4' x 8" (3.66 x 1.22 x .20 meters)

Digit Size/Color: 18" / 13" High Intensity Red and Amber

Approx. Hanging Weight: 118 lbs (54 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), RL, ETN



MODEL 2745

Most Game Information. The best option when vertical space is limited in a larger facility.

Size: 20' x 5' x 8" (6.10 x 1.52 x .20 meters) Digit Size/Color: 18" / 13" High Intensity Red and Amber Approx. Hanging Weight: 254 lbs (115 kg) Controls Available: MPC (Wired Wireless)

Caption Types Available: NL (shown), RL, ETN



MODELS 2780 / 2781 / 2785 INTELLIGENT CAPTION™









Intelligent Captions™ by Nevco are the most technologically advanced multi-sport scoreboards in the industry. With electronic team names and electronic caption plates, Intelligent Caption™ scoreboards offer you the most accurate scoring possible, allowing you to customize the scoreboard to your team and your sport, every time. See page 18 for more details about Nevco's Intelligent Caption™ scoreboards

Basketball: Fouls, Player and Time Outs Left (TOL) Volleyball: Won, Set and Time Outs Left (TOL) Wrestling: Points and Weight or Advantage Time Operates with wired or wireless console control No caption plates to change (put that ladder away) Available in 10-ft or 12-ft widths







BASKETBALL MODE





Add a Professional Touch to Your Facility. Automatically signals or lights when the time runs out at the end of the period. Connects to main scoreboard control, operates in conjunction with current generation of Nevco controls. Invisible when not lit. Bright, long-lasting, energy-efficient LEDs. Easily installed on most major backboard brands.

LED Color: High Intensity Red

Approx. Hanging Weight: Controller 10 lbs (4.5 kg); LED Strips 1 lb (0.5 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)



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CELEBRATING OVER 80 YEARS OF EXCELLENCE

BASKETBALL/VOLLEYBALL/WRESTLING









SHOT CLOCK: MODEL SSC-7

BASKETBALL PRODUCTS

Basic Shot Clock Set.

Size: 20"W x 20"H x 2"D (.508 x .508 x .051 meters) each Digit Size/Color: 13" High Intensity Red and Amber Approx. Hanging Weight: 30 lbs (14 kg) each Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld)





SHOT CLOCK: MODEL SSC-T5

Shot Clock with Game Time.

Size: 24"W x 24"H x 2"D (.610 x .610 x .051 meters) each Digit Size/Color: 5"/13" High Intensity Red and Amber Approx. Hanging Weight: 50 lbs (23 kg) each

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld)





SHOT CLOCK: MODEL SSC-T9

Largest Shot Clock with Game Time.

Size: 36"W x 30"H x 2"D (.914 x .762 x .051 meters) each Digit Size/Color: 9"/13" High Intensity Red and Amber Approx. Hanging Weight: 58 lbs (26 kg) each

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld)



FEATURES

Bright, long lasting, energy-efficient LEDs reduce power consumption and operating

New durable Lexan face and lightweight aluminum cabinet can withstand heavy impact from basketball.

Integrates with Nevco accessories, such as End of Period (EOP) lights and Locker







All sizes available in multiple configurations.





Multisport Stat Panels for Large Facilities.

Stats for up to six players with time outs left

and a built-in horn. Upgrade standard caption

plates with Electronic Captions (shown), which

allow you the flexibility to electronically switch

stat modes between basketball and vollyeball.

Size: 5' x 8' x 8" (1.52 x 2.42 x .20 meters) each panel

Digit Size/Color: 9" High Intensity Red and Amber

Caption Types Available: NL, RL, EC (shown) Controls Available: MPC (Wired, Wireless)

Approx. Hanging Weight: 230 lbs (104kg) per set











MODEL SD7-5

Multisport Stat Panels. Stats for up to six players. Basketball caption plates include "plyr", "pts" and "fls". Volleyball caption plates include "plyr", "kills", "digs" and "aces".

Size: 3' x 6' x 8" (.91 x 1.83 x .20 meters) each panel Digit Size/Color: 5" High Intensity Red and Amber Approx. Hanging Weight: 180 lbs (82 kg) per set Caption Types Available: RL, NL (shown), EC Controls Available: MPC (Wired, Wireless)



MODEL PTF7

Basketball Stat Panels. Displays individual stats for up to five players and time outs left.

Size: 5' x 7' x 8" (1.52 x 2.13 x .20 meters) each panel Digit Size/Color: 9" High Intensity Red and Amber Approx. Hanging Weight: 200 lbs (91 kg) per set Caption Types Available: NL (shown), RL, EC Controls Available: MPC (Wired, Wireless)









15 or 12 Player Panels. Displays team name and up to 15 or 12 player numbers and names. Double-sided for tournaments, junior / varsity or multisports. Set includes numbers and letters.

Size: 15-player: 3' x 8' x 8" (.91 x 2.43 x .20 meters) each panel 12-player: 3' x 7' x 8" (.91 x 2.13 x .20 meters) each panel Digit Size/Color: Includes 4.75" letter / number set Approx. Hanging Weight: 15-player: 80 lbs (36 kg) per set 12-player: 60 lbs (27 kg) per set









15-PLAYER

15 or 12 Player Panels with Foul Lights. Contains 15 or 12 player foul indicators. Also, indicates which players are in the game. (Shown above with the Models P15 and P12 player panels – Models P15/P12 not included with Models F715/F712.)

Size: 15-player: 2' x 8' x 8" (.61 x 2.43 x .20 meters) each panel 12-player: 2' x 7' x 8" (.61 x 2.13 x .20 meters) each panel Approx. Hanging Weight: 15-player: 130 lbs (59 kg) per set 12-player: 108 lbs (49 kg) per set

Controls Available: MPC (Wired, Wireless)

CELEBRATING OVER 80 YEARS OF EXCELLENCE CELEBRATING OVER 80 YEARS OF EXCELLENCE



BASKETBALL/VOLLEYBALL/WRESTLING SCOREBOARD

BASKETBALL PRODUCTS



STAT CREW INTERFACE

The Nevco scoring and timing interface for Stat Crew® software sends game statistics directly from the Stat Crew® software to an LED matrix display or Nevco Stat Panels. This significantly reduces the operating requirements while increasing the game experience for players, coaches and fans by showing official game stats on Nevco displays throughout

- Saves Cost Operate Stat Panels or hybrid scoring displays automatically, eliminating the need for an extra person to track/post data.
- Saves Space at the Scorers Table with automatic data transmission from Stat Crew® to Nevco products, you free up a seat at the scorers table.





INDUSTRY'S MOST VERSATILE SCORERS TABLES

Nevco's scorers tables are the most flexible scorers table solution on the market today. Available with interchangeable non-lit, rear-lit and full color LED displays. Additionally, Nevco scorers table can grow over time by combining and interlocking with other scorers tables to expand into a longer, seamless table. See pages 10-11 for more information.





NEXT POSSESSION INDICATOR

Perfect Addition for the Scorers Table. Displays next possession of the jump ball using LEDs. Non-padded option includes front and side indicators, is battery operated, and is completely portable. Padded option includes front and rear indicators, requires 120v power adapter (included), and mounts to Nevco scorers table. Possession Indicator is available in black only, but padding is available in a variety of colors.

Non-padded Size: 16.25" x 4.25" x 5.5" (.41 x .11 x .14 meters) **Padded Size:** 18.25" x 5.25" x 5.5" (.46 x .13 x .14 meters) LED Color: High Intensity Red Approx. Weight: 5 lbs (2 kg)







MPCX2 WIRELESS HANDHELD CONTROL

Small and lightweight control perfect for smaller facilities or to operate auxiliary scoreboards. Convenient wireless operation within 1000'. Operates multiple scoreboards simultaneously. System allows multiple controllers to link to a single scoreboard. A great tool for coaches - run the scoreboard in practice from the palm of your hand without connecting table-top controller. Operates on two AA batteries and includes a built-in battery indicator. Built-in wireless strength meter and internal antenna.

Size: 3.25" x 5.5" x .875" (0.08 x 0.14 x 0.02 meters) Digit Size/Color: Bright 32 characters LCD display Approx. Hanging Weight: 5.5 oz (.16 kg)























FOOTBALL

The name of the game is sight, distance and angle. It's not only about what the coaches can see, it's about what every fan needs to see and how well they can see it. Our Display and Scoring Consultants have the experience to do it right. No matter the scoreboard or the distance, Nevco delivers clarity and accuracy.

Call your Display and Scoring Consultant to request a digital proof of your display and scoring solution.

1.800.851.4040

www.nevco.com



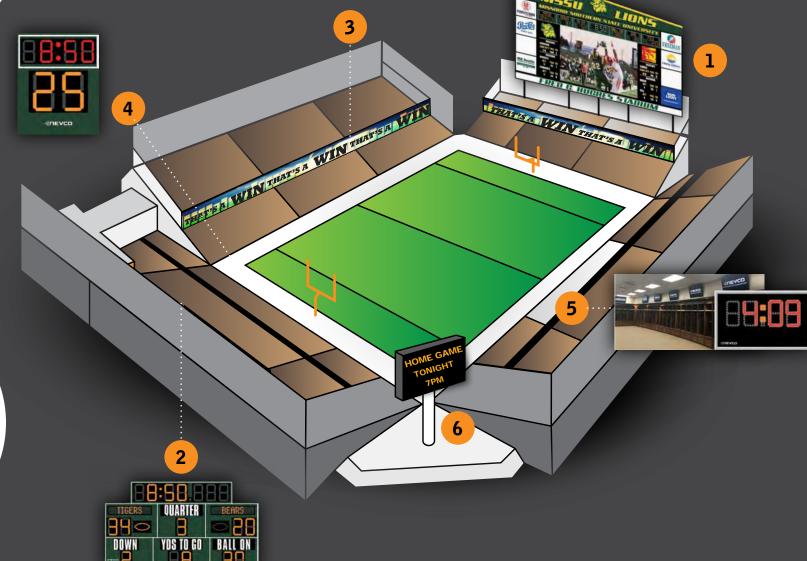


THE FIELD GENERAL: NEVCO INTEGRATED DISPLAY AND SCORING SOLUTIONS

Whether you're looking for a basic football scoreboard with accessories, a professional stadium sound system to ensure your fans hear you loud and clear, or a larger than life video display, we will work to find the best solution for your field that will deliver the ultimate game-day atmosphere for your fans.

- VIDEO DISPLAY WITH STRIP SCOREBOARD AND STADIUM PRO™ SOUND
- 2 ANCILLARY SCOREBOARD WITH ELECTRONIC TEAM NAMES AND TRACK TIMER
- 3 LED FASCIA OR RIBBON BOARD

- NEVCO EXCLUSIVE: DELAY OF GAME TIMERS WITH GAME CLOCK
- 5 LOCKER ROOM CLOCK
- 6 MONOCHROME MARQUEE





3600 SERIES





Amarillo ISD, Amarillo, TX

- Wide range of models to select from; select the ideal model for your facility
- Lighted time colon and decimal; automatically adjusts to 1/10th of a second
- Large digits easily seen from long distances White outline striping separates features for greatest readability – standard on all

outdoor scoreboards

Bright, long-lasting, energy-efficient LEDs





larger facilities.

MODEL 3616







Maximum Impact. The overall largest scoring solution for football that includes possession indicators and time outs left. Perfect for

Size: 36' x 10' x 8" (10.97 x 3.05 x .20 meters)

Digit Size/Color: 30" / 18" High Intensity Red, Amber, or Translucent White **Approx. Hanging Weight:** 1020 lbs (463 kg) **With ETN's:** 1220 lbs. (553 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN





MODEL 3688











Largest Intelligent Caption™ Scoreboard. Intelligent Captions change automatically between football, soccer, lacrosse, field hockey, or baseball / softball scoring information.

Size: 32' x 8' x 8" (9.75 x 2.44 x 0.2 meters)

Digit Size/Color: 30" / 24" / 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 930 lbs (422 kg) Controls Available: MPCX2 (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only





MODEL 3620









Size: 32' x 8' x 8" (9.75 x 2.44 x .20 meters)

Digit Size/Color: 30" / 24" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 760 lbs (345 kg) With ETN's: 822 lbs. (373 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

PANTHERS Optional Electronic Team Names 8:80 YOS TO GO Optional White LEDs shown











Signature Nevco Design. Retro design that includes possession indicator. The perfect signature piece for any field.

Size: 30' x 10' x 8" (9.14 x 3.05 x .20 meters)

Digit Size/Color: 30" / 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 630 lbs (286 kg) With ETN's: 692 lbs. (314 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN





MODEL 3618









Room for Logo. Same size as the Model 3615 (above) but with a layout that allows space for a logo, sponsorship or mascot.

Size: 24' x 8' x 8" (7.32 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 570 lbs (259 kg) With ETN's: 632 lbs. (287 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN





MODEL 3617











Size: 24' x 8' x 8" (7.32 x 2.44 x .20 meters)

Digit Size/Color: 24" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 570 lbs (259 kg) With ETN's: 632 lbs. (287 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN



Optional White LEDs shown

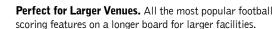












Size: 24' x 8' x 8" (7.32 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White **Approx. Hanging Weight:** 570 lbs (259 kg) **With ETN's:** 632 lbs. (287 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

















Size: 24' x 8' x 8" (7.31 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 740 lbs (336 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



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3600 SERIES CONTINUED



MODEL 3619







Room for Logo with Time Outs Left. Same size as the Model 3617 (above) but with a layout that allows space for a logo, sponsorship or mascot.

Size: 24' x 8' x 8" (7.32 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 570 lbs (259 kg) With ETN's: 632 lbs. (287 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





GHIS Optional Electronic Team Names

SCOREBOARDS



MODEL 3682











Mid-Size Intelligent Caption™ Scoreboard. Intelligent Captions™ change automatically between football, soccer, lacrosse or baseball/ softball scoring information.

Size: 20' x 8' x 8" (6.10 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 690 lbs (313 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only





MODEL 3621

All the most popular football scoring features on a smaller scoreboard. Includes possession indicators, time outs left and built-in horn.

Size: 20' x 8' x 8" (6.10 x 2.44 x 0.2 meters)

Digit Size/Color: 24"/18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 520 lbs (236 kg) With ETN's: 582 lbs. (264 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





(IIII) MODEL 3625







Largest Basic Multisport. The largest standard scoring solution.

Size: 18' x 9' x 8" (5.49 x 2.74 x .20 meters)

Digit Size/Color: 30" / 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 460 lbs (209 kg) With ETN's: 522 lbs. (237 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN



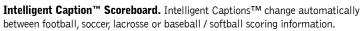


MODEL 3680









Size: 18' x 8' x 8" (5.49 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 590 lbs (268 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only

IRWIN A. & ROBERT D.
GOODMAN ATHLETIC COMPLEX

Edgewood High School, Madison, WI

EDGEWOOD HIGH SCHOOL



- PANTHERS Optional Electronic Team Names



MODEL 3600

Classic Football. The most basic football scoreboard that includes possession indicators.

Size: 18' x 8' x 8" (5.49 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs. (219 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN















East Chambers ISD, Winnie, TX



For large fields. Includes ball on, yds to go and time outs left.

Size: 18' x 8' x 8" (5.49 x 2.44 x 0.2 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs. (219 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

*Soccer captions standard; Football conversion set available



Optional White LEDs shown

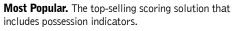












Size: 18' x 8' x 8" (5.49 x 2.44 x .20 meters)

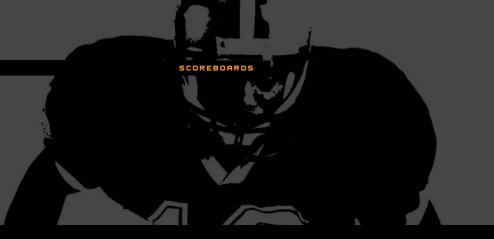
Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs. (219 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN



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MODEL 3634









includes time outs left. If desired, ball possession can be indicated as a "P" in the T.O.L. digits.

Size: 18' x 8' x 8" (5.49 x 2.44 x .20 meters)

Diait Size/Color: 24" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs. (219 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN















Mid-size Multi-Sport Scoreboard. A mid-range football solution.

Size: 16' x 5' x 8" (4.88 x 1.52 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 260 lbs (113 kg) With ETN's: 315 lbs. (138 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

*Soccer scoreboard shown with Football conversion set.

Optional White LEDs shown





MODEL 3658

Mid-size Football Scoreboard. Similar to the 3655 (above) but optimized for football with only one digit for Down.

Size: 16' x 5' x 8" (4.88 x 1.52 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 260 lbs (118 kg) With ETN's: 315 lbs. (143 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN





MODEL 3602



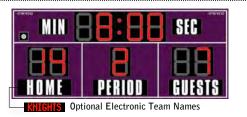


Perfect, Inexpensive Scoring Option. The next most basic scoring solution that is commonly used as an auxiliary scoreboard, and includes ETN capabilities.

Size: 12' x 5' x 8" (3.66 x 1.52 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 180 lbs (82 kg) With ETN's: 235 lbs. (107 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown) ETN





MODEL 3650









Basic Multisport. The perfect auxiliary scoreboard for small fields.

Size: 10' x 4' x 8" (3.05 x 1.22 x .20 meters)

Digit Size/Color: 14" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 130 lbs (59 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown)





DGT-6-T14

Nevco Exclusive: Delay of Game Timer with Clock.

Incorporates a game clock with a traditional DG1 all in one unit, making crucial game timing easily visible by both quarterbacks and officials from anywhere on the field.

Dimensions: 4' x 5' x 8" (1.22 x 1.52 x 0.20 meters) Digit Size/Color: Game Time: 14" High Intensity Red /

Play Clock: 24: Amber / Translucent White LED Upgrade also available Approx. Hanging Weight: 60 lbs. (27 kg) Controls Available: MPCW-7 (Wireless)



MODEL DGT-6

Perfect Accessory for the Field. Delay of game timer, easily viewed by the quarterback.

Size: 4' x 4' x 8" (1.22 x 1.22 x .20 meters) Digit Size/Color: 30" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 50 lbs (23 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)



MPCX2 WIRELESS HAND-HELD CONTROLLER

Small and lightweight control perfect for smaller facilities or to operate auxiliary scoreboards. Convenient wireless operation within 1000'. Operates multiple scoreboards simultaneously. System allows multiple controllers to link to a single scoreboard. A great tool for coaches - run the scoreboard in practice from the palm of your hand

without connecting table-top controller. Operates on two AA batteries and includes a built-in battery indicator. Built-in wireless strength meter and internal antenna.

Size: 3.25" x 5.5" x .875" (0.08 x 0.14 x 0.02 meters) Digit Size/Color: Bright 32 characters LCD display Approx. Hanging Weight: 5.5 oz (.16 kg)





MODELS SEG-14/ SEG-18

Portable Play Clock. The SEG-14/SEG-18 can be used as a practice segment timer and display 0-99 minutes, or a portable Delay of Game Timer and display between 0-99 seconds. Three programmable reset keys allow for mulitple reset times

within an event. Can operate independently from any existing Nevco or non-Nevco equipment. Our portable hand-held wireless control allows programming and use independent

16 lbs. (7.26 kg)

of display. Lithium Ion Battery powered. 6+ hours of operation. Available with 14" or 18" digits. Can also be used as NCAA compliant Lacrosse Shot Clocks.

SEG-18: 29" x 24" x 9" (0.74 x 0.61 x 0.23 meters) **SEG-14:** 22" x 21" x 9" (0.56 x 0.53 x 0.23 meters) Digit Size/Color: 18" or 14" High Intensity Red

or Amber Approx. Hanging Weight: 18 lbs. (8.16 kg)



CONTACT A DISPLAY AND SCORING CONSULTANT: 1.800.851.4040 • www.nevco.com

CELEBRATING OVER 80 YEARS OF EXCELLENCE

CELEBRATING OVER 80 YEARS OF EXCELLENCE

FOOTBALL & TRACK COMBO

7600 SERIES

- Advanced timing features ideal for football/track
- A variety of sizes and features; select the ideal
- model for your facility
- Large digits easily seen from long distancesWhite outline striping separates features for greatest readability – standard on all outdoor scoreboards
- Built-in horn
- Bright, long-lasting, energy-efficient LEDs





FULL FEATURE SOLUTIONS

Nevco offers a variety of track display and scoring solutions that integrate with FinishLynx® and Hy-Tek's® track results software, so that every meter of every event is logged.















Maximum Impact. The overall largest multisport scoring solution option offered. Commonly used in large facilities.

Size: 36' x 10' x 8" (10.97 x 3.05 x .20 meters)

Digit Size/Color: 30" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 1020 lbs (463 kg) With ETN's: 1220 lbs. (553 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





MODEL 7620











32' Multisport. The only 32' multisport scoring solution. This model includes possession indicators, time outs left and 1/100th of a second timing capabilities.

Size: 32' x 8' x 8" (9.75 x 2.44 x .20 meters)

Digit Size/Color: 30" / 24" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 760 lbs (345 kg) With ETN's: 822 lbs. (373 kg)

Controls Available: MPC (Wired, Wireless) Caption Types Available: NL (shown), ETN





MODELS 7605 / 7615 / 7625











Multisport with 1/10th, 1/100th, or 1/1000th of a Second Timing. Full-featured multisport scoring solution that includes possession indicators, time-outs left and displays 1/10th, 1/100th, or 1/1000th of a second timing.

Size: 24' x 10'6" x 8" (7.32 x 3.20 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 730 lbs (331 kg) With ETN's: 792 lbs. (359 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN







Shown with optional Electronic Team Names

Model 7605 Model 7615 **Model 7625**

MODELS 7630 / 7631 / 7632













Size: 24' x 8' x 8" (7.32 x 2.44 x .20 meters)

Digit Size/Color: 24" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 570 lbs (259 kg) With ETN's: 632 lbs. (287 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN



Model 7630





Shown with optional Electronic Team Names

MODELS 7604 / 7614 / 7624





Model 7631





Multisport with Full Track Timing. Basic football scoreboard with 1/10th, 1/100th, or 1/1000th of a second timing.

Size: 18' x 10'6" x 8" (5.49 x 3.20 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 530 lbs (240 kg) With ETN's: 592 lbs. (269 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





Shown with optional Electronic Team Names

Model 7604

Model 7614

Model 7624













Intelligent Captions™ change automatically between football, track, soccer, lacrosse, baseball or softball scoring information.

Model 7680: $18' \times 10'6 \times 8"$ (5.49 x 3.2 x .20 meters) / 710 lbs (322 kg) **Model 7685:** 24' x 8' x 8" (7.31 x 2.44 x .20 meters) / 740 lbs (336 kg) **Model 7688:** 32' x 8' x 8" (9.75 x 2.44 x .20 meters) / 930 lbs (422 kg)

Digit Size/ Color: 24" / 18" High Intensity Red, Amber, or Translucent White Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: Intelligent Captions and Electronic Team Names only







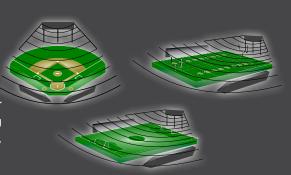
Model 7680 Model 7685

Model 7688

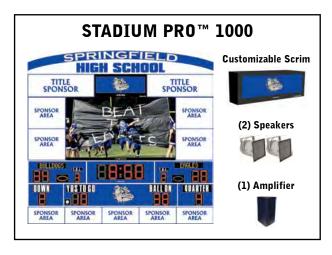
STADIUM PRO™ SOUND

DO YOUR FANS HEAR YOU LOUD & CLEAR?

Be loud and clear with **Nevco Stadium ProTM Sound** integrated with your scoreboard or video display. From the national anthem, to the final, nail biting play, the Nevco Stadium ProTM Sound System ensures that players, parents, and fans have the ultimate game-day experience.



WHICH STADIUM PRO™ IS RIGHT FOR YOU?





FEATURES OF STADIUM PRO™ SOUND

- Custom designed for the athletic market to provide complete coverage.
- Delivers clear, intelligible voice and concert quality music at high decibel levels throughout your facility.
- Single-point sound system located at the scoreboard with high-fidelity, full-range reproduction of music and speech, ensures sound clarity.
- Speakers housed in a weatherproof, lightweight aluminum, custom designed speaker cabinet with front mesh scrim.
- Industry's best 5 year warranty on loudspeakers and speaker cabinet.
- Perfect for any outdoor field or stadium.











DOWN YES TO GO BALL ON QUARTER

BOZARD













HOCKEY

Looking for a way to maximize your team's impact on and off the ice? Nevco's wide range of hockey scoring solutions are designed to deliver a superior level of quality and flexibility for any arena.

Call your Display and Scoring Consultant to request a digital proof of your display and scoring solution.

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www.nevco.com





CENTER ICE: NEVCO INTEGRATED DISPLAY AND SCORING SOLUTIONS

Whether you want a wall-mounted scoreboard to display penalties and shots on goal, or a center-hung 4-sided video display with virtual scoring overlay, Nevco will ensure your scoring solution attacks the competition.

- 1 CENTER-HUNG 4-FACE VIDEO DISPLAY
- 2 FULL COLOR LED MESSAGE CENTER
- 3 ANCILLARY SCOREBOARD WITH ELECTRONIC TEAM NAMES
- 4 LED FASCIA OR RIBBON BOARD

- 5 HOCKEY GOAL LIGHT SYSTEM
- 6 LOCKER ROOM CLOCK
- 7 FULL COLOR MARQUEE



CHOOSE THE BEST

Nevco is a prominent industry leader for a solid Nevco is a prominent industry leader for a solid reason: quality. You'll find it in our Display and Scoring Consultants, in each and every product, in our installation and in the countless years of peak performance, game after game. performance, game after game.





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IO Π スロイ



Shown with Optional Electronic Team Names



period 📑 player penalty penalty playe

Shown with Optional Electronic Team Names

4-SIDED





MODEL 4711





Full Featured. Our best-selling hockey scoreboard designed with two player number and penalty timers per team.

4-Sided Maximum Impact. A center-hung scoring solution that includes two player numbers and penalty timers per team.

1-sided: 8' x 6' x 8" (2.44 x 1.83 x .20 meters) 4-sided: Approx. 12' 1" square at top x 9' 6" square at bottom x 6' high (3.68 x 2.90 x 1.83 meters)

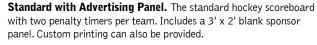
Digit Size/Color: 13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 1-sided: 130 lbs (58 kg) 4-sided: 1054 lbs (478 kg)

Controls Available: MPC (Wired, Wireless) Caption Types Available: NL, RL, ETN

Shown with Optional Electronic Team Names





4-Sided with Standard Advertising Panels. The basic center-hung hockey scoring solution. Features two penalty timers per team.

Size: 1-sided: 8' x 6' x 8" (2.44 x 1.83 x .20 meters) 4-sided: Approx. 12' 1" square at top x 9' 6" square at bottom x 6' high (3.68 x 2.90 x 1.83 meters)

13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 1-sided: 130 lbs (58 kg) 4-sided: 1054 lbs (478 kg)

Controls Available: MPC (Wired, Wireless) Caption Types Available: NL, RL, ETN

Digit Size/Color:

period shots on goal penaltu

MODEL 4750

Shown with Optional Electronic Team Names



4-SIDED





Shots on Goal. The standard hockey scoreboard that includes shots on goals.

4-Sided with Shots on Goal. Our largest center-hung scoring solution that includes shots on goals.

1-sided: 8' x 6' x 8" (2.44 x 1.83 x .20 meters)

4-sided: Approx. 12' 1" square at top x 9' 6" square at bottom x 6' high (3.68 x 2.90 x 1.83 meters)

Digit Size/Color: 13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 1-sided: 130 lbs (58 kg) 4-sided: 1100 lbs (498 kg) Controls Available: MPC (Wired Wireless)

Caption Types Available: NL, RL, ETN





4-SIDED





Shots on Goal. The standard hockey scoreboard that includes shots on goals.

4-Sided with Shots on Goal. Our largest center-hung scoring solution that includes shots on goals.

1-sided: 12' x 5' x 8" (3.66 x 1.52 x .20 meters) 4-sided: Approx. 15' 7" square at top x 13' 8" square

at bottom x 5' high (4.79 x 4.21 x 1.52 meters) Digit Size/Color: 13" / 9" High Intensity Red and Amber **Approx. Hanging Weight:** 1-sided: 148 lbs (67 kg)

4-sided: 1308 lbs (593 kg) Controls Available: MPC (Wired Wireless) **Caption Types Available:** NL, RL, ETN

MODEL 4760

Maximum Impact Wall Mount. The extreme scoreboard that is perfectly designed for large facilities. It includes player numbers penalty timers and shots on goal.

Size: 24' x 5' x 8" (7.32 x 1.52 x .20 meters) Digit Size/Color: 18" / 13" High Intensity Red and Amber Approx. Hanging Weight: 325 lbs (147 kg) Controls Available: MPC (Wired, Wireless) Caption Types Available: NL (shown), RL, ETN





MODEL 4730

Scoring Solution with Advertising Panels. Our largest hockey scoreboard with a blank sponsor panel; custom printing can be provided. Features include two player numbers and penalty timers per team.

Size: 24' x 5' x 8" (7.32 x 1.52 x .20 meters) Digit Size/Color: 18" / 13" High Intensity Red and Amber Approx. Hanging Weight: 300 lbs (136 kg) Controls Available: MPC (Wired, Wireless) Caption Types Available: NL (shown), RL, ETN





Most Popular. Our only 18' hockey scoreboard. Includes two penalty timers per team.

Size: 18' x 4' x 8" (5.49 x 1.22 x .20 meters) Digit Size/Color: 18" / 13" High Intensity Red and Amber Approx. Hanging Weight: 185 lbs (84 kg)

Controls Available: MPC (Wired, Wireless) Caption Types Available: NL (shown), RL, ETN





Full Featured with Low Clearance. The ideal large-facility scoring solution. This model includes two player numbers and penalty timers.

Digit Size/Color: 13" / 9" High Intensity Red and Amber Approx. Hanging Weight: 148 lbs (67 kg)

Optional Electronic Team Names

Size: 16' x 3' x 8" (4.88 x .91 x .20 meters)

Controls Available: MPC (Wired, Wireless) Caption Types Available: NL (shown), RL, ETN







Low Clearance with Shots on Goal. Designed with shots on goal and two penalty timers per team like the 4750. Perfect for use in large facilities.

Size: 16' x 3' x 8" (4.88 x .91 x .20 meters)

Digit Size/Color: 13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 140 lbs (64 kg) Controls Available: MPC (Wired, Wireless) Caption Types Available: NL (shown), RL, ETN IGHTS Optional Electronic Team Names



Low Clearance with Advertising Panels. Features two penalty timers per team. Designed for large facilities.

Size: 16' x 3' x 8" (4.88 x .91 x .20 meters)

Digit Size/Color: 13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 136 lbs (62 kg) Controls Available: MPC (Wired, Wireless) Caption Types Available: NL (shown), RL, ETN





Basic Hockey with Penalty Indicators. The most basic scoring solution for hockey. Offers a wireless handheld control option.

Size: 8' x 3' x 8" (2.44 x .91 x .20 meters)

Digit Size/Color: 13" / 9" High Intensity Red and Amber

Approx. Hanging Weight: 65 lbs (30 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), RL, ETN





Shots on Goal. The exclusive model designed

TIGERS

Optional

Electronic Team Names with shots on goal only. Used primarily as a secondary scoring component.

Size: 5' x 3' x 8" (1.52 x .97 x .20 meters) Digit Size/Color: 13" High Intensity Amber Approx. Hanging Weight: 40 lbs (18 kg) Controls Available: MPC (Wired, Wireless)
MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), RL, ETN





Goal! A goal light that is mounted outside of the rink. Includes switches for goal light operators.

Size: 1'6" x 1' 7.75" x 4" (.46 x .50 x .10 meters)
Approx. Hanging Weight: 11 lbs (5 kg)
Controls Available: MPC (Wired, Wireless)







SOCCER

From official kick-off to the final seconds on the pitch, Nevco offers a complete line up of soccer scoring solutions to ensure not a second of game time will be missed!

Call your Display and Scoring Consultant to request a digital proof of your display and scoring solution.

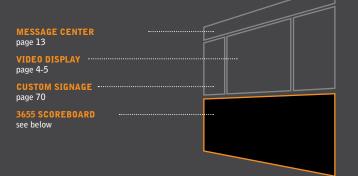


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CHOOSE THE BEST

Nevco is a prominent industry leader for a solid reason: quality. You'll find it in our Display and Scoring Consultants, in each and every product, in our installation and in the countless years of peak performance, game after game.







Big Impact. Our largest soccer scoreboard. Includes total shots, saves, corner kicks and penalty kicks for home and guests.

Size: 32' x 10' x 8" (9.75 x 3.05 x 0.2 meters)

Digit Size/Color: 30" / 24" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 890 lbs (404 kg) With ETN's: 952 lbs (432 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN















Signature Nevco Design. Retro style scoreboard that maximizes viewing distance. Perfect centerpiece to any venue.

Size: 30' x 10' x 8" (9.14 x 3.05 x .20 meters)

Digit Size/Color: 30" / 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 630 lbs (286 kg) With ETN's: 692 lbs (314 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

*Football scoreboard shown with Soccer conversion set



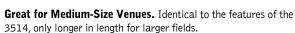












Size: 24' x 8' x 8" (7.32 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 570 lbs (259 kg) With ETN's: 632 lbs (287 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

*Football scoreboard shown with Soccer conversion set













Intelligent Caption™ Multi-Sport Scoring.

Intelligent Captions change automatically between football, soccer, lacrosse or baseball / softball scoring information.

Size: 18' x 8' x 8" (5.49 x 2.44 x 0.2 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 590 lbs (268 kg) Controls Available: MPC (Wired, Wireless)

Caption Types Available: Intelligent Captions and Electronic Team Names only



CONTACT A DISPLAY AND SCORING CONSULTANT: 1.800.851.4040 • www.nevco.com



3600 SERIES

- Wide range of models to select from;
- · Lighted time colon and decimal; automatically adjusts to 1/10th of a second
- Large digits easily seen from long distances
- White outline striping standard on all outdoor scoreboards for greatest readability
- Built-in horn
- Bright, long-lasting, energy-efficient LEDs All Nevco soccer scoreboards can be used for lacrosse or field hockey







West Virginia Wesleyan College, Buckhannon, WV



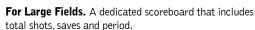






MODEL 3656





Size: 18' x 8' x 8" (5.49 x 2.44 x 0.2 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs (219 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





total shots.

MODEL 3634











Great Basic Display. The standard scoring solution that includes

Size: 18' x 8' x 8" (5.49 x 2.44 x .20 meters)

Digit Size/Color: 24" / 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs (219 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

*Football scoreboard shown with Soccer conversion set.



KNIGHTS Optional Electronic Team Names















Classic Scoreboard with Shots. The standard scoring solution that includes total shots.

Size: 18' x 8' x 8" (5.49 x 2.44 x .20 meters)

Digit Size/Color: 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs (219 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN

*Football scoreboard shown with Soccer conversion set.















Size: 18' x 9' x 8" (5.49 x 2.74 x .20 meters)

Digit Size/Color: 30" / 24" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 460 lbs (209 kg) With ETN's: 522 lbs (237 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless) Caption Types Available: NL (shown), ETN





MODEL 3655









Pure Soccer. Specifically designed for soccer. Includes total shots.

Size: 16' x 5' x 8" (4.88 x 1.52 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 260 lbs (113 kg) With ETN's: 315 lbs (138 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





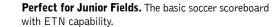
MODEL 3602











Size: 12' x 5' x 8" (3.66 x 1.52 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 180 lbs (82 kg) With ETN's: 235 lbs (107 kg) Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown), ETN





MODEL 3650









Entry Level. The smallest soccer scoreboard.

Size: 10' x 4' x 8" (3.05 x 1.22 x .20 meters)

Digit Size/Color: 14" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 130 lbs (59 kg)

Controls Available: MPC (Wired, Wireless), MPCX2 (Handheld Wireless)

Caption Types Available: NL (shown)





INDOOR SOCCER SOLUTION

Nevco's industry leading indoor scoreboard, the 2700, is also a great solution for indoor soccer. It's ideal for small spaces because it's smaller than our other

It's also a great solution for indoor venues that host multiple sports in the same gymnasium or other indoor space.
• Scores soccer, basketball, volleyball or wrestling

- Uses same wired or wireless console controller or the handheld wireless MPCX2 controller.

Note: The 2700 series scoreboards are not approved for outdoor use.

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LACROSSE & FIELD HOCKEY









CHOOSE THE BEST

Nevco is a prominent industry leader for a solid reason: quality. You'll find it in our Display and Scoring Consultants, in each and every product, in our installation and in the countless years of peak performance, game after game.







Most Popular Lacrosse Scoreboard. This unique modular design enables customers to choose two penalty timers initially, and add a Model 5633 penalty timer at the time of installation or any time after!

Size: 18' x 8' x 8" (5.49 x 2.44 x 0.2 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 420 lbs (191 kg) With ETN's: 482 lbs (219 kg)

Controls Available: MPC (Wired, Wireless)
Caption Types Available: NL (shown), ETN





MODEL 5634



Basic. Our basic lacrosse scoreboard. Add on up to 2 additional penalty timers (Model 5633) over time as budget allows.

Size: 18' x 6' x 8" (5.49 x 1.82 x 0.2 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White Approx. Hanging Weight: 320 lbs (145 kg) With ETN's: 375 lbs (170 kg)

Controls Available: MPC (Wired, Wireless)
Caption Types Available: NL (shown), ETN





MODEL 5625





Outdoor Hockey. Our outdoor model that features two penalty timers per team. Includes a blank 3' x 2' sponsor panel; custom printing can also be provided.

Size: 12' x 8' x 8" (3.66 x 2.44 x .20 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 290 lbs (132 kg)
Controls Available: MPC (Wired, Wireless)
Caption Types Available: NL (shown)







Add-on Penalty Timer. Add the 5633 on to a Model 5634 or 5635 for an additional penalty timer and a seamless appearance.

Size: 18' x 2' x 8" (5.49 x 0.61 x 0.2 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 150 lbs (68 kg)
Controls Available: MPC (Wired, Wireless)







Add-on Penalty Timer. Add the 5632 on to a Model 5634 or 5635 for additional penalty timers and a seamless appearance.

Size: 18' x 4' x 8" (5.49 x 1.21 x 0.2 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 237 lbs (107 kg)
Controls Available: MPC (Wired, Wireless)







Add-on Penalty Timer. Add the 5642 on to an Intelligent Caption[™] Model 3685 or Model 7685 for a seamless appearance.

Size: 24' x 3' x 8" (7.31 x 0.91 x 0.2 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 200 lbs (90.7 kg)
Controls Available: MPC (Wired, Wireless)







Add-on Penalty Timer. Add the 5643 onto an Intelligent CaptionTM Model 3685 or Model 7685 for two additional penalty timers with a seamless appearance.

Size: 24' x 5' x 8" (7.31 x 1.52 x 0.2 meters)

Digit Size/Color: 18" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 350 lbs (158.76 kg)
Controls Available: MPC (Wired, Wireless)



MODELS SEG-14/ SEG-18

Lacrosse Shot Clock. The SEG-14 / SEG-18 are ideal NCAA compliant Lacrosse Shot Clocks. Three programmable reset keys allow for multiple reset times within an event. Clock can display between 0-99 seconds. Can operate independently from any existing Nevco or non-Nevco equipment. Our portable hand-held wireless control allows programming and use independent of display. Lithium ion battery runs for over 6 hours. Available with 14" or 18" LED digits.

SEG-18: 29" x 24" x 9" (.74 x .61 x .23 meters) **SEG-14:** 22" x 21" x 9" (.56 x .53 x .23 meters) **Digit Size/Color:** High Intensity Red or Amber **Approx. Hanging Weight:** 18 lbs (8.16 kg) 16 lbs (7.26 kg)





CELEBRATING OVER 80 YEARS OF EXCELLENCE 1.800.851,4040 PAGE 63



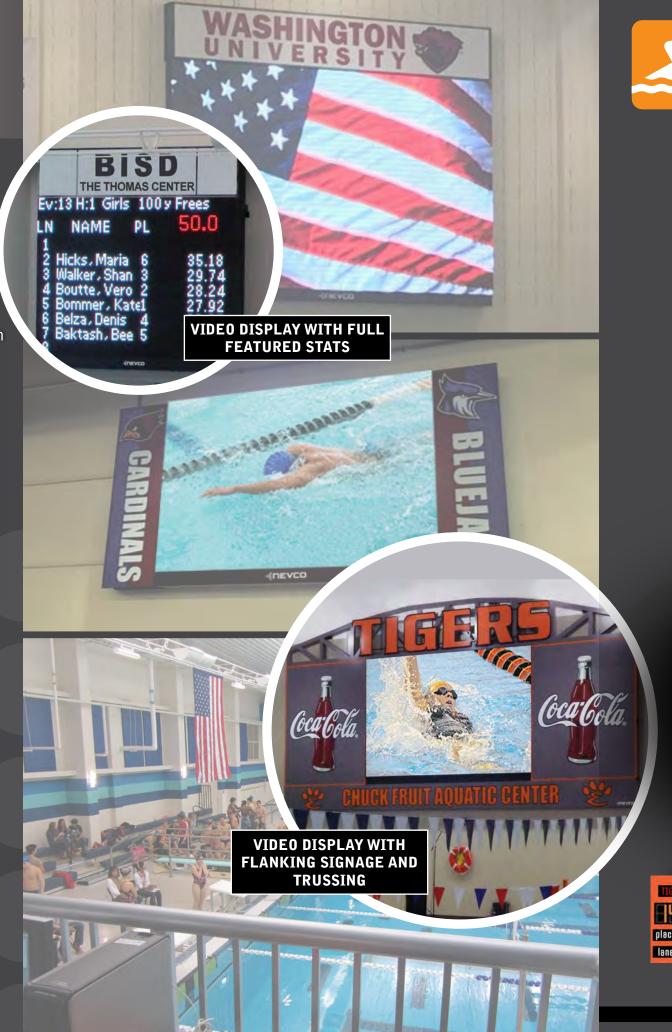
SWIMMING

It's sink or swim in the pool because every touch of the wall bears extreme significance down to hundredths of a second. The simple flash of a number or replay can bring down a thunderous roar of cheers or jeers. Don't leave any meet to chance.

Call your Display and **Scoring Consultant** to request a digital proof of your display and scoring solution.

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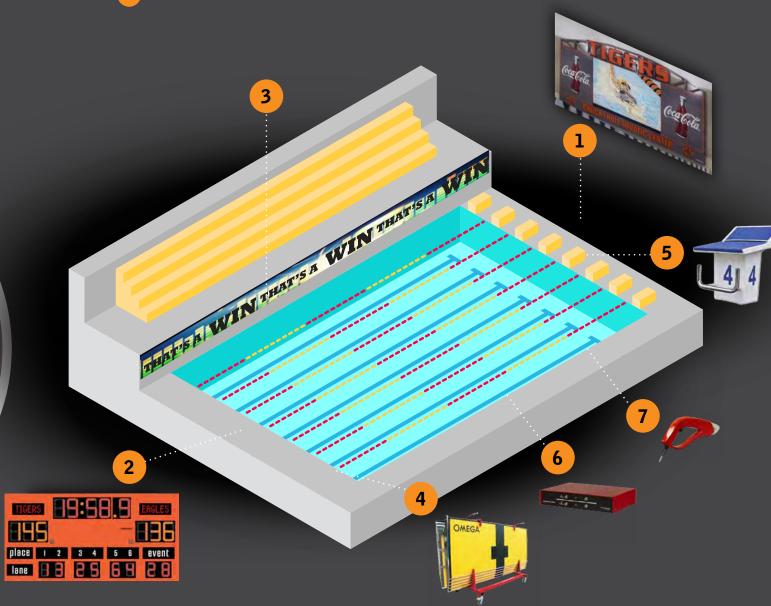


THE FAST LANE: **NEVCO INTEGRATED DISPLAY AND SCORING SOLUTIONS**

Take command of your aquatic center with Nevco and bring every meet to life through our state-of-the-art video display and scoring solutions. Integrate any Nevco solution with the industry's best timing systems and products, ensuring your aquatics project has superior accuracy, quality, reliability, and ease of operation.

- 1 VIDEO DISPLAY
- SCOREBOARD WITH ELECTRONIC **TEAM NAMES**
- 3 FASCIA OR RIBBON BOARD
- 4 TOUCH PADS

- STARTING BLOCKS & RELAY PLATFORMS
- TIMING SYSTEM
- 7 START PISTOL





TENNIS

Third-set tiebreaker, match point. It's as much mental as physical at this point. Keep coaches, teammates, and fans in the know by displaying each court's score and the entire team score on a tennis scoreboard. Ditch the court score cards and love the visibility a scoreboard brings to your courts.

Call your Display and Scoring Consultant to request a digital proof of your display and scoring solution.

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SCOREBOARDS

9600 SERIES





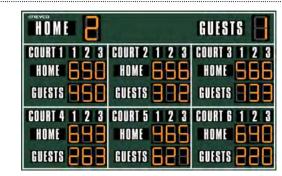
MODEL 9650

Multicourt Control. The tennis scoring solution that allows simultaneous scoring of up to three sets on six courts at the same time. Also offers team scoring from 0-9. Allows for simultaneous wireless scoring without the use of a computer. Includes 54" x 11" blank sponsor panel; custom printing can be provided.

Size: 16' x 10' x 8" (4.88 x 3.05 x .20 meters)

Digit Size/Color: 18" / 14" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 490 lbs (222 kg)
Controls Available: MPCX2 (Handheld Wireless)
Caption Types Available: NL (shown)





MODEL 9652

Game. Set. Match. This tennis scoreboard keeps track of current game score and up to 3 set scores per match. Also includes service indicator.

Size: 9' x 4' x 8" (2.74 x 1.22 x .20 meters)

Digit Size/Color: 14" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 110 lbs (49 kg)
Controls Available: MPCX2 (Handheld Wireless)
Caption Types Available: NL (shown)





Set Scoring. This tennis scoring solution allows scoring of up to three sets. Like all Nevco tennis solutions, this scoreboard offers wireless scoring without the use of a computer.

Size: 5' x 4' x 8" (1.52 x 1.22 x .20 meters)

Digit Size/Color: 14" High Intensity Red, Amber, or Translucent White

Approx. Hanging Weight: 60 lbs (27 kg)
Controls Available: MPCX2 (Handheld Wireless)
Caption Types Available: NL (shown)





LOVE...THE PORTABLE HAND-HELD CONTROL

All Nevco tennis scoreboards use the handheld MPCX2 control The MPCX2 control features:

- Convenient wireless operation within 1000'
- High-visibility LCD display with a sealed keyboard
- Offers single-hand operation with a no-slip grip and is water resistant
- Long battery life with indicator; operates on two AA batteries
- Features a built-in wireless strength meter and internal antenna
- Small enough to fit in a shirt pocket or can be attached to a waist band using the built-in clip

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CONTROLLERS

Nevco offers a wide range of controller options to operate any past or present Nevco scoring solution. The controllers are designed for simplicity and can easily be programmed and operated for each sport through a sportsspecific overlay.





GET SOCIAL WITH NEVCO

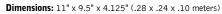


Montgomery-Waller Recreation Center, San Diego, CA Aliso Niguel High School, Aliso Viejo, CA

CONTROLLER MPCW7

Advanced Universal Control Ideal for Larger Facilities.

The MPCW7 can be used for wireless and wired operation of Nevco scoreboards and has an operating range of 1,000+ feet. Hand-held time switch for starting and stopping the clock. Profiles feature retains user preferences and settings for easy reference. Segment timing, ideal for practice and drills. Sport-specific keyboard overlays included, and battery maintains time of day. All MPCW7 controllers are pre-programmed for your facility before leaving the factory: plug and play when received. Can be used interchangeably with MPCX2 Wireless handheld controller (below).



Approx. Weight: 3.75 lbs (1.59 kg)

Keypad: Split and raised 40 key keyboard



CONTROLLER MPCX2

Small and Lightweight Control Perfect for Smaller Facilities or to Operate Auxiliary Scoreboards. Convenient wireless operation within 1000'. Operates multiple scoreboards simultaneously. System allows multiple controllers to link to a single scoreboard. Operates on two AA batteries and includes a built-in battery indicator. Built-in wireless strength meter and internal antenna. Can be used interchangeably with MPC7 Wireless controller (above).

Dimensions: 3.25" x 5.5" x .875" (.08 x .14 x .02 meters)

Approx. Weight: 5.5 oz (.16 kg)

Display: Bright 32 characters LCD display

Keypad: 12 key keyboard

















GO WIRELESS Nevco offers the flexibility to upgrade your existing wired scoreboard to a wireless scoreboard at any time. It's simple and low cost, plus as an added benefit your existing wireless controller will operate the Nevco scoreboard that you will be purchasing in the future. Nevco's wireless controllers are highly engineered to virtually eliminate outside interference and can also be operated at distances of more than 1000'. Contact your Display and Scoring Consultant to help you go wireless today.

CARRYING CASE for MPC

MPC (Wired, Wireless) Protective Case. Protect your controller in between games with a Nevco carrying case. Carrying cases are molded from impact-resistant plastic to perfectly fit and protect your Nevco MPC controller. The case also allows space to store the operator's manual and overlays.

Dimensions: 20" x 13" x 8" (.50 x .33 x .20 meters) Approx. Weight: 4.60 lbs (2.08 kg)





CARRYING CASE for MPCX2

MPCX2 Protective Case. Protect your controller in between games with a Nevco carrying case. Carrying cases are molded from impact-resistant plastic to perfectly fit and protect your Nevco MPCX2 controller. Holds two MPCX2 controllers.

Dimensions: 12.5" x 8" x 4" (.31 x .20 x .10 meters) Approx. Weight: 1.45 lbs (.65 kg)





SOLAR POWER KIT

Nevco recognizes the need to preserve the environment and conserve precious resources which led to the development of the Nevco solar power kit.

If your facility is ready to go green or if electrical power just isn't practical, consider a solar-powered kit to supply power to your scoreboard. Solar power is available for multiple small baseball, football, soccer and multisport scoreboard models. Each Nevco solar power kit is specifically engineered to work with your scoreboard and designed for all weather conditions.

Plus, a Nevco solar kit may be a much more cost-effective option than running power lines to your outdoor field.

Contact your local Nevco Display and Scoring Consultant to learn more about how your facility can implement this exciting and environmentally friendly technology.

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CELEBRATING OVER 80 YEARS OF EXCELLENCE CELEBRATING OVER 80 YEARS OF EXCELLENCE

ACCESSORIES

Nevco offers a wide selection of accessories to complement and complete your Nevco scoring solution. From segment timers to locker room clocks, Nevco helps you maximize your impact while helping you meet all the rules and regulations for your sport.



MODEL 9605

Outdoor Timer. Displays 99-minute timing, up or down. Optional time-of-day feature. Includes brackets for post or wall mounting. Timer features a waterproof design. Available in all standard Nevco colors.

Size: 6' x 3' x 8" (1.83 x .91 x .20 meters)

Digit Size/Color: 18" High Intensity Red and Amber

Approx. Hanging Weight: 60 lbs (27 kg)

Controls Available: MPC (Wired, Wireless), MPCX2

(Handheld Wireless)



MODEL 9715

Indoor Locker Room Clock. Perfect for locker rooms/officials rooms. Displays same time as scoreboard timer. Lightweight for easy mounting. Can also be used for monitoring exercise stations. Displays operate without an independent power source and can be daisy chained together with shot clocks, end of period lights or up to 8 other clocks using an Indoor Accessory Driver from Nevco.

Size: 14.25" x 10.25" x 1.5" (.36 x .26 x .038 meters)
Digit Size/Color: 4.5" High Intensity Red and Amber
Approx. Hanging Weight: 3.5 lbs (1.6 kg)
Controls Available: MPC (Wired, Wireless), MPCX2
(Handheld Wireless)



MODEL 9710

Indoor Timer. Displays 99-minute timing, up or down. Optional time-of-day feature. Includes a built-in horn and brackets for post or wall mounting. Available in all standard Nevco colors. Ideal for timing ice rink rentals.

Size: 5' x 3' x 8" (1.52 x .91 x .20 meters)

Digit Size/Color: 18" High Intensity Red and Amber

Approx. Hanging Weight: 40 lbs (18 kg)

Controls Available: MPC (Wired, Wireless), MPCX2

(Handheld Wireless)

MODELS SEG-14 / SEG-18

Segment Timers. SEG-14 / SEG-18 have multiple uses: a practice Segment Timer, a portable Delay of Game Timer for football, a NCAA compliant Lacrosse Shot Clock, or a portable Shot Clock for Basketball. Three programmable reset keys allow for multiple reset times within an event. Can operate independently of your Nevco or non-Nevco equipment. Our portable hand-held control allows programming independent of display. Lithium Ion Battery powered. 6+ hours of operation. Available with 14" or 18" digits.

SEG-18: 26" x 24" x 9" (.66 x .60 x .23 meters) **SEG-14:** 22" x 21" x 8" (.56 x .53 x .20 meters) **Digit Size/Color:** High Intensity Red or Amber **Approx. Hanging Weight:** 18 lbs (8.16 kg) 16 lbs (7.26 kg)





PROTECTIVE NETS & SCREENS

Protect Your Nevco Scoring and Display System. Protective nets are available for both indoor and outdoor scoring and display systems. Protective screens are indoor only. Custom sizes available.

 Net Sizes:
 Standard Sizes Available

 20' w x 6' h
 10' w x 8' h
 5' w x 3' 2" h
 8' w x 6' h
 18' w x 4' h

 14' w x 8' h
 26' w x 8' h
 8' w x 3' h
 12' w x 4' h
 20' w x 5' h

 14' w x 10' h
 20' w x 10' h
 8' w x 5' h
 12' w x 5' 6" h
 24' w x 5' h





ACCESSORIES

Customize your new scoring solution by upgrading to Electronic Team Names, which allow you to customize both "home" and "guest" team names for every home game! Want to really make your outdoor scoreboard stand out in the crowd? Upgrade to our translucent white LEDs for a crisp, bright appearance on your field.

ELECTRONIC TEAM NAMES (ETN)

Perfect for Multiteam Complexes or Facilities that Host

Tournaments. Easily change one team name to the next. Program team names using the MPC (Wired, Wireless) controllers. Customize the team name for each team playing in your facility. Bright, longlasting, energy-efficient LEDs.

Note: ETNs are not available on some scoreboard models.



DIGIT COLORS

Make Your Board Stand Out. All Indoor Nevco Scoreboards come standard with pre-set High Intensity Red and Amber LED digit combination. Electronic Team Names and Intelligent Captions™ colors are customizable.

All Outdoor Nevco Scoreboards are available in High Intensity Red, Amber, or Translucent White LEDs.





CUSTOM CAPTION PLATES

Customize Your Caption Plates. Replace "home" and "guests" caption plates with custom-printed team name or logo caption plates.



SCORBITZ™ - REVENUE GENERATION AND STREAMING SCORES

Stream Scores to Mobile Devices. By adding a simple Nevco/ScorbitzTM gateway device to your Nevco scoreboard solution, you can automatically share your scoreboard data, time and score in real time with fans on their smart phones. You can also share your team's schedules with your fans so they know when to tune in. Plus, ScorbitzTM can offer a new revenue stream for your athletic program through advertising in the app.



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SIGNS

Nevco offers a wide range of signage options to let your opponents know that you mean business. Whether you want standard signs, arches, domes, rear-illuminated team or sponsor signs, channel letters or decorative trusses, Nevco will assist you in maximizing your school spirit.

PAINT & STRIPING COLORS

All scoreboards and striping are available in the following 15 standard colors. Please contact your Nevco Display and Scoring Consultant to see actual color swatches.



TYPE A/AD/ADL

A-Style Sign: Constructed of single thickness aluminum. Top and bottom edges bent for additional strength. Easily installed.

AD-Style Sign: Sign cabinet is the same depth as the message center or scoreboard. Adaptable mounting brackets are included for easy installation.

ADL-Style Sign: Bright illuminated sign for maximum visibility. Impactresistant face. Sign cabinet is the same depth as the message center or scoreboard. Adaptable mounting brackets are included for easy installation.





TYPE DOME

For a truly custom look, choose a Nevco dome sign constructed of aluminum for stability. Then maximize the impact of your dome sign by prominently displaying your team logo.



TYPE ARCH

For a sleek look consider adding a Nevco arch sign to your display and scoring solution. Arch signs can be mounted both above and below a scoreboard.



DECORATIVE TRUSSES / LETTERS / MASCOTS

For maximum impact add a custom decorative truss to boldly display your team name or logo. Speak with your Display and Scoring Consultant to learn more about making this impressive addition the perfect complement to your display or scoring solution.





CUSTOM SIGN SIZES & TYPES AVAILABLE

Ask your Nevco Display and Scoring Consultants how a custom sign type or custom sign size could maximize the impact of your scoreboard. For more information, please call us at 1-800-851-4040 or e-mail info@nevco.com





#70 Desert Tan

#95 Silver Gray

PMS MATCH AVAILABLE

#76 Print Black

In addition to the standard 15 colors, Nevco can match any PMS color. When ordering, please specify the PMS color to be used. Please contact your Nevco Display and Scoring Consultant for pricing information. Delivery time may be longer than standard

For more information, please call us at 1-800-851-4040 or e-mail info@nevco.com.

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THE NEVCO COMMITMENT

NEVCO, INC. GUARANTEE



A. Nevco, Inc. scoreboards, scoring tables, marquees, message centers, video boards* and Stadium Pro loudspeaker enclosures are guaranteed for a period of five (5) years from the date of invoice against defects in workmanship or material (defined below).*Video Board exclusions include Model 8815, 8825, 8835, and 8845.

Wireless components, portable scoreboards and solar power kit carry a two (2) year guarantee from date of invoice. Hand-held controls and switches carry a one (1) year guarantee from date of invoice. The Stadium Pro loudspeaker front printed scrim is guaranteed for one (1) year from the date of invoice. Video Board Models 8815, 8825, 8835, and 8845 are guaranteed for one (1) year from date of invoice, unless additional years of warranty is purchased.

For products supplied by third-party suppliers (i.e. cameras, computers, computer monitors, radar guns, loudspeakers, amplifiers and associated electronics), Purchaser agrees to accept the manufacturer's warranty, if any, in lieu of any warranty by Nevco.

B. Nevco's obligation under this Warranty shall be limited to repair or replacement, at its option, of any equipment or part thereof. Unless otherwise directed by Nevco, any defective equipment or part thereof shall be returned to Nevco for repair or replacement. Nevco may, at its option, provide on-site warranty service. Nevco shall have a reasonable period of time to make such repairs or replacements. Nevco will pay no charges for time or materials used by others in making

C. Purchaser shall pay ground transportation charges for the return of any defective equipment or parts thereof. If returned equipment or parts thereof are repaired or replaced under the terms of this warranty, Nevco will prepay surface postage transportation charges back to Purchaser; otherwise, Purchaser shall pay transportation charges to return the equipment or parts thereof back to the Purchaser. All returns must be pre-approved by Nevco before shipment. Nevco shall not be obligated to pay freight for any unapproved return. Purchaser shall pay any upgraded or expedited transportation charges.

D. Defects shall be defined as follows. Excepting LEDs, a "Defect" shall refer to a material variance from the design specification that prohibits the equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. This warranty does not impose any duty or liability upon Nevco for partial LED pixel degradation. Nor does this warranty provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

THIS LIMITED WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR THE PARTICULAR PURPOSE OF PURCHASER. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY NEVCO, ITS AGENTS OR EMPLOYEES, SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

The above Guarantee and Extended Warranty are effective as of the printing of this Catalog. Nevco, Inc. reserves the right to update or change the Guarantee and Extended Warranty without providing written notice. To view or receive the most current copy of the Guarantee and/or Extended Warranty, please visit our website at www tion or call 1-

INDUSTRY STANDARDS

All Nevco display and scoring models are tested to ensure quality and design standards are met. In addition to internal testing procedures, Nevco may supplement the testing of any model by applying for one or more of the following designations:

A UL listing indicates the safety of the product has been independently examined and evaluated by Underwriters Laboratories and has earned the right to carry the UL mark. As part of the listing, the manufacturer must agree to and participate in periodic and unannounced factory inspections by UL to ensure standards are being met. A CUL mark indicates the product has been examined and tested by Underwriters' Laboratory to the National Safety Standards of Canada. A CSA listing is equivalent to the CUL mark. CSA listings are issued by CSA International. Many municipalities require one of these listings to meet building codes.

The CE mark is placed on products compliant to the New Approach Directives of the European Union. The CE mark proves to buyers that the product fulfills all the essential safety and environmental requirements as defined in the European Directives.

The FCC mark is placed on products compliant to the Federal Communications Commission standards. While wireless devices are required to be certified by the FCC, all electronic equipment must meet standards for limits on emissions of harmful radio interference. The FCC mark proves to buyers that the product fulfills all the essential environmental requirements. Industry Canada monitors and approves all wireless devices and electronic equipment sold in Canada.

The ROHS (Restriction on Hazardous Substances) standard limits the amounts of lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (Cr (VI)), PBDE (polybrominated diphenyl ethers), and PBB (polybrominated biphenyls). The ROHS standard was set forth by the European Union and adopted by the state of California.















SERVICE INFORMATION

The Nevco Service Department can assist with phone service at no cost. Commonly our technicians can troubleshoot over the phone and will recommend follow up actions to resolve your issue. Most often the techs will only need the basic information on the system to assist (scoreboard

We have service technicians standing by from 7am until 5pm Central time. Call 800-851-4040 and select option 2 (Service) to be connected.

If you would like to enter a ticket via our automated ticket system, follow the link below and enter the required information. A service technician will be assigned to your case and reach out to you.

To send an item in for evaluation or repair, please send it with a note defining the issue to address listed below. Please note any specific shipping or handling requirements to include the return ship-to address and contact information. We typically repair with a one-day turn around and will ship them back UPS GND unless otherwise instructed.

U. S. and International

301 East Harris Avenue, Greenville, IL 62246-2151 USA U. S.: 1-800-851-4040 • International: 1-618-664-0360

NEVCO SCOREBOARD COMPANY, ULC #606B-55 Cedar Point Drive, Barrie, ON L4N 5R7 Canada: 1-800-461-8550/1-705-719-9341 E-mail: canada@nevco.com



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STADIUM PRO 1000 & 2000 Series Professional Sound System





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Stadium Pro 1000 & 2000 Series Operating Instructions

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Stadium Pro™ 1000



The Stadium Pro™ 1000 is ideal for a wide variety of outdoor facilities, including football, lacrosse, soccer, softball and track. The permanent installation offers concert quality sound that can be heard above the noise of the crowd. The Stadium Pro 1000 is easy to operate and integrates with Nevco video scoreboards to offer a complete video display, scoring and audio solution to high schools, colleges, universities and other sports venues.

Stadium Pro™ 1000 Components













Speakers (2)

Subwoofer (1) Control Rack (1)

Pod Mix (1)

Microphone (1)

Stadium Pro™ 2000

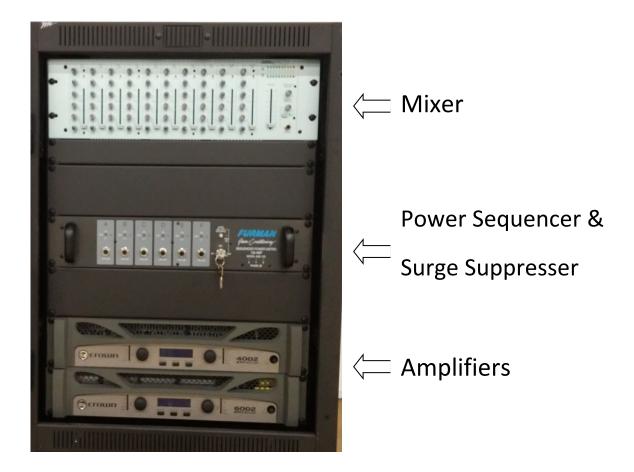


The Stadium Pro™ 2000 sound system offers a more powerful option for larger venues. Similar to the Stadium Pro 1000, the Stadium Pro 2000 is an ideal outdoor sound system for a wide variety of facilities, including football, lacrosse, soccer, softball and track. The permanent installation offers concert quality sound that can be heard above the noise of the crowd. The Stadium Pro 2000 is easy to operate and integrates with Nevco video scoreboards to offer a complete video display, scoring and audio solution to high schools, colleges, universities and other sports venues.

Stadium Pro™ 2000 Components



Stadium Pro™ 1000 & 2000 Control Room Package



The Stadium Pro 1000 & Stadium Pro 2000 are built around the same basic components. Both systems house identical components with the exception of one additional amplifier in the Stadium Pro 2000 series system.

The equipment rack houses all of the appropriate equipment required to control and power the scoreboard speaker box. Additional Space has been designed into this rack for accessories such as wireless microphones, CD Players, and IPod Docks.

Note: The control room package for your Stadium Pro sound system ships with electronics installed in the control rack and with locking casters. Casters may be removed to allow for the equipment rack to fit under counter tops.

Stadium Pro™ 1000 & 2000 Announcer Station



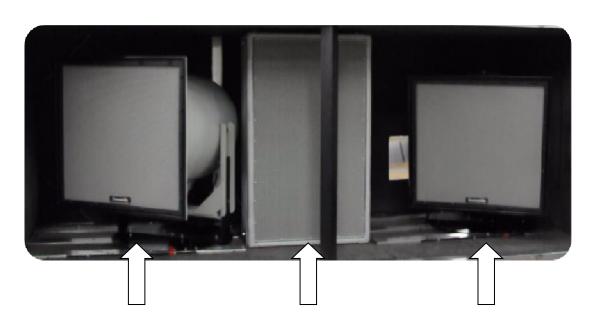
The Stadium Pro 1000 & Stadium Pro 2000 use the same announcer station setup. From the pod mix it is possible to switch the microphone operation on and off as well as mix an external music source, such as an iPod or phone into the system.

The Pod Mix station connects to the control room rack via a balanced 3 Pin XLR microphone cable.

See section 5 for details on connecting the microphone, pod mix, and external music sources.

Note: The pod mix can be extended down to field level for on field control of microphone and external music source, simply by extending the 3 Pin XLR Microphone cable.

Stadium Pro™ 1000 & 2000 Speaker Enclosure Components



Full Range - Loudspeaker
Unit # I

Subwoofer
Unit # II

Full Range - Loudspeaker
Unit # III

I-215LVSN

HIGH POWER, DUAL 15-INCH WEATHER-RESISTANT TRAPEZOIDAL SUBWOOFER



The I-215LVSN is a weather-resistant high power, trapezoidal, installation subwoofer designed to complement R Series full range loudspeakers. The I-215LVSN is the ideal choice where space enables it to be used without being obtrusive. The I-215LVSN is comprised of dual 15" (380mm) high power Cool-Coil™ low frequency drivers in a front loaded, ported configuration. The rugged grey enclosure is constructed from weather-resistant fiberglass-laminated marine plywood. The enclosure also incorporates 23 load-rated M10 rigging points. Simple and flexible installation is achieved using optional hardware.

R2-52N

DEFINED COVERAGE, WEATHER-RESISTANT, THREE-WAY LOUDSPEAKER SYSTEM WITH 50° x 20° COVERAGE



The R2-52N full-range loudspeaker system is engineered to provide quality, long throw full-range sound projection in a variety of outdoor and indoor applications. Its wide, smooth frequency response and high efficiency ensures high-fidelity music reproduction along with superb projection of clear, intelligible speech at very low distortion. The R2-52N is an all horn loaded tri-axial design using precision waveguides manufactured with hand-laminated fiberglass. The outer enclosure forms a double wall construction with the internal bass horn, providing a completely weather-sealed chamber for the LF drivers. The mid/high frequency horn assembly is mounted in the mouth of the bass horn. A high quality passive crossover with dynamic driver protection is included. The result is a loudspeaker system that is extremely strong, non-resonant, weather-resistant, and easy to install.

Crown XTi 6002 Power Amplifiers



The Crown XTi Series power amplifiers provide the power output required to drive all of the transducers within the Stadium Pro Speaker Enclosure. These amplifiers boost the incoming signal from the control room mixer and produce speaker level outputs which intern drive the various loudspeakers. Integrated on board digital signal processing allows Nevco the ability to custom tailor the amplifiers output characteristics to maximize the acoustical performance of your Stadium Pro Sound System.

Alesis Multi Mix 12R – Control Room Mixer

The Alesis Multi Mix 12R allows you to mix various microphone and line level inputs into your Stadium Pro sound system. Wireless microphones, compact disc players, iPods, smartphones, and other input devices can connect through this mixer to your stadium pro sound system. Front controls allow the operator to control which of the 12 input sources the audience hears and gives them control over each independent input source.

Furman ASD-120 - Stadium Pro Power Sequencer / Surge Suppressor



The Furman ASD-120 allows you to power up its' six circuits in a sequenced fashion. The sequence is reversed for power down. Power sequencing is needed whenever various kinds of equipment must be powered up or down in groups, rather than all simultaneously. In audio systems, sequenced powering is often necessary to allow turn-on transients from low level amplifiers and processors to settle before any power amps are turned on. Simultaneous powering would result in a loud, annoying, and potentially destructive 'pop' reaching the speakers.

Conduit Runs

The Stadium Pro 1000 and Stadium Pro 2000 series sound systems will require a minimum of (1) one 2" nonmetallic PVC Schedule 40 conduit. This conduit should run between the announcer booth/press box and score board speaker enclosure junction box. This conduit will house the speaker level signal cables required to power the stadium pro transducers.

- It is imperative that these speaker cables are pulled in a dedicated conduit away from high voltage power runs.
- In new installations it is important to maintain efficient conduit runs. Minimizing the overall cable length used between score board and announcer booth will maximize system efficiency and will aid in the installation of the new speaker wire.
- In existing conduit installations special care should be taken to ensure conduit run is free of moisture and standing water before installing the new cabling.
- No additional grounding will be required between the control room equipment rack and the stadium pro speaker enclosure.
- The Stadium Pro 1000 series system will require 3 independent runs of 2 pair 10 gauge speaker wire, Belden Part # 5T00UP
- The Stadium Pro 2000 series system will require 6 independent runs of 2 pair 10 gauge speaker wire, Belden Part # 5T00UP
- Clearly label each speaker wire pair with the provided wire labels before pulling it through the conduit. Failure to properly identify each speaker wire pair could result in improper terminations and will damage the loudspeakers.

Power Requirements

- The Stadium Pro 1000 Series sound system will require 2 dedicated 120 Volt, 20 Amp circuits located in the announcer booth / press box or near the control room equipment rack location.
- The Stadium Pro 2000 Series sound system will require 3 dedicated 120 Volt, 20 Amp circuits located in the announcer booth / press box or near the control room equipment rack location. These circuits will require proper grounding per local and national electric codes.
- All Stadium Pro sound systems contain built-in power line surge protection.
- Using ground fault protected circuits to power the stadium pro sound system could cause unexpected fault interrupts.

Structural Requirements

Nevco recommends that you consult a professional engineer or architect familiar with the area before attempting installation. They can verify that the selected mounting laterals and columns, along with the brackets, screws, and other hardware items provided by you or Nevco are adequate for your local soil conditions, wind loads or other conditions. If procedures are used that are not covered in this manual or the provided technical drawings, careful analysis of the installation is urged.

Unpacking the Equipment

- Inspect the shipping container for damage. If any damage can be seen, contact the carrier immediately.
- Unpack speaker enclosure from the crating and inspect for damage.
- Unpack the control room equipment rack from the crating and inspect for damage.
- Carefully remove all equipment from it packing carton.

Focusing the Directional Loudspeakers

- Your Stadium Pro sound system will arrive with the horn style speakers in a shipping postion. Simply relocate the 2 (Stadium Pro 1000) or 4 (Stadium Pro 2000) directional loudspeakers from their shipping position to point at the seating for your venue. This is done by removing the 2 mounting clips, and one center pivot bolt from each of the adjustable loudspeakers. Vertical adjustments are rarely needed, but may be made by aligning the holes marked on the rear aluminum loudspeaker support strap. Horizontal focusing is done by first shifting the speaker location to location A if angling sharply to the right or location C if angling sharply to the left. Then simply rotate the speaker into position and lock it down with the bolts. The sticker on the speaker plate also describes the process. Each horn style speaker covers about 50 yards of sideline so a field with 50 yards of seating on both sides should have one speaker pointed to each side. A field with 100 yards of seating should have both speakers pointed to the same side. So on and so forth.
- Minor adjustments may be required once installed to maximize the stadium pro's coverage consistency for your specific venue.
- Once the loudspeakers are properly focused replace and tighten all mounting hardware to lock the loudspeaker into position.

Speaker Enclosure Assembly

Before mounting the Stadium Pro on your score board structure, it is recommended that you attach
the provided scrim retention springs to the front side of the loudspeaker enclosure with the
provided mounting screws.

Mounting the Enclosure

Refer to the installation drawings provided by your Nevco representative and available at www.nevco.com for detailed instructions on enclosure mounting

- Once the loudspeakers have been locked into their predefined positions, you can then begin preparations for hoisting and mounting the loudspeaker enclosure to the scoreboard structure.
- Nevco strongly encourages you to check local codes before beginning the installation. You may wish
 to contact a local architect, contractor, or sign installer for assistance. Your Nevco Sales
 Representative may be able to assist you in finding professional installers who are familiar with this
 type of equipment.
- Always use good mechanical practices when mounting the speaker enclosure.

- Use plated fastening devices to prevent rust or corrosion.
- Lift the speaker enclosure using the provided lifting strut mounted on the top of the stadium pro speaker enclosure.
- Nevco recommends consulting with a qualified rigger before hoisting the stadium pro speaker enclosure.

Installing the Scrim and Trim

- Unroll the mesh scrim and fasten to the hooks at each of the four corners. Once the mesh is attached at each of the corners work your way around the perimeter and attach each individual hook. Once each of the hooks is attached check to confirm the hooks and mesh are tightly in place.
- The final step is to install the finishing trim work. The top and bottom pieces of trim are different widths. The top trim piece is the narrower of the two long trim pieces.
- Set the top piece of trim in place and make sure the pre-drilled hole patterns match the mounting holes on the speaker cabinet. Then using a #2 Phillips bit securely fasten using the supplied metal screws.
- Next we will install the bottom piece of trim. Again first line up to make sure all the holes patterns match up then securely fasten using the supplied metal screws.
- Mount the side trim pieces. The side trim pieces mount over the top and bottom trim pieces. The
 left and right trim pieces need to be identified. There is a different mounting hole pattern for the
 left and right sides. Confirm you are installing the correct side piece by ensuring that the hole
 pattern with the greater number of mounting holes.
- Once you have confirmed left and right securely fasten the left and right trim pieces using the supplied metal screws.
- Finally refer to the instructions to use the supplied self-tapping screws to secure the side trim to the speaker cabinet.

Speaker Wire Installation

- The Stadium Pro 1000 series system will require 3 independent runs of 2 pair unshielded 10 gauge speaker wire, Belden Part # 5T00UP
- The Stadium Pro 2000 series system will require 6 independent runs of 2 pair unshielded 10 gauge speaker wire, Belden Part # 5T00UP
- Before pulling speaker wire, clearly label each speaker wire pair with the provided wire labels before pulling it through the conduit. Failure to properly identify each speaker wire pair could result in improper terminations and will damage the loudspeakers.
- It is imperative that these speaker cables are pulled in a dedicated conduit away from high voltage power runs.
- During wire pull insure that speaker wire insulation is not damaged by sharp conduit or junction box edges.
- Continuous cable runs from control room equipment rack to speaker box is required to maintain the specified system performance. Avoid splicing speaker cables mid run, unless absolutely necessary.
 Splicing of speaker cables mid-run will result in degraded system performance.

Terminating the Loudspeakers

- Once conduit runs are connected to the speaker enclosure junction box and speaker wire is installed in conduit, you are ready to begin wire terminations at the speaker enclosure junction box. The Stadium Pro 1000 will have 6 total wires to connect to the 3 different transducer groups. Simply match each of the wire pairs to the corresponding labels on each speaker input lead, and terminate. The Stadium pro 2000 will have 12 total wires to connect to the 3 different transducer groups. Short jumpers will be required to connect the 2 independent junction boxes in the 2000 series system.
 - Cut, strip and twist each wire pair to prepare speaker wire for basic wire nut type terminations. Take care to maintain existing wire label scheme to prevent improper terminations.
 - 2. After cutting, re-label and match each wire pair with the appropriate transducer group and then twist and terminate with the provided wire nuts.
 - 3. Once wire terminations are complete and wire labels have been applied to all terminated wires, carefully tuck terminations into junction box and close and secure junction box cover.

Terminating Speaker Connector Wall Plates

Stadium Pro 1000

The speaker connector wall plate should be installed in the same room as the control room equipment rack. A 4" Square junction box with single gang drywall trim ring will need to be installed within 10' of the desired control room rack location.

- 1. Once wires are pulled to the junction box location, cut and re label wire pairs. Strip each wire pair and prepare wires for basic wire nut termination.
- 2. Using the provided wire nuts match and terminate each wire pair on the wall plate to the wires going to the speaker enclosure.
- 3. Carefully tuck terminations into junction box and secure wall plate connector with the provided 6-32 screws.

Stadium Pro 2000

The speaker connector wall plates should be installed in the same room as the control room equipment rack. Two 4" Square junction boxes with single gang drywall trim rings will need to be installed within 10' of the desired control room rack location.

- 1. Once wires are pulled to the junction box locations, cut and re label wire pairs. Strip each wire pair and prepare wires for basic wire nut termination.
- 2. Using the provided wire nuts match and terminate each wire pair on the wall plates to the wires going to the speaker enclosure.
- 3. Carefully tuck terminations into junction boxes and secure wall plate connectors with the provided 6-32 screws.

Control Room Equipment Setup

Once the wire terminations are complete, and wall plates are installed, you are now ready to begin connecting the control room equipment to the speaker enclosure, and the microphone and pod mix to the control room rack.

- 1. Connect the 2 (Stadium Pro 1000) or 3 (Stadium Pro 2000) power input pigtails to the appropriate dedicated 120V, 20A power outlets.
- 2. Connect the 1 (Stadium Pro 1000) or 2 (Stadium Pro 2000) keyed speaker output connectors to the speaker input wall plates.
- 3. Unpack Microphone and assemble the provided desktop microphone stand.
- 4. Connect the microphone to the pod mix announcer station with the provided 25' 3 Pin XLR microphone cable.
- 5. The supplied RCA to 1/8" IPod / Accessory cable can also be connected to the back side of the pod mix.
- 6. Then, connect the pod mix to one of the microphone input jacks on the back side of the rack mounted control room mixer with the provided 25' 3 pin XLR microphone cable.

Note 1: The control room equipment rack should be at least 6" away from walls to maintain proper ventilation. In hot environments the rear door of the equipment rack may be removed to help further vent heat from the back of the equipment enclosure.

Note 2: Do not block the air intakes on the front of the amplifiers mounted in the bottom of the control room equipment rack. Reduced airflow will cause the amplifiers to overheat and can eventually cause system failure.

Note 3: It is recommended that you leave the front door of the control room equipment rack open or removed during normal operation to facilitate proper air-flow and equipment cooling

Testing Loudspeaker Connections

Before starting up your new Stadium Pro sound system, it is imperative to confirm that each speaker transducer is receiving the proper signal from each amplifier. If speaker wire terminations are done improperly, transducers could receive the wrong signals and damage to the loudspeaker system could result. Follow the steps below to confirm proper connections before sending loud program material through the system.

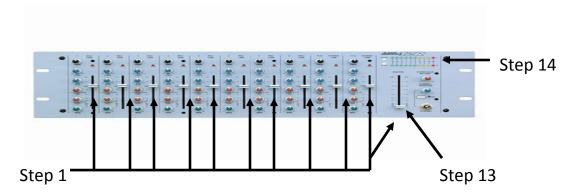
Control Room Equipment Startup

(See below for location on equipment for each step)

- Make sure all 11 faders on the rack mount control room mixer are set to their lowest level.
- 2. Confirm that all volume knobs on the amplifier are fully turned counter clockwise to their lowest position
- 3. Confirm that all 3 power input indicator lights are illuminated on the power sequencer.
- 4. On the power sequencer, turn the key switch counter clockwise to the "ON" position
- 5. Wait while sequencer starts energizing 6 separate circuits (Note that the sequence indicator lights will start illuminating)
- 6. Confirm LED Power indicator lights are illuminated on mixer, amplifier, and other auxiliary equipment.
- 7. Connect phone or media player to the pod mix line input.
- 8. Set the pod mix line input volume control to 3:00 and turn "ON" the line input
- 9. Ensure the Microphone switch on the pod mix is in the "OFF" Position.
- 10. Select and play a music track from your phone or external media device that you are familiar with. (It is important to pick music track that will represent the full range of the audio spectrum. Pop songs, or something with a drum kit work well and usually represent the full audio spectrum)
- 11. Make sure your phone or media players volume is set to at least 3/4 to full volume output.
- 12. Turn up the pod mix input fader on the control room mixer.
- 13. Set the Master fader to the Odb position (top most position)
- 14. You should now see the left / right signal indicator LED's indicating signal.
- 15. Adjust the pod mix input trim knob until the main LED signal indicators are hovering in the 0db range.









At this point you are ready to begin sending a small amount of signal to the loudspeakers. In order to prevent damage to the loudspeakers it is best to use two people to perform this test. One person should remain in the control room and the other in front of the loudspeaker enclosure. Two way radios or cell phones will help with communication during this initial startup test.

Identify the subwoofer amplifier and slowly turn up the CH 1 volume dial 2 or 3 clicks only.

The person listening to the speaker enclosure should hear the lower octaves of kick drums, bass guitars, and or low rumbling coming from the center speaker in the speaker enclosure. If you are not hearing any bass sounds from the center mounted subwoofer, turn down the amplifier volume control and contact Nevco technical support for further instruction.

Note: If the source music track does not have any bass frequencies, this test will be ineffective.

17. Turn the subwoofer volume control back down and then move on to the full range amp identified as R2 - SP1000 or SP2000.

Note: The Stadium Pro 2000 Series will have an additional amp and 2 additional full range loudspeakers. Repeat this test for the additional amplifiers and loudspeakers to ensure proper operation of all loudspeakers in your system.

18. Turn the CH 1 volume know up two or three clicks, and confirm that both full range loudspeakers are functioning.

The person listening to the loudspeakers should hear a full range sound coming from both of the full range speakers. If the sound in any way sounds muffled, turn down the amplifier volume control and contact Nevco technical support for further instruction.

Sending Signal to the Loudspeakers

Once you have confirmed proper operation of the subwoofer and the full range loudspeakers, you are now ready to perform a system test a normal operating levels.

- 1. Turn down the line input volume knob on the pod mix announcer station.
- 2. Now slowly start to turn up all 4 of the volume knobs on the amplifiers. The volume knobs should be turned all the way clockwise to their fully open position.
- 3. With your music track still playing, slowly start to turn up the line input volume knob on the pod mix announcer interface station.
- 4. Listen to your Stadium Pro sound system at a moderate level to insure all components are operating properly and sound appropriate.

Section 7: System Operation

Powering up the System – Normal Operation

- Ensure **ALL** faders on the control room mixer are turned down.
- Turn the power sequencer power key counterclockwise to the "ON" position.
- Wait 30 40 seconds for system to power up.

System Operation

- Slowly adjust master fader to the Odb mark (Top most position)
- On the Announcer station pod mix set the microphone switch to the "ON" Position.
- While talking into the microphone slowly begin to turn up the pod mix input fader to the 0db mark. (Typically Channel 8)
- On the Control Room Mixer adjust the trim knob of the pod mix input to the desired microphone level.
- Connect an external media player or smartphone to the announcer stations line input.
- Ensure that the line input volume knob on the pod mix is turned counter clockwise to its lowest position.
- Switch the line input switch on the pod mix to the "ON" position.
- Slowly turn line input volume knob up until your music is at the desired level.

Powering Down the System

- Insure ALL faders on the control room mixer are turned down.
- Turn the power sequencer power key clockwise to the "OFF" position.
- Wait 30 40 seconds for system to power down.

Storing the System (Off Season)

• In the off season, or at any time between system usage, the control room equipment rack power pigtails, and speaker output cables can be disconnected from the wall to provide additional lightning protection for your Stadium Pro System. Simply reconnect them before your next use.

Cleaning the Control Room Rack

- It is important to minimize dust build up in and around the control room equipment rack.
- Care should be taken to dust the inside and outside of the control room rack.
- Semiannually it is recommended that you vacuum the inside of the equipment rack and any venting on equipment within the control room rack.
- Avoid using pressurized air to blow dust from components.

Cleaning the Speaker Box

- The stadium pro series speaker enclosure should be inspected and cleaned annually.
- Remove the surrounding trim and scrim material from the speaker enclosure.
- Using a hose wash any standing debris from within the scrim material.
- Inspect the interior of the speaker enclosure for any signs of dirt or foreign debris.

Cleaning the Speaker Scrim

- Simply rinse the scrim material from the inside out with a garden hose.
- Visually inspect the scrim material and grommets for any signs of wear.
- See Section 4 for scrim and trim installation and removal instructions

Annual System Testing & Inspection

Nevco recommends performing a simple annual test of your stadium pro sound system at the start of each season to ensure all components are operating properly. Testing should be performed annually along with system maintenance. Simply play an audio track that you are familiar with through the sound system and listen to each individual loudspeaker up close. Ensure that you hear a well-rounded full range sound with crystal clear high frequency and well defined bass.

Note: Hearing damage can occur while listening to your stadium pro system at high SPL levels close-range.

Note: Speaker enclosure rattles may be present while listing to high SPL content at close-range.

Section 9: System Troubleshooting

Troubleshooting

Problem	Solution
No sound.	Check all cabling and connections.
	Check power source.
	Power system off and on after one minute.
	Check that all components have powered on correctly and are responding.
	Check speaker cabling is properly connected in control room and at speaker cabinet.
Sound from speakers "does not sound right".	Check all cabling and connections.
	Power system off and on after one minute.
	Perform testing described in Section 6 – "Control Room Equipment Startup"

If the problem persists please contact the Nevco Service Department at 800-851-4040.

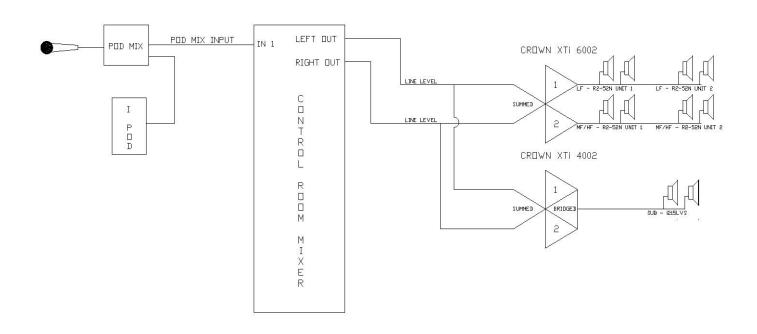
Stadium Pro Sound 1000 and 2000 Series Replacement Parts

For replacement parts please contact the Nevco service department at:

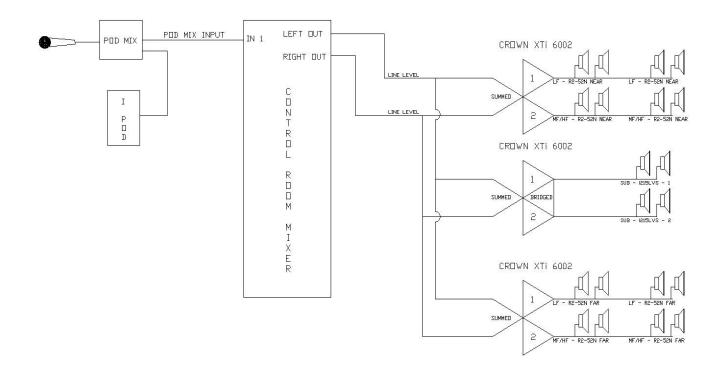
Nevco, Inc. 301 East Harris Ave. Greenville, IL 62246-2151 USA

USA Toll-Free 800-851-4040 Canada Toll-Free 800-461-8550 International Telephone +1-618-664-0360

Stadium Pro Sound 1000 Series Schematics



Stadium Pro Sound 2000 Series Schematics



Nevco Guarantee

Nevco, Inc. scoreboards, marquees, message centers, Stadium Pro loudspeaker enclosures and video boards are guaranteed for a period of five (5) years* from the date of invoice against defects in workmanship or material and will be replaced or repaired without cost to the owner provided the equipment or parts (which includes LED segments) are returned postage-paid to the Nevco, Inc. factory. Shipping back to the owner will be surface postage prepaid except if air or special method of return is specified, then shipping will be freight collect. Nevco, Inc. will pay no charges for time or materials used by others in making repairs or corrections. Guarantee shall be void if: any alteration or service, other than unplugging modules or controls, is performed without Nevco, Inc. factory authorization; or if the equipment has been connected to incorrect power, or is improperly grounded or improperly installed. Equipment which is subjected to accident, neglect, abuse, misuse or other natural disasters, including but not limited to: fire, wind, lightning, flood is not covered by this guarantee.

Note: Please refer to Warranty and Limitation page on the Nevco website at www.nevco.com for Warranty information and claims.

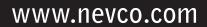


VIDEO DISPLAYS AND SCORING SOLUTIONS



Teams today are looking for scoring solutions that communicate more than the score. They are looking for completely customizable options to further set them apart from their opponents and enhance their fans' game-day experience.

Nevco understands this and can help you design, plan, and install the ultimate video display and full scoring solution. With your vision in mind, our Consultants will work hand in hand with you along the way. Nevco is a one stop shop for your ultimate display and scoring solution that will maximize your impact like never before.







MAXIMIZE YOUR IMPACT













ABOUT US

For over 85 years, and with more than 100,000 installations worldwide, the Nevco name has become synonymous with tremendous customer service and high quality products that are built to last. Nevco's innovative products are manufactured with superior quality and designed for flexibility and integration among our entire product line. From representatives who will consult with you throughout the entire process, to the highest quality products and manufacturing best practices, to personable and knowledgeable customer service technicians, and the best warranty in the industry, you can rest assured that your decision to go with Nevco is the best choice.

UNMATCHED EXPERIENCE

We've worked with a wide range of customers to design and install integrated LED displays in diverse venues across a variety of sports. We understand the inner-workings of facilities and work closely with our clients to design a scoring solution customized to fit your venue.

MANUFACTURING EXCELLENCE

Our entire product line, from basic scoreboards to video displays, is made using the highest quality electronics and manufacturing processes and is backed by an unmatched 5-year warranty. All products are assembled in the US using the latest globally sourced technologies.



In 1934, Nevco opened its doors in Greenville, IL and sold the first electronic scoreboard. With our headquarters located centrally in the Midwest and Sales Consultants represented throughout all 50 States and Internationally, we have experience that is unparalleled.

INDUSTRY BEST LEAD TIMES

Nevco has the shortest lead times in the industry and can work with you to expedite the equipment to ensure you meet your project deadlines. Our on-time delivery rate is 99% accurate, so you can rest assured that your new equipment will be delivered on the date we promised.

UNBEATABLE SERVICE

We provide on-site training of your new equipment with one of our own experienced technicians. Throughout the life of your product, we provide toll-free technical support and guarantee a response to all service inquiries within 24 business hours.



EXPERIENCE THE NEVCO DIFFERENCE

"Nevco has the broadest offering and best technology for our incredibly varied four-sheet facility. From our 2,500 seat arena to our covered outdoor sheet, to our NHL practice facility, and our community rink, we needed four completely different approaches and Nevco had it all."

- Patrick Quinn, Chairman of the St. Louis Legacy Ice Foundation

"We chose Nevco because of their reputation of quality products, and quite frankly, their willingness to come alongside us on the project to meet our deadlines. From the vice president to the project manager to the install technician, we felt like we were the company's priority."

- Bryan Winfrey, Director of Communications and Marketing at Valley Christian High School

"We are extremely excited about our partnership with Nevco. We believe our new 6mm LED Video Display will make the perfect statement and will leave a lasting impression like our first conference championship and first NCAA appearance made on our fans. These improvements at UNF Arena will give the Ospreys Community the ultimate fan experience and put us a step ahead of our competition."

- Lee Moon, Director of Athletics at University of North Florida









































LEADING LED TECHNOLOGY



Nevco uses only the highest quality LED's from the top LED suppliers ensuring maximum visibility, even in direct sunlight.

WIDE VIEWING ANGLES



Nevco video displays are visible from the widest viewing angles, up to 170 degrees, to ensure that everyone has a great view of the video screen.

BRIGHT BRILLIANT COLORS



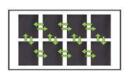
Nevco video displays can produce as many as 281 trillion colors with more gradients than the human eye can differentiate, and refresh rates as high as 4,000 Hertz.

UL/CUL LISTED



Only Nevco offers actual UL and CUL Listings on video displays (not UL or CUL equivalents) ensuring safety, durability, quality, and regulatory compliance.

SIGNAL & POWER REDUNDANCY



Nevco video displays keep you in the game by utilizing signal redundancy to allow continued operation, even in the event of a loss of signal. Nevco video displays are less likely to suffer outages by offering power redundancy, running cooler, more efficiently.

PROACTIVE DIAGNOSTICS



Nevco video displays offer substantial reliability by proactively diagnosing issues before resulting in larger problems.

WIDE RANGE OF RESOLUTIONS



Nevco offers a variety of different resolutions for both indoor and outdoor video displays to ensure the best view, no matter the distance. Our most popular resolutions include 3.9mm, 6mm, 10mm, 16mm, and 20mm, with other resolutions available upon request.





ENHANCE YOUR FOOTBALL GAME-DAYS

Nevco has a long history of designing and installing some of the largest video scoreboards in the country. More than just scoreboards, these video displays and scoring solutions include other state-of-the-art features like fascia/ribbon boards, sound systems, decorative accents, and integrated control rooms.



























BUILD THE PERFECT SOLUTION

Full Color LED Video Display w/ Flanking Sponsor Signage



LED Scoreboard w/ ETN's









Stadium Pro™ Sound w/ Personalized Mesh Face Scrim

HOME OF THE WARRIORS

Additional Sponsor Signage





ELECTRIFY YOUR COURT

No matter the size of the venue, Nevco works with you to deliver the ultimate game-day experience for your fans! We have experience designing LED video boards for high schools, collegiate athletics, and professional arenas.

















BUILD THE PERFECT SOLUTION

Full Color LED Video Display w/ Virtual Scoring



LED Bottom Ring w/ Custom Imprinted Bottom







3D Illuminated Wedge Panels







Illuminated Signage



Full Color LED Video Display w/ Digital Sponsor





Supplemental Scoreboard w/ ETN's



LED Scorers Table





SWING FOR THE FENCES

Step up to the quality and clarity of Nevco. Our integrated systems and innovations help you make every game-day a home run. No matter the scoreboard or the distance, Nevco delivers a superior level of quality that satisfies even the toughest crowd.























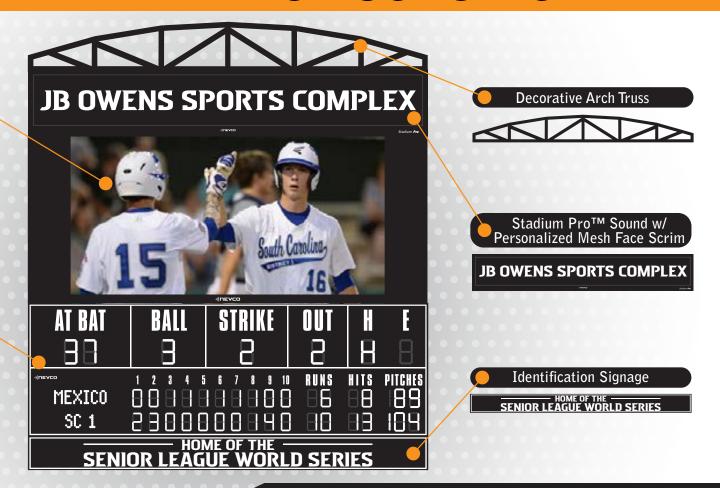


BUILD THE PERFECT SOLUTION

Full Color LED Video Display w/ Flanking Signage



LED Scoreboard w/ ETN's







ICE THE COMPETITION

Nevco's wide range of hockey scoring solutions are designed to deliver a superior level of quality and flexibility for any arena. Whether you want a center-hung 4-sided video display or a wall-mounted video display, Nevco will ensure that your scoring solution attacks the competition.

















BUILD THE PERFECT SOLUTION







GAIN HOME FIELD ADVANTAGE WITH DISPLAY DIRECTOR™

With the investment in your Nevco Video Display, you also get the industry's leading content management software, Display Director™. With Display Director™, you can simplify your game-day operations and control your video displays, LED fascia boards, and LED Scorers Tables all from the easy-to-use, touchscreen interface.















CUSTOMIZE YOUR GAME-DAY EXPERIENCE

DISPLAY DIRECTOR™ CONTROLS



Visual and Audio



Virtual Scoring



Stats Integration



Instant Replays



Fan Prompts



Sponsorship



Overlay Functionality



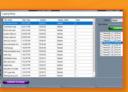
Content Creation Functionality



Create Media Sequences



Live Camera Feed



Proof of Play Reporting



Zone Your Video Board into Multiple Displays

THIRD PARTY INTEGRATION



















ENGAGE YOUR FANS



GENERATE REVENUE













HYPE UP YOUR FANS!

Every venue has a different style and need. With this in mind, HYPE can create a custom graphics package to best accommodate your venue. Fill your facility's seats for every game by providing your fans with an exciting and engaging in-game atmosphere with the help of HYPE Creative Services!

Create your custom curated graphics package today!

- Branded Fan Prompts
- Dance Cams
- Races
- Shuffles
- Stat Graphic Templates
- Team Intro's & Game Opens

- Kiss Cams
- Interactive Sponsor Games
- Noise Meters
- Headshot Templates
- Team TV Commercials
- And More!

A FEW OF OUR PARTNERS









































STADIUM PROTM SOUND SYSTEMS

Be loud and clear with Nevco Stadium ProTM Sound integrated with your scoreboard or video display. From the national anthem, to the final nail-biting play, the Nevco Stadium ProTM Sound System ensures that players, parents, and fans have the ultimate game-day experience.

- Delivers clear, intelligible voice and concert quality music at high decibel levels throughout your facility.
- Single-point sound system located at the scoreboard, with high-fidelity, full-range reproduction of music and speech, ensuring sound clarity.
- Speakers housed in a weatherproof, lightweight aluminum, custom designed speaker cabinet with front mesh scrim.















STADIUM PRO™ 1000

Powerful and affordable, recommended for smaller stadiums.





Customizable Scrim



(2) Speakers



STADIUM PRO™ 2000

Recommended for stadiums with more than 3,000 seats.











Multi-Channel Receiver

Wireless Microphone



Assisted Listening Devices



Referee Microphone

INCLUDED ACCESSORIES







Microphone



(2) Subwoofers

Control Rack













MAXIMIZE YOUR COURTSIDE IMPACT

INDUSTRY LEADING VERSATILITY

Nevco's Scorers Tables come in a variety of sizes and styles with Bleacher Mount options available. Combine the different styles and sizes to create any length by interlocking them for a seamless look!

Available in Non-Lit, Rear-Lit, and LED











SPONSORSHIP & REVENUE

Nevco's LED Scorers Tables give you the ability to make the most of your courtside by displaying virtually limitless spots for sponsors, advertising, and donors.



SIMPLIFY GAME OPERATIONS

Run multiple video displays at one time (scorers tables, video display, fascia/ribbon boards) using Nevco's proprietary Display Director™ Software.







INDOOR & OUTDOOR SCOREBOARDS

Nevco offers a breadth of products and services to maximize your impact with fans. Outfit all of your stadiums and fields by adding scoreboards and scoring accessories. Our scoreboards can serve as a stand-alone scoring solution or perfectly accent any video display.

OUTDOOR SCOREBOARDS











INDOOR SCOREBOARDS













COMPLETE YOUR SCORING SOLUTION

Nevco offers a variety of products and services to deliver your facility the ultimate scoring solution. Accessorize your video display or scoring solution to enhance your game-day atmosphere and maximize your impact on fans, players, and coaches.

OUTDOOR ACCESSORIES

Delay of Game Timers



Pitch Count Displays



Field Timers



Clocks / Timers



Protective Nets/Screens



Stat Panels



Shot Clocks



End of Period Lights





Hockey Goal Lights

INDOOR ACCESSORIES















NEVCO SPORTS MARKETING

RECENT PROJECTS



Nevco Sports Marketing has helped over 400 schools upgrade their facilities while creating revenue streams and lasting partnerships within their community.

When you partner with Nevco Sports Marketing, you'll have a dedicated team who will be working on your school's behalf to secure sponsorships with local community members, businesses, and supporters in order to fund your new equipment.

Once the cost of your equipment is covered, the continuous revenue stream that's been established will benefit your school for years to come.

A partnership with Nevco Sports Marketing not only provides you with an updated facility, it also connects you to your community and improves their own brand awareness. Nevco Sports Marketing has helped over 8,000 businesses and organizations through securing sponsorships.

Want to see if Nevco Sports Marketing is a good fit for your athletic program? Contact your Nevco Consultant to learn more!





Nevco Sports, LLC 301 East Harris Avenue Greenville, IL 62246



User Manual





THANK YOU

Thank You for Purchasing from NEVCO. We appreciate your business.

The following instructions will help you become familiar with the operation and features of your new software. Please take a few minutes to study this manual, and to practice with the **NEVCO DISPLAY DIRECTOR** Software.

If you ever have any questions or comments, please call or email us.

NEVCO, Inc. 301 East Harris Avenue Greenville, IL 62246-2151 USA

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> Website: www.nevco.com Email: info@nevco.com



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1. DISPLAY DIRECTOR MANUAL INTRODUCTION

1.1 INTRODUCTION

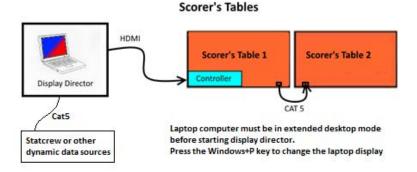
Welcome to Display Director, a content management software for your LED Video Display. Display Director is designed to have an unintimidating, intuitive user interface and provide a powerful in-game tool by allowing control of your game day operations. Display Director allows your system to easily display statistics, headshots, graphics, animations, ads, and more.

1.2 SET UP

Following is the general set up of Display Director. The diagrams show how it is set up and connected to the rest of your system for a few different configurations and options.

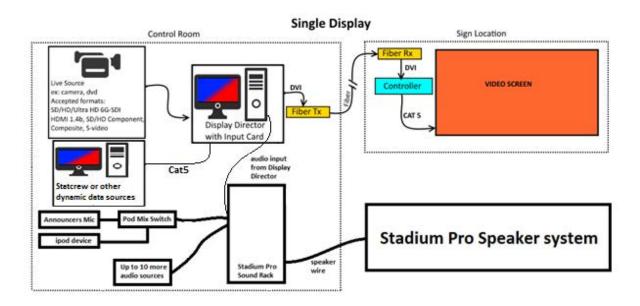
Video Source 1 Switcher Fiber Interface Video Source 2 Video Source 3 Video Signals Bi-Directional Directo Client Typical Video Installation Signal Path

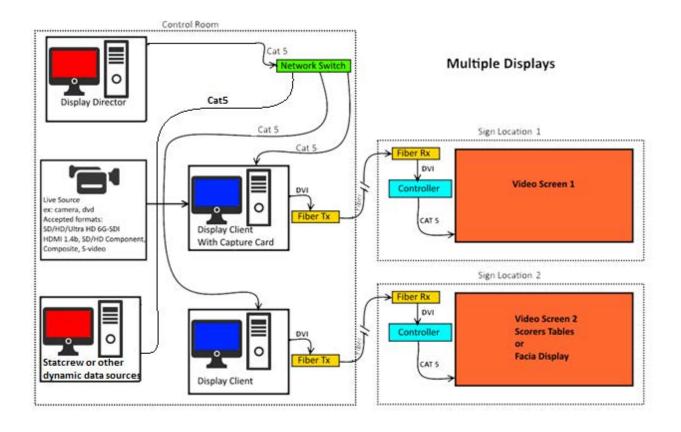
Video Switcher/Broadcast Integration Setup













1.3 USER INTERFACE

Illustrated below in Figure 1-1 is an overview of the Display Director User Interface. This user manual will explain in detail each of these features and their functions.

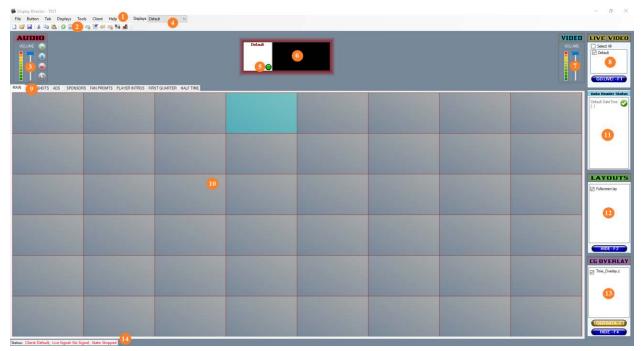


Figure 1-1

- 1. Main Menu
- 2. Main Toolbar
- 3. Audio Controls
- 4. Project Display Dropdown List
- 5. Network Connection Indicator
- 6. Display Preview
- 7. Video Volume Control
- 8. Live Video Control Panel

- 9. Tab Page Controls
- 10. Button Layout Grid
- 11. Data Reader Status Panel
- 12. Zone Layouts Control Panel
- Character Generator (CG) Overlays Control Panel
- 14. Live Video Status Bar



2. QUICK START

2.1 Introduction

Quick Start explains the simple building blocks of operating Display Director. It is used to explain opening a new or existing project, adding or importing media, managing buttons, creating tabs, setting up a live video, and communication to the Display Client.

Before getting started, ensure that you have the green license key seen in Figure 2-1. Make sure that you have it plugged into your computer with Display Director on it. The software will not open if this key is not inserted. If you have lost your key, you must contact Nevco Service Department and a new one must be ordered.



Figure 2-1

Now, to get started, you must open Display Director. Your computer will be setup as seen in Figure 2-2. You may click the Display Director Computer Icon, seen highlighted in Figure 2-2.



Figure 2-2



When opening Display Director for the first time, there will be a box that pops up with a black background and it says "Nevco" on it. To get rid of this, you must double click it. Following are some common terms and concepts used with Display Director.

When referring to "(Display) Director," it is what can be seen in Figure 2-3. When referring to "(Display) Client," it is what can be seen in Figure 2-4. Figure 2-4 is the software that actually runs on the video display and what is in the top left is exactly what the video display would show. The Director controls what is shown on the Client.





Figure 2-3

Figure 2-4

There are two "modes" that Display Director can be in: "EDIT" or "DIRECTOR." If you are in edit mode, red will be seen as the outline of your display as in Figure 2-5. Edit mode is where you will add all of your content to the project. If you are in director mode, green will be seen as in Figure 2-6. Director mode is where you will be able to play the content that is already contained in your project. Director mode can also be called "live" mode. The icon highlighted in each of these images will allow you to toggle between edit and director mode.



Figure 2-5



Figure 2-6





Figure 2-7 shows the grid of squares contained in Display Director. The top square has content in it, and therefore is called a button. It is currently selected because it has a pink box around it. The other squares have no content in them. The green square is where your mouse hovers. If you selected (clicked on) an empty button, it would turn pink, showing it is now selected.

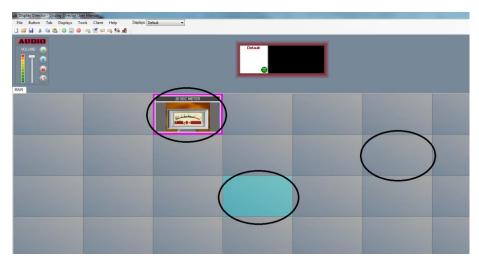


Figure 2-7

You can adjust the brightness of your display(s) by going to the main menu, *Displays > Adjust Brightness*, as seen Figure 2-8.

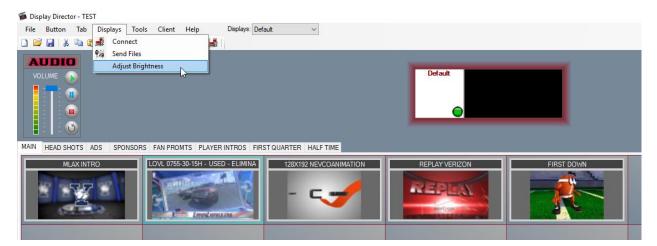
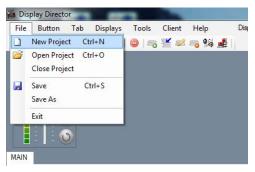


Figure 2-8



2.2 CREATING A NEW PROJECT

If the New Project Dialog shown in Figure 2-11 is not open in Display Director after opening, select *File > New Project* from the main menu, shown in Figure 2-9 or click on the *Create New Project* icon in the main toolbar, shown in Figure 2-10. If an existing project is open, you must first close it to open a new project. By default, when Display Director is started, it will have the most recent project already open.



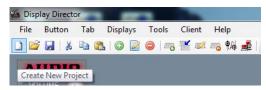


Figure 2-10

Figure 2-9

When creating a new project, the New Project Dialog is displayed, shown in Figure 2-11, with a listing of all available displays (or clients). If no displays are listed, verify that all display controllers (clients) are turned on and then click LOCATE DISPLAYS. All displays on the network will be discovered and added to the Available Displays list. Select the display or displays to be included in the project, enter a Project Name, and then click on CONTINUE.



Figure 2-11

2.3 OPENING AN EXISTING PROJECT

When opening Display Director, it will open to the last project that was worked on. To open an existing project, first close any other project. This is done by selecting *File > Close Project*. Now select *File > Open Project*, this will show all projects you have created and you can now select the project you would like to open and click OPEN. You may also select the *Open an Existing Project* icon on the main toolbar, just as was done for opening new projects.





2.4 ADDING BUTTONS TO A PROJECT

There are two ways to add buttons to the project: Add Button Media and Import Button Media. The Add Button Media option creates one button and adds a one or more media file(s) to that button. The Import Button Media option allows the selection of multiple media files and creates a button for each selected media file. When using Import Media, it will import multiple files into the one zone selected – only one zone can be imported at a time. When using the Import Media option, keep in mind how much space is available on the button grid layout. If too many files are trying to be imported, it will issue an error and will omit the last selected media files if the user continues the import. Sequence files cannot be added using the Import Button Media option.

When adding media to a button, it can be added from any location on your computer, such as a flash drive or a network drive – simply just navigate to that location in the Windows file explorer dialog window that comes up when adding media to a button. When it is added to the button, the media will be copied into a central file location, C:/NEVCOFiles/Media. This is where every piece of media you upload or create will be located. This is important in case you would like to clean out old pieces of media. By default, when adding media to a button, Display Director will pull up this file location for you to browse.

The C:/NEVCOFiles/Media folder should never have subfolders. This is due to the fact that when a piece of media is sent to play on the display, the Display Client will look for the media in this specific "Media" folder. If the media is not in this specific folder, it will not find the piece of media and therefore, will not play the media. It is okay to have a subfolder here if you do not intend to use any of the media in the subfolder. For example, you could organize the old files that are not used anymore in a subfolder – this would be helpful if you did not want to delete the old files, but wanted to make sure they will not be used on the display.

2.5 ADD BUTTON MEDIA

Make sure that you are in edit mode when adding a button to your project. Select the square in which you would like to place the media from the button layout grid. There are four methods to add a button using the Add Button Media option:

- Select Button > Add from the main menu
- Click on Add Button icon (green circle with a plus sign) from the main toolbar
- Right click on the selected square and click Add in the right click menu
- Double-click the square

When adding a button, the Button Properties Dialog window will display as shown in Figure 2-12. The Button Properties Dialog can be expanded to show more options, shown in Figure 2-13. This can be done by clicking on the ADVANCED >> option.

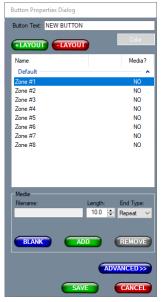


Figure 2-12





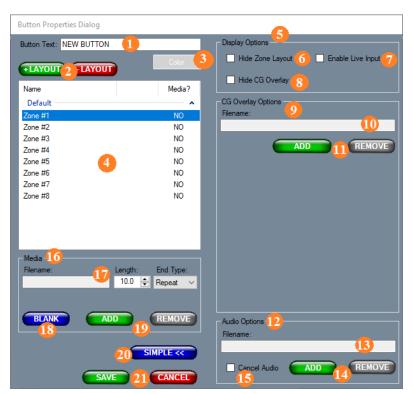


Figure 2-13

- 1. Button Name Textbox
- 2. Layout Add and Remove Options
- 3. Button Color Selector
- 4. Zone Media List Box
- 5. Display Options Group Box
- 6. Hide Zone Layout Checkbox
- 7. Enabled Live Input Checkbox
- 8. Hide CG (Character Generator) Overlay Checkbox
- 9. CG Overlay Options Group Box
- 10. Selected CG Overlay

- 11. Add and Remove CG Overlay Options
- 12. Audio Options Group Box
- 13. Selected Audio File
- 14. Add and Remove Audio Options
- 15. Cancel Audio Checkbox
- 16. Media Options Group Box
- 17. Media File Name and Information
- 18. Add Blank Display Option
- 19. Add and Remove Media Options
- 20. Advanced and Simple Toggle
- 21. Save or Cancel Add Options

Select the zone the media file will be displayed in from the zone media list box (4), then click on ADD (19) which will show an open file dialog in which you can select the media or sequence file you would like to add. Click on Open to add the file. The selected file's name will be shown in the file name textbox (17) and in the button name textbox (1). The button name shown can be changed to a different name if desired, but by default it will be named the same as the last piece of media that was selected for the button.





A layout is a way to split your display into multiple "zones." The layout can be selected by clicking + LAYOUT (2) and clicking on the desired layout. When a layout is selected, the number of zones that are in that layout will display in the zone media list box (4). Layouts are created in the Layout Creator tool, which will be covered in section 5 of this manual. The layout will stay on the display until another layout is applied to the display, the hide layout option is selected (6), or the hide layout option is clicked (from the zone layouts control panel on the main screen).

CG overlays are overlaid on top of the content on the display. A CG Overlay can be added to a button by clicking on the ADD option (11) in the CG Overlay Options group box (9), then select the overlay you would like to use. The name of the overlay selected will display in the selected overlay textbox (10). CG Overlays are created with the CG Overlay Creator explained in section 4 of this manual. CG Overlays will stay on the display until another overlay is applied to the display, the hide layout option is selected (8), or the hide overlay option is clicked (from the CG overlays control panel on the main screen).

The button color can be changed by clicking on the button color selector (3). Choose a color and click on OK. This can help organize buttons added to the project.

For the media information (17), the length should not affect anything as the display will continue to play the last piece of media that the user told it to. The end type can be set to repeat (endless, until you do something to change it) or none, in which the media will freeze on the last frame.

On systems with our audio features, an audio file can be added to the button using the advanced Button Properties Dialog. Click on ADD (14) in the Audio Options group box (12) which will show an open file dialog where you can select the audio file you would like to add. Click on Open to add the file. The name of the file will be displayed in the audio file name textbox (13). Audio can be set to have its own button or to be played with a media file.

Audio files (.mp3, .wav, or .m4a) will continue to play over any button until either: it is stopped manually by the user (audio controls in the upper left hand corner of the main screen of Display Director) or another button with an audio file attached to it is selected. This is also similar for video files with embedded audio (.mp4, .mov, etc.) These videos will continue to play as long as the video file is visible on the display.





To finish all button additions, click on SAVE (21) and the button will be added to the button grid as shown in Figure 2-14.

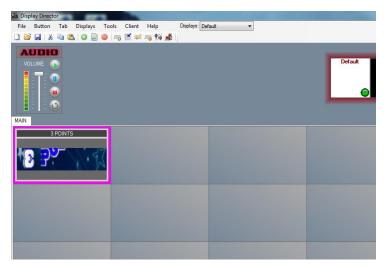


Figure 2-14

2.6 IMPORT BUTTON MEDIA

The Import Button Media option can be used to import multiple media files all at once. Make sure that you are in edit mode when adding buttons to your project. Select the square in which you would like to start the button import from the button layout grid. The two methods to import media into buttons are as follows:

- Select Button > Import Media from the main menu
- Right click on the selected square and click on Import Media from the right click menu

Now the Import Media Files Dialog window will display as shown in Figure 2-15.

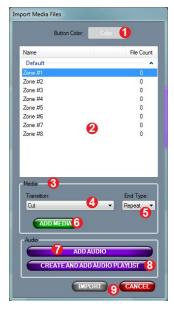


Figure 2-15

- 1. Button Color Selector
- 2. Zone Media List Box
- 3. Media Import Options
- 4. Transition Dropdown Menu
- 5. End Type Dropdown Menu
- 6. Add Media Option
- 7. Add Audio Option
- 8. Create and Add Audio Playlist Options
- 9. Import and Cancel Options





Select the zone the media files will be displayed in from the zone media list box (2). Only select one zone for each import you do. It will start the import either from the first button window or from the selected button window (left to right, top to bottom.) Click on ADD MEDIA (6), which will show an open file dialog in which you can select the media files you would like to add. Select multiple files by clicking the beginning and holding Shift, then clicking the end, to select files together. Or, hold down Ctrl and individually select files to be imported. The order you select the files is the order that they will import. Click on Open to add the files.

Buttons will be named by the file name; if a different name is desired, button text can be edited individually after import. The buttons' color can be changed by clicking on the button color selector (1). Choose a color and click on OK. This button color will be set to all of the media being imported. These buttons will not have a layout and therefore will show the last layout applied with the new button's content in the zone that was selected. You can change the end type, just as described for the Add Button Media option. Leave the transition option as it is. Now you can click IMPORT (9), and for every media file you selected, a button will be created.

The Import Media function can also be used to import multiple audio files or an audio playlist. To create an audio playlist using the Audio Playlist Creator tool, click "Create and Add Media Playlist" in the Import Media dialog or on the main menu on the Display Director main screen, *Tools > Audio Playlist Creator*. Playlists created with this tool will have the file extension of .apl. Audio and media cannot be added at the same time using the Import Media Dialog feature.

After the new buttons have been added to Display Director using the Import Button Media, it will look similar to Figure 2-16.

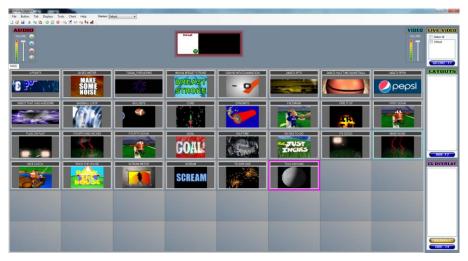


Figure 2-16



2.7 EDIT, MOVE, AND DELETE BUTTONS

To edit, move, or delete existing buttons, Display Director must be in edit mode first. Then you can select the button in which you would like to edit. Button editing can be performed using one of the four methods:

- Select Button > Edit from the main menu, as shown in Figure 2-17
- Click on the Edit Button icon in the main toolbar, as shown in Figure 2-18
- Right click on the selected button and select Edit, as shown in Figure 2-19Figure 2-19
- Double click on the selected button





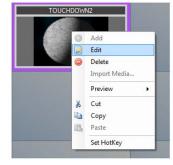


Figure 2-17

Figure 2-19

The Button Properties Dialog will be displayed as seen before in Figure 2-12 or Figure 2-13 for advanced editing. Select what zone you would like to edit, click on the EDIT option to change the selected attached media, make all other desired changes as described before, and then click SAVE to save the updated button.

Button functions of cut, copy, and paste can be performed using one of the four methods:

- Select the button and on the main menu select *Button > (desired action)*
- Click on the desired action's icon in the main toolbar
- Right click on the button window being edited and select the desired action
- Select a button to edit and use the key shortcuts to perform the desired action:

Cut: Ctrl + X, Copy: Ctrl + C, Paste: Ctrl + V

To move a button, select it and cut or copy it using one of the methods described above, then paste it to the desired new location. If the cut option is selected, the button will be removed from the previous location in button layout grid. If the copy option is used, the button will remain in the button layout grid where it was copied from and will also be in the new location that it is pasted in. Any undesired button can be deleted.

Deleting a button is very similar to adding a button. Select the button which you would like to remove, and then there are four ways to delete it:

- Select *Button > Delete* from the main menu
- Click on Delete Button icon (red circle with a minus sign) from the main toolbar
- Right click on the selected button window and select Delete from the right click menu
- Hit the Delete key on your keyboard





2.8 CREATING TABS

Tabs are useful for organizing many different sets of buttons in one project. To add a tab to your project, select *Tab* > *Add* or click on the *Add a Tab* icon on the main toolbar. A dialog box will open where you can enter the name of the new tab and then click on SAVE to add the tab. To access the tab, simply click on it. This will change the grid of buttons to that tab's content.

There are other tab options displayed on the main toolbar and the main menu that can be used to insert, edit, or delete tabs. Inserting a tab will insert the new tab exactly where the currently selected tab is located. Editing the tab will allow you to rename the tab. Deleting the tab will delete the tab and all of its content. There is also one option located on the main toolbar, *Tab* > *Clear Current Tab* that allows you delete all of the buttons in the currently selected tab.

2.9 SETTING UP A LIVE VIDEO STREAM

Make sure that your live video equipment is setup and connected to the Display Director system. To start setting up your live video for Display Director, open up the Configure Live Source window by selecting *Tools > Video Capture Setup* and then a window similar to Figure 2-20 will open. If you are in multiple mode (described in section 2.12), go to the Client computer and select the "VID CAPTURE" option on the Display Client to get to the Configure Live Source window.



Figure 2-20

Now you will need to select the correct options for your setup. The following will use the example as shown in Figure 2-20. This is a computer with the Blackmagic Design Decklink Studio 4K capture card installed. The first option seen here is simply selecting the video source. So for this example, the "DeckLink Studio 4K" is selected. In this list, you may see anything that is connected to the computer such as capture cards, webcams, or screen capture programs.



The next option that is selected is the "line" – this is where the video is coming from. In other words, there will be multiple ways that your video can be input into your computer and this will need to be selected from this dropdown list. Options include HDMI, SDI, Component, Composite, or S-Video. It may also include what the input for the audio is as well.

Lastly for the video device setup, there will be a Format dropdown list. This will list different formats that the video can be in. Options include: NTSC options, HD 720-60p, HD 1080i and 1080p with different refresh rates, and UHD 4k with different refresh rates. This should be selected according to your video input.

After all of the video options are selected, there are now audio options that can be selected. The Audio dropdown list will show the options that you will have for audio, including from a capture card, such as the Blackmagic Decklink. Microphones would also show up here as an option.

Next is an External dropdown box – this will be used if you have an external audio source and will be similar to the "Audio" dropdown box.

Now you can select the format that the audio will be in or you can leave it to set to auto. This will have details such as the frequency, number of channels, and number of bits.

Now there will be one last dropdown box that will give you the option to change the video output format. Choose your desired output format or leave it to set to auto.

When you have all of the options selected that match your system, ensure that your video capture system is setup and turned on. Now you can click "Init Device" and your stream should come up on the right side of this dialog box in the preview window. Now click "Save and Close" and your system is ready to go live.





2.10 LIVE VIDEO STATUS BAR



Figure 2-21

There is a status bar for the live video status on the Display Director main screen as seen in Figure 2-21. It will have the status of each display that is set up for live video. If the live video feed is set up properly, it will display in black text something like "Live Signal: OK, State: Running" and alternatively, if it is not working as expected, it will display in red text and will list if it is getting any signal or not. For Figure 2-21, the live video camera was simply turned off and therefore, it was not getting a live video signal. If the user hovers the mouse over the client's live video status, it will display more information about the live video setup such as the video input device and the video format.

This is a helpful visual cue to warn the operator that something may need to be fixed before game day. The status will change real time, so that if something were to come unplugged or the camera was not turned on, the user can see that feedback immediately and know that someone should take a look at the live video setup to ensure that Display Director can get the live video. See our troubleshooting guide at the end of the manual in section 10 for tips on troubleshooting a live video setup that is not operating as expected.

2.11 DISPLAYING A LIVE VIDEO STREAM

There are multiple ways to make the display go live. One of the ways is to find the live video control panel on the right of the Display Director main screen, ensure that the display you want to display your live stream is selected, and then click "Go Live!" or hit the F1 hotkey.

The other option to launch the live stream is to create a button that is just made for going live. You can then assign layouts and overlays to it, just like any other button. When you are creating the button, in the advanced options, you will see a checkbox with "Enable Live Input" – check this box. Now anytime the button is selected, the video display will go live. This option can be seen in Figure 2-13 and is the checkbox with the "7" label.



2.12 SENDING MEDIA TO DISPLAY CLIENT

Display Director can run in single or multiple mode. Systems running in single mode do not have to send media files to the Display Client and can skip this step. To determine which mode Display Director is running in go to the main menu and then select *Help > About*, as shown in Figure 2-22. The mode will be listed on the left side of the About Display Director dialog window, as shown circled in red in Figure 2-23. See in Figure 2-23, there is also the version number listed. This is helpful information for our Service Department in the case you call in with any issues.



Figure 2-22

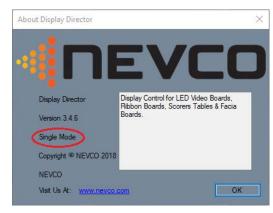


Figure 2-23

For systems running in multiple mode, files must be sent to the Display Client to operate correctly. The time required to complete the send process is determined by the number of buttons contained in the project and by the number of buttons added to the project since a previous send. For larger projects, this process should be done well in advance of any scheduled event. As with most features in Display Director, there are two methods to send files. The first method is to click on the *Displays > Send Files* in the main menu, shown in Figure 2-24. The second method is to click the *Send Files* icon on the main toolbar, shown in Figure 2-25.

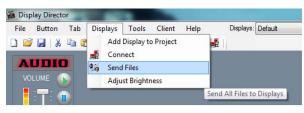


Figure 2-24

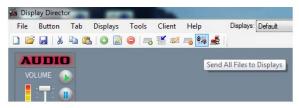


Figure 2-25

The send files options will be disabled (grayed out) if Display Director is connected to the Display Client in director mode. To enable the menu item and toolbar icon, change Display Director to edit mode. Click on *Displays > Disconnect* from the main menu or refer to Figure 2-5 and Figure 2-6 for the toolbar Connect icon.



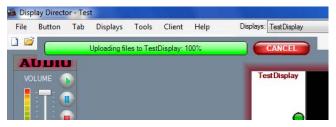


Figure 2-26

After clicking the *Send Files* icon or selecting *Display > Send Files* from the main menu, the media files will be sent to the Display Client. During the send process, the Send File Progress Dialog will be displayed, shown in Figure 2-26. After the send file process is completed, it will close automatically and the files should now be available to play on the Display Client.

If the user forgets to send files before attempting to play media, they will be warned when switching to director mode. It will tell them how many files have not been sent to the client and will ask if you would like to send the files. If the files are not sent before attempting to play, they will simply not play on the display.

Select *Displays* > *Connect* from the main menu or click on the *Connect* icon in the toolbar, shown in Figure 2-5 and Figure 2-6. This icon and borders will change from red to green meaning Display Director is connected to Display Client.

With Display Director connected to the Display Client, click any of the buttons and the running media will be shown in the display preview, where Pepsi is shown below in Figure 2-27. The content in the display window will also be shown on the display (client).

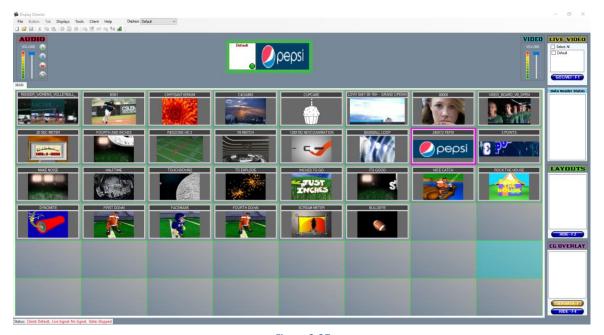


Figure 2-27





3. MEDIA SEQUENCER

3.1 Introduction to Media Sequencer

Media Sequencer is an application that can be used to create a sequential list of media files, sort of like a slideshow. Sequences can be comprised of both image files (.jpg, .png, .bmp, etc.) and/or video files (.avi, .wmv, .mov, .mpg, .mp4, etc.). This can be used in many different ways, including: advertising, slideshows, commercials, highlights, and much more. Sequences should be made in advance of game time. Sequences are not project specific and can be accessed by any project that is opened in Display Director.

3.2 Media Sequencer User Interface

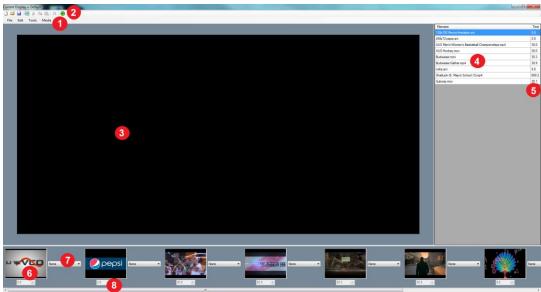


Figure 3-1

- 1. Main Menu
- 2. Main Toolbar
- 3. Sequence Preview Window
- 4. Sequence File List

- 5. Duration Preview
- 6. File Preview
- 7. Transitions Between Media
- 8. Media Duration Option

3.3 CREATING A MEDIA SEQUENCE

Open Media Sequencer application from the Display Director main menu by selecting *Tools > Media Sequencer*, shown in Figure 3-2.

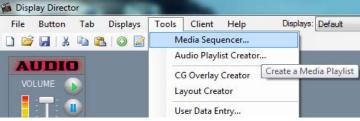


Figure 3-2





Create a new sequence by clicking on the *New* icon on the main toolbar, shown in Figure 3-3, or by selecting *File > New* in the Media Sequencer application on the main menu, shown in Figure 3-4.



Figure 3-3

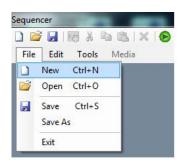


Figure 3-4

Choose the display that you would like to create the sequence for from the Display Dialog that appears and then select OK, shown in Figure 3.5. This is important for the sizing of the sequence. It is possible that if you create a sequence for one display and then try to display it on a different sized display, the sequence will not work.



Figure 3-5

3.4 ADDING MEDIA TO SEQUENCE

Now that a new media sequence is open, it is ready for you to add media files. To add media, click on the *Add* icon in the main toolbar, shown in Figure 3-6, or by selecting *Media* > *Add* from the main menu, shown in Figure 3-7.



Figure 3-6

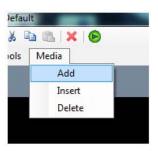


Figure 3-7





A Windows open file dialog will appear. Use this dialog to search for and select the media you would like to add. Multiple files can be selected and added to the sequence at once. Click Open to add the file(s). The selected media will appear in the file list menu and the bottom preview windows, as seen in Figure 3-8.



Figure 3-8

To save a media sequence, select *File > Save*, or click the *Save* icon on the main toolbar. A Save File dialog window will appear, seen in Figure 3-9. Give the sequence a name in the filename box and click the SAVE option.



Figure 3-9

3.5 Previewing a Media Sequence

After adding media to the sequencer, the sequence can be previewed by clicking on the *Preview Sequence* icon in the main toolbar shown in Figure 3-10, or by selecting *Tools > Preview* from the main menu.

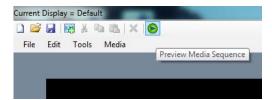


Figure 3-10





The media files will be shown in the sequence preview window, as seen in Figure 3-11. The files will play in the set order, each with their own duration. The file transitions will also be displayed while running the sequence.



Figure 3-11

Click on the *Stop Sequence* icon in the toolbar, seen in Figure 3-12, or select *Tools > Stop Preview* from the main menu, to stop the sequence preview. The sequence cannot be edited or saved while previewing, so it must be stopped before editing. You may now edit by deleting, rearranging, and adding media. You may also add transitions and change duration times. Media can be rearranged by clicking and dragging the thumbnails on the bottom panel shown in Figure 3-11.

For optimal performance, it is recommended that for each sequence created, it remain at or under 20 files. Media Sequencer will allow users to go over this recommendation if needed.



Figure 3-12

3.6 ADDING A MEDIA SEQUENCE TO A BUTTON

The sequence you just created is automatically saved into the C:\NEVCOFiles\Media folder on your computer. The sequence file will be created with the file extension of .spq. You can now add the sequence file to a button as explained in section 2.5. Remember that a sequence cannot be added by the "Import Button Media" option.

If a sequence is added to a button, and then the sequence is updated, it will automatically update in the previously created button.

When a sequence is playing on the display, and a different animation is selected, Display Director will hold on to the timestamp in which the sequence was halted. This means that the next time this sequence is selected, it will resume where it left off. Only one sequence's timestamp is held in memory, so this function will only work for the most recently interrupted sequence.





4. CHARACTER GENERATOR OVERLAY CREATOR

4.1 Introduction to CG Overlay Creator

CG Overlay Creator an application that is used to create overlays for buttons. Overlays are made to display over top of all other content. Overlays can include images, conditional images, permanent text, and editable text. Overlays are added to buttons in the in the Button Properties dialog window in the advanced portion, as displayed in Figure 2-13. Overlays can also be used for a Virtual Scoreboard, or VSB, to show on the video display. Overlays are not project specific and can be accessed by any project that is opened in Display Director.

4.2 CG OVERLAY CREATOR USER INTERFACE

Open CG Overly Creator by selecting *Tools > CG Overlay Creator* from the main menu in Display Director. This will pull up the CG Overlay Creator application and it should look something like Figure 4-1. The black box seen here is the preview for your message center and can be zoomed with the *Tools* option on the main menu. To move, resize, and rearrange items, the main toolbar can be used.

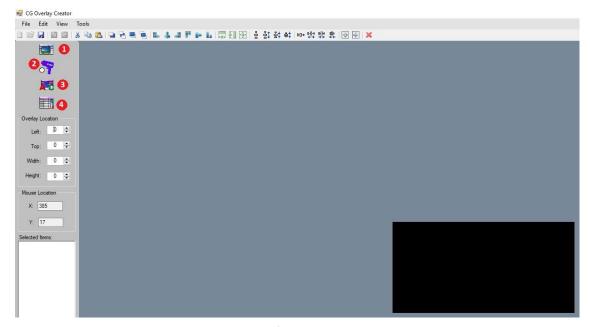


Figure 4-1

1. Add Image 2. Add Pitch Speed Image 3. Add Text 4. Add Data Item (Dynamic Text)

4.3 CREATING A NEW OVERLAY

To open a new overlay, select *File > New* or click on the *New* icon on the main toolbar. Now a window will open for you to select the display that you would like to use the overlay on, name the overlay, and click OK. Your display preview should now show up. Now you can use the side toolbar seen in Figure 4-1 to add various objects to your overlay. If an overlay is used on a display that it was not created for, it has the potential to not work.





4.4 Creating Data Items and Virtual Scoreboard Elements

To add dynamic text (you can edit in game), click on Add a Data Item (4) icon and then a dialog window, shown in Figure 4-2, will show up. Set the Data Properties dropdown lists as shown in Figure 4-2, and change Field number as necessary. Click on ACCEPT to add this item to the overlay. You can also change the Data Properties dropdown lists to include virtual scoring items – this is explained later in this section.

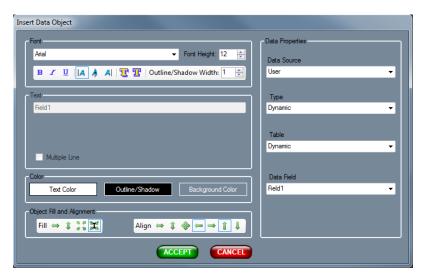


Figure 4-2

To finish your overlay creation, save your layout by selecting *File* > *Save* from the main menu or click on the *Save* icon on the main toolbar. Verify the name of your overlay, then click SAVE. Overlays will stay on the display until another overlay is applied to the display, the hide layout option is selected on a button, or the hide overlay option is clicked (from the CG overlays control panel on the main screen in Display Director). When an overlay is completed, it can now be added to a button as described in the section 2.5.

Now to change the dynamic text in game, click on USER DATA option in the CG overlays control panel on the Display Director main screen or go to the main menu and select *Tools* > *User Data Entry...*, or hit the hotkey, F3, on your keyboard. This will open the dialog window to change the dynamic text fields, shown in Figure 4-3 on the following page. Select the field you would like to change, make your update, and then click UPDATE and CLOSE to exit. Your changes should be saved and reflected as the item on the overlay will change. This is a neat feature that could be used for a 50/50 raffle or for displaying the next home game date.



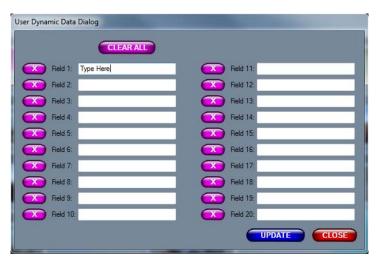


Figure 4-3

In order to create a Virtual Scoreboard overlay, you will need to create each element separately and then you can arrange them in the way that you prefer. In order to add an element to the scoreboard overlay, click on the Insert Data Item (4) icon and this will bring up the Insert Data Object dialog window. In this window, to the right, you will see the Data Properties group box, similar to before as in Figure 4-2.

For the Data Source of the object, there will be two options for virtual scoring: NEVCO and StatCrew. If you are using StatCrew, select StatCrew. Right now, Display Director supports the following sports for StatCrew: baseball game and season data, basketball, football, ice hockey, lacrosse, soccer, and volleyball. Everything else will be under the "NEVCO" data source. "Everything else" includes all MPC (Nevco specific) data, FinishLynx track, HyTek track, and FlashTiming track. The MPC data that Display Director supports are as follows: basketball, basketball stats, baseball, football, volleyball, lacrosse, soccer, wrestling, hockey, pitch speed, and datetime. Pitch speed data is to be obtained with the Stalker radar gun interface. DateTime objects are various configurations of date, time or both together. These will read from the computer, so make sure that the date and the time of your computer is accurate.

The dropdown boxes after the Data Source is selected will change depending on what you choose. The Type dropdown will include the data listed above as supported, so you would choose what suits your needs and then the Table dropdown will change accordingly.

Again, the Table dropdown will update based on what you select as the Type. Usually, this will either be a sport or if you have already selected a sport, then this will be a data type; For example, if you have selected the Data Source as StatCrew and the Type as Soccer, then the Table field will have the following options: period1h, period1v, period2h, period2v, playerh, playerv, teamh, and teamv. Each of these selections will bring up different options in the Data Field dropdown.



In order to create a DateTime object, the Data Source should be "NEVCO," the Type should be "VSB," and the Table should be "DateTime." This will populate the Data Field options to multiple choices for date, time, or both together.

The Data Field option will include specific data items based upon the fields selected above. Continuing the example presented earlier, let us say that with the Data Source as StatCrew and Type as Soccer, you select the Table as teamh (which means "Home Team"). Now the data that will come up in the Data Field dropdown will be as follows: id, name, code, record, score, shots, saves, fouls. Selecting the saves option will add a data element to your overlay that will change dynamically with the home saves that are set in game. You can change the look, size, and position of each data element. Building from this example, you can now create your virtual scoreboard.

Keep in mind that in addition to your scoreboard elements, you can also add images to your overlay, such as your school mascot. Also, another neat trick for a virtual scoreboard is that instead of adding text labels of "home" and "guest," you can add your team mascot's name, such as "Eagles" and for the guest's team name, you can select a user data item (explained above) that you can change each time there is a different away team, instead of making a new overlay.

4.5 CREATING A PITCH SPEED IMAGE

Display Director supports displaying pitch speed; the way that this works is that when the pitch is thrown, a Stalker radar gun is used to obtain the speed of the pitch. When there is a pitch speed registered, then it can show up virtually on your video display through Display Director, on an overlay. The pitch speed will remain for a set number of seconds after the pitch. This duration can be changed in the Stalker radar gun's settings – Display Director simply reads the data that is output by the Stalker radar gun.

Once you prove the pitch speed value will display when there is pitch speed data and then will be hidden when there is an absence of data, a pitch speed image can be added. A pitch speed image is an image that will show up with the pitch speed value, and then will hide when the pitch speed value is hidden. This can be an image that symbolizes pitch speed or even a paid sponsorship.

To add a pitch speed image, simply click on the symbol on the left toolbar (2) and select an image that you would like to display with pitch time. Know that this image will not show at all times and will only show when there is pitch speed data (which should only happen after a pitch is clocked with the Stalker radar gun).





5. LAYOUT CREATOR

5.1 Introduction to Layout Creator

Layout Creator is an application that is used to create button layouts, each layout having one or multiple zones. This means that multiple media can be contained in one button and displayed at the same time on the video display. For example, you could have a live video on one half of the screen and player statistics on the other half. Layouts are not project specific and can be accessed by any project that is opened in Display Director.

A good suggestion for using layouts is to create one main layout button that you will use primarily on your display. Then create buttons without layouts and insert media in the different zones where you would like to display new images. This way you can change each zone of your default layout individually. When a button is selected that only has media in one zone, it will only change the media in that one zone (other zones will remain with previously selected media).

Layouts should be added to a button when it is desired to look exactly that way every time it is played. For example, you may want the American flag animation to be shown full screen any time it is selected, so you add a full screen layout to the same button.

If a layout is not set, it will be set to default; this will make the layout full screen unless there are other layouts previously selected. When switching buttons in director mode, if you are switching from a button with a set layout to a button without one, also called default, the second button will display in the same layout as the previous button.

The layout will stay on the display until another layout is applied to the display, the hide layout option is selected in the settings of creating a button, or the hide layout option is clicked (from the zone layouts control panel on the main screen). Hiding the layout will make zone 1 full screen.

Adding a layout to a button is described in section 2.5.





5.2 LAYOUT CREATOR USER INTERFACE

Open Layout Creator by selecting *Tools > Layout Creator* from the main menu on Display Director's main screen. This will pull up the Layout Creator application and it should look similar to Figure 5-1, once you have selected a layout.

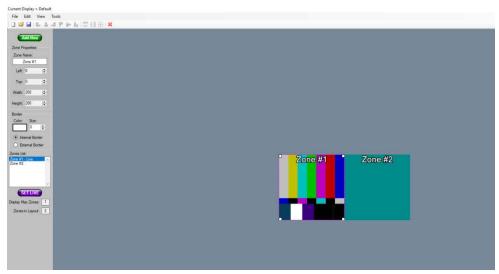


Figure 5-1

5.3 CREATING A NEW LAYOUT

To open a new layout, select *File > New* or click on the *New* icon on the main toolbar. Now the Select Template dialog window, shown in Figure 5-2, is open. This dialog window shows a few layout templates created for you. Select the template you would like. Make sure that you also select the display that you wish to create the layout for. If a layout is applied to a display that it was not made for, it is possible that it will not display correctly. Click on OK to open the layout template.

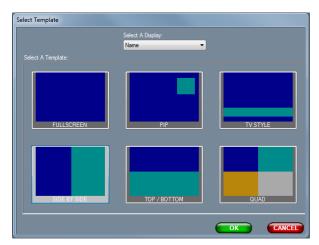


Figure 5-2



At this point you can either save the layout as is or you can edit this layout to your own liking by using the left side toolbar and preview window. Zones can be added, deleted, resized, and moved.

If there is an area on the preview window which is left without a zone, then no content can be added in this area. This means that no media can be displayed there, but an overlay will still overlay on top of this area. An example where this could be useful would be if you had StatCrew stats being displayed on one side of your video display, you could make it so that there is a layout that can be displayed with these stats so that no media can ever be behind the stats and the stats can be read easily.

The zone with the multicolored bars in Figure 5-1 is the live zone. When creating a layout, the live zone is set up to be the only one the plays audio, so there will be no audio overlap if you insert multiple pieces of media with audio. The live zone also denotes where your live stream will display when it is selected to "Go Live" from the live video control panel on the Display Director main screen. The live zone can be changed with the toolbar on the right side.

The maximum number of zones that can be added to a layout is 8. However, this limit is sometimes set to a smaller number based on the size of the video display. If the display is smaller, then it would look very crowed and busy with 8 zones.

To finish your layout creation, save your layout by selecting *File > Save* or click on the *Save* icon on the main toolbar. Name your layout, then click SAVE.





6. DATA READER (VIRTUAL SCORING)

6.1 Introduction to Dynamic Data Sources

A dynamic data source is an XML feed into Display Director from another software package or device. An XML file can be interpreted by Display Director and will automatically update the data from the XML feed on your video display via a CG overlay. This is useful for the implementation of virtual scoring on an LED display.

There will need to be separate data readers for each data source that needs to be read by Display Director.

6.2 CREATING A DYNAMIC DATA SOURCE

Data Reader is a mechanism used by Display Director to read this dynamic XML data. The XML data is changing as the game data changes and is updated. In order to point data reader to an XML file, go to the main menu and click on *Tools > Data Reader Setup*. On the main menu of Data Reader, click on Edit, then Add Data Input. The window seen in Figure 6.1 will show up. In the background is the Data Reader window.

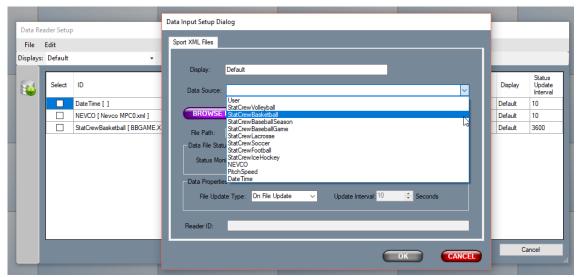


Figure 6-1

The name of your display that will be hosting this data should be listed in "Display." If it is not, then change the name of the display in text box to match where you want the data. The "Data Source" is the type of data being read, this list can be seen in Figure 6-1. The data sources include: NEVCO, multiple StatCrew sports, PitchSpeed, and DateTime.

A NEVCO data source can be multiple things. NEVCO data sources include NEVCO scoreboard data files (MPC), FinishLynx, and HyTek. (FinishLynx and HyTek are third party companies that Display Director can read data from to display on your scoreboard.) These are found under "NEVCO" because the Nevco Decryptor software is used to create a readable version of the data for Display Director.





A StatCrew data source is used for any data that is from StatCrew. (StatCrew is a third party company that Display Director can read data from to display on your scoreboard.) The file is already readable by Display Director and does not need to go through Nevco Decryptor. Multiple sports are currently supported by Display Director: Volleyball, Basketball, Baseball (singular game and season data), Lacrosse, Soccer, Football, and Ice Hockey.

The DateTime data source is pulled from the system that Display Director is running on. It will pull the date and the time so that this data can be displayed on the scoreboard along with other data.

The PitchSpeed data source will pull data from a Stalker Radar gun interface. (Stalker Radar is a third party company that Display Director can read data from to display on your scoreboard.) This data source will be an output of Nevco Decryptor.

Now the "Browse for Source File" option can be selected in order to find the file that Display Director will read from. This will be where the StatCrew dumps its output files or it will be where Decryptor is set to put the output files. DateTime will not need a source file to be selected.

Enter the "File Path" with respect to the computer that is reading the data. For example, if the Display Client Computer has the data in C:\NEVCOFiles\StatCrew\game.xml, then you may enter that path here. If the file actually resides on another computer in a local network, then you should enter the path \\COMPUTER\NEVCOFiles\StatCrew\game.xml. Replace "COMPUTER" with the computer name or IP address that hosts the file. If you are running a multiple system, then Display Director will open to the client computer's file path. You may test this path by copying and pasting it into Windows File Explorer address bar and confirming the file that you want to read opens. Keep in mind that Decryptor's output file is Display Director's input file.



Figure 6-2



Figure 6-3

Now there are a few options that can be selected related to when the file updates and what the status lights are going to indicate. These are indicated in Figure 6-2. The Data File Status Indicator Settings are related to the Status Indicator Panel shown in Figure 6-3, which can be found on the main Display Director User Interface. This Indicator Panel will display status indicators that will show whether Display Director is getting new information or not. The Status Monitor Interval setting will determine how often that data reader is getting checked.





The Data Properties settings will determine when Display Director will read information from the selected file. The options are for "On File Update" or "Timed". There is also an option for "None" if you desire the data reader to never update. "On File Update" will update the data in Display Director as soon as the source file is updated. "Timed" will update the data in Display Director on an interval that can be chosen.

In the case that one of the data readers is indicating that it is not getting new data, there are a few steps that the user can take to ensure that this is fixed:

- First, make sure that the source of the data is actually turned on and outputting data to the Display Director computer. For example, if you are reading data from an MPC controller, this will need to be turned on so that there is active data coming in to be read.
- If this is data source that requires Nevco Decryptor, then ensure that Decryptor itself is operating correctly. This can be done by monitoring the output file of Decryptor, ensuring that it is changing. Sources that require Nevco Decryptor include: scoreboard data files (MPC), FinishLynx, HyTek, and Stalker Rader setups.
- It could be that the Status Monitor Interval has been surpassed. For example, if there is a StatCrew file that is has not been updated in over an hour (default Status Monitor Interval for StatCrew), then the status indicator will turn red to indicate it is not getting new data. This means that everything is still setup properly, but the file has not updated. This should be fixed by pushing an update to the StatCrew file.
- If Decryptor is working and the Status Monitor Interval has not been surpassed, then the other option is to double check that the data reader's source file is accurate. This can be done by opening the Data Reader Setup and then selecting the troublesome data source, and clicking "Edit Data Input". Here, you can check that the "File Path" is correct.

Keep in mind that you will need to create a data reader for each type of data you want to read. For example, if you were reading MPC data with StatCrew data, and you wanted DateTime on there as well; this means that you will need to set up three separate data readers.

For MPC data readers, these should only be setup once for all of your sports, provided you are not using legacy scoreboards. For example, there should only be one data reader for a 2700 scoreboard that displays Basketball, Volleyball, and Wrestling. Note that for this setup mentioned to work, Decryptor 2.0 and up will be needed.

Once all of these data readers are created, they will automatically start themselves and will update the data in Display Director immediately. There should be no further maintenance of the data readers themselves as they will start up on creation, when Display Director is opened, and when the user changes to "Live Mode."





7. CONTENT PLAY LOG

7.1 VIEWING A PLAY LOG REPORT

A play log is a log of all of the content that was played on your video display, it will list the file name, start time, duration, and other details. To view a play log, select *Tools > Play Log...* from the main menu on the Display Director main screen. This will open the dialog window seen in Figure 7-1. Now you can filter with the dropdown box by viewing all displays' reports together or just selecting one display at a time. There will be a separate play log for each day, as seen below. To view it, simply check the checkbox next to the play log(s) you would like to view and then click LOAD PLAY LOG. You can view multiple play logs together, at the same time.

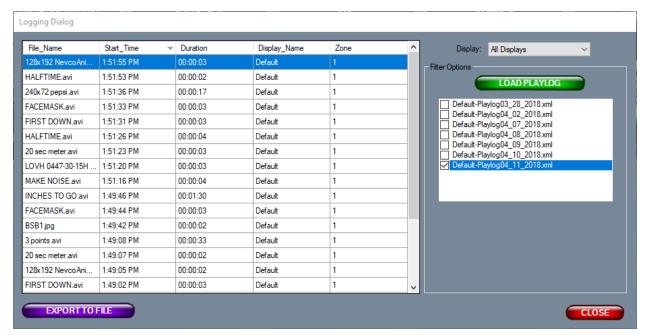


Figure 7-1

7.2 EXPORTING TO A FILE

You may wish to export this play log to a file in order to share as proof to advertisers that their content was played on your video display. This can be used as a sort of receipt. Click EXPORT TO FILE and this will open a dialog save the playlog as a CSV (comma separated value) file. A CSV file can be opened by a simple text editor or by Microsoft Excel.

Select CLOSE when you are finished viewing and exporting play log files.





8. DISPLAY CLIENT

8.1 CLIENT CONTROL PANEL

Figure 8-1 below is of the Display Client. There are multiple controls that can be found here. If your system is a single system setup, then you might not see as many controls as they will be located in the director user interface.



Figure 8-1

- **Bright Adjust** This slider can be used to adjust the brightness of the video display **Reset Bright** This button will reset the brightness level to the default value (50%)
- Contrast Adjust This slider can be used to adjust the contrast of the video display

 Reset Contrast This button will reset the contrast level to the default value (50%)
- Stop Life Monitor Life monitor is system that keeps your client open, so that when your computer is rebooted or if the client gets closed, it will stay open. However, if you need to close the client, you can click this button and then the exit button to close it. Note that you will need to reopen it for your video display to show any content.
- Refresh This will close and reopen your display client. This will reset your video display to black.
- **Fullscreen** This can be used to make the display client go full screen on your computer monitor.

 Double click on the full screen display to reset it back to your settings.
- Properties This is where you can change the pixel matrix and other settings of the video display. It is not recommended that you change these settings without talking to the Nevco service team. This control is located in the director on a single system setup.
- **Exit** This will exit your display client. Note that no content will show on your video display without reopening the display client.
- **VSB Props** This button will open settings where you can change the way that indicators (such as possession, end of period, or bonus) look on your virtual scoreboard (VSB).
- **Vid Capture** This option will allow you to setup your live video feed. This will be in the director settings for a single system setup.





9. CONTENT GUIDELINES

9.1 CONTENT CREATION GUIDELINES

Designing content for digital media is different than designing content for a printed copy; different rules apply for creating an effective message.

Make Text Large

Outdoor displays should be simple, clear, and easy to read

Bold Text – Making Your Display More Legible

- Use both upper and lower case letters
- Use sans-serif fonts these provide the best readability
- From a distance, thin lines begin to fade and very heavy fonts blur together
- Add a dark, thick line around text to separate it from the background

Convey ONE Message or Idea at a Time – Less is More!

- Keep messages or images to a minimum
- Convey ONE thought to your target audience

Short and Sweet – Keep the Words Short for Faster Comprehension

- Use no more than ten words on a billboard, including logo and product tag line
- It is recommended that seven or fewer words are used for the headline

Use Bright, Bold Hues and Limit White Backgrounds

- Use the primary colors red, yellow, and blue
- Do NOT use complimentary colors, like orange and green, together
- Use contrasting color combinations best for viewing from far distances

Chose Images Carefully

- It is recommended that three or less visual images are used Example: one image, one logo, and one headline
- Use images that correspond to the size (and aspect ratio) of your display for optimal performance
- If occasional delays, lock-ups, or crashing are experienced, try resizing your media to be smaller

No White Space

 Outdoor digital displays are NOT like printed media; what looks good on paper may not be a good digital display – a full white screen may illuminate the stadium more than the lighting and be distracting to players and fans





9.2 ACCEPTED MEDIA TYPES

Display Director uses certain video codecs for video playback. It is important that you know what video codecs are supported. A non-supported codec may not be accepted by Display Director or could lock up the display output.

File Format	Codec name
.avi	Xvid, MPEG-4, DivX, ffdshow
.mov	H.264, Sorensen 3, Animation
.wmv	Windows Media Video 9
.mp4 / .mpg	MPEG-4 Video File

Image File Types: .jpg, .png, .bmp

Video File Types: .avi, .mov, .wmv, .mp4, .mpg, .spq, .gif

Audio File Types: .mp3, .m4a, .wav, .apl

9.3 RECOMMENDED FILE SIZES

<u>File Resolution:</u> When creating content, you will experience the best performance when your images and/or videos are the exact pixel matrix of your video display. File resolutions above 1920x1080 are not supported.

<u>File Size:</u> Total file size should not exceed multiple gigabytes (GB).

9.4 ACCEPTED VIDEO INPUT FORMATS

The following video formats are accepted by Display Director by means of the hardware interfaces listed.

Video Formats:

HD Video Standards

720p50, 720p59.94, 720p60 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30 1080i50, 1080i59.94, 1080i60

Hardware Interfaces:

SDI Video Inputs

1 x 10-bit SD/HD/2K/4K - Supports 6G 4:2:2 and 3G 4:4:4

HDMI Video Inputs

1 x HDMI type A connector





10. TROUBLESHOOTING GUIDE

10.1 Introduction to the Troubleshooting Guide

This troubleshooting guide is meant to help the user through some of the most common issues experienced in operation. Please check this guide if you are having problems. The issues covered in this guide assume that the hardware is connected properly. If the solution to your problem does not fix your issue, all of the solutions listed here are good checks to ensure your system is set up correctly. If your problem is not included in this guide, please contact our service department.

This troubleshooting guide includes information on the nonoperation of single and multiple system setups and the nonoperation of virtual scoreboards. To check what system setup (single or multiple) you are running, refer to section 2.12.

Also, be sure to refer to section 2.1 to clarify the use of "director" and "client" keywords used in this troubleshooting guide. This guide also assumes that you familiar with the rest of the user manual.

10.1 SINGLE DISPLAY SYSTEM

A single display is one that only runs on one computer, meaning the director and the client are on the same computer. Following are common problems and solutions that can occur within a single display system.

10.1.1 Problem: The preview window does not match the display, the message center doesn't reflect the button presses, and I can see the "display client" on my director computer.

Solution: The client is not on the correct screen. The client must be on the screen that is your message center. To solve this, a few methods can be used:

- i. Right click on your desktop and select "Screen Resolution" or "Display Settings." A dialog window will open; ensure that the "Multiple displays" drop down box is set to "Extend these displays." The Windows + P shortcut can also be used to change this setting, select "Extend."
- ii. Now if you still cannot see your content, you may have to try changing your main display (this can be found in the same dialog window mentioned above.) A restart of the computer may be needed to see the changes. Also, Windows + Arrow Key will move programs between displays.
- iii. Another fix that should be more permanent if the previous fixes are not working is to go to *Tools > Edit Display Properties* in Display Director, and in the dialog box, you will see the "Multiple Monitor Settings," as seen in Figure 10-1. Select the Monitor that is not currently selected, ensure that the "Director and Client on same monitor" is not selected, and then save your changes. You will need to close and reopen Display Director and it should open as expected.







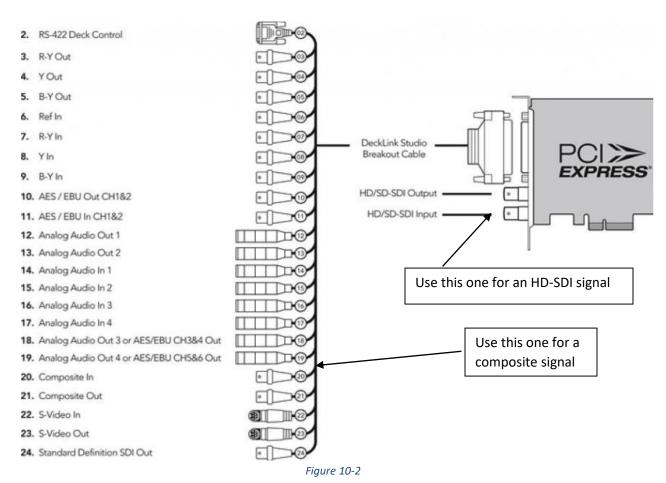
10.1.2 Problem: An error message may pop up on opening, the client will not open, or the status light by the display preview will be red.

Solution: It is possible that a setting was not set correctly upon installation. To edit these you will need to look at a few files. On your computer, navigate to C:\NEVCOFiles\Settings. Here you will see a files, DisplayInfo. Right click and select edit for this file. Find the line that says "<SignMode>X</SignMode>". X will either be 0 or 1... for a single display setup, ensure that it is 0 or change to 0 and save. Now reopen Display Director; it should be working.

10.1.3 Problem: The live video input is not working.

Solution: The live video may not be set up to work, or may be set up incorrectly. See the following:

- i. Check that the video format is set properly, see section 2.9 on setting up a your live stream
- ii. The video input is connected to the wrong port. This can be common with a composite single connected to the HD-SDI input on the DeckLink Studio 4k cards because they can both use coaxial BNC connectors. Figure 10-2 shows the proper place to connect a composite signal, from a TC-40 for example. Note that if you are using HDMI input, the bottom port is the input in line with the SDI inputs on the main PCI card shown below.





10.2 MULTIPLE DISPLAY SYSTEM

A multiple display is one that runs on two or more computers, meaning that the controlling computer is the director, and the other computers (video boards) are running as clients. Following are common problems and solutions that occur within a multiple display system. If your answer is not below, please check the single display issues as some of them overlap.

10.2.1 Problem: I cannot send files to my client. When attempting to send files, the progress window will show up but it will not show any progress.

Solution: The computers have not been connected correctly. One of the following should be a solution to this problem:

i. Follow the path: Control Panel > Network and Internet > Network and Sharing Center > Change advanced sharing settings > and ensure that "network discovery" and "file and printer sharing" are both turned ON and "password protected sharing" is turned OFF.

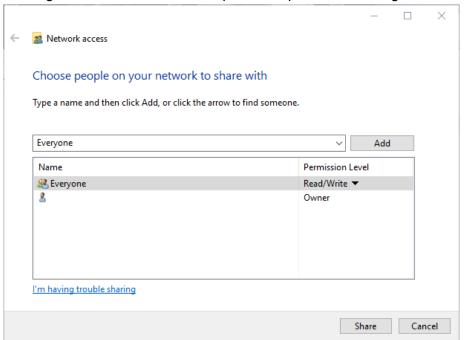


Figure 10-3

ii. There are files that must be "shared" on your network. On each computer (director and client computers), navigate to the C:\ drive and locate the "NEVCOFiles" folder. Right click on this folder, and go to "Give access to" and select "Specific people..." Now, as seen in Figure 10-3, select "Everyone" in the drop down and click add, make sure the permission level is Read/Write, and click Share. Complete this process with the "C:\NEVCOLogs" folder as well. Make sure this is done on the director computer and all the client computers. You should now be able to send files to the client computer(s).



iii. A check to ensure you are connected properly is that after "sharing" the NEVCOFiles and NEVCOLogs folders, you should be able to access all of your computers from any of your computers. A good test for this is to go to your Windows "File Explorer" and type in "\192.168.10.10" (or the IP address is of any computer other than the one you are using), and here you will see shared folders from this computer. If the NEVCOFiles and NEVCOLogs folders are there, you should be connected properly. Ensure this is true for all the computers in the system. If this is not the case, please review this whole solution.

10.2.2 Problem: I see a Display Client on my Display Director machine. There should only be Display Director.

Solution: A setting was not set up correctly. On the director computer, navigate to C:\NEVCOFiles\Settings and right click to select edit on the DisplayProps.xml file. We will be looking at the SignMode line, "<SignMode>X</SignMode>". X can be 0 or 1. For a multiple display director, ensure that SignMode is set to 1 and if not, change it and save the file. Exit and reopen Display Director.

10.2.3 Problem: I have a green light on my preview and I was able to send files... However, when clicking a button, it will not show up on my message center.

Solution: A setting was mistakenly changed. Follow these steps:

- 1. On the client computer, navigate to C:\NEVCOFiles\Settings and right click to select edit on the DisplayProps.xml file. We will be looking at the SignMode line, "<SignMode>X</SignMode>". X can be 0 or 1. For a multiple display client, ensure that SignMode is set to 1 and if it not, change it and save the file. Exit and reopen the display client. This will have to be done for each client computer that is not operating.
- 2. Make sure that the display name matches on both computers. In the DisplayInfo.xml (director computer) and the DisplayProps.xml (client computer) is where you will find the display name, "<Name>DisplayNameHere</Name>". Change these lines in these files so that they match. Ensure to restart both programs and then to send files again.
- 3. If the buttons are still not working or the SignMode settings were correct, proceed to problem 10.2.4.

10.2.4 Problem: I did problem 10.2.3, but the buttons are still not working.

Solution: If the buttons are still not working or the SignMode settings were correct, there may be a problem with the subnet masks of your computers.

- The broadcast address of the network must be 255. This is a hardcoded setting of Display Director and to get your system to operate correctly, you will need to change your network settings so that the broadcast address of your network is 255. This is standard, but it can sometimes be set otherwise.
- 2. The subnet masks of each computer must match. To find the Subnet Mask of the computer, open the command prompt (can use search bar to open this in Windows). Type "ipconfig" and hit enter in the command prompt. Below the IPv4 address, there will be a Subnet Mask line. The subnet mask should look like 255.255.255.0. This must be checked for each computer. If it does not match (for example, it is 255.255.0.0), it will not work. The subnet mask must be changed.





- Follow the path: Control Panel > Network and Internet > Network and Sharing Center.
 Now under "View your active networks" there will something like "Connections: Ethernet 2." Click on the "Ethernet," this will bring up a dialog window. In this dialog window, click Properties.
- 4. Now you will see a list; double click on "Internet Protocol Version 4 (TCP/IPv4)." This will bring up the dialog window seen in Figure 10-4 on the following page (may not look exactly like the figure, but it will be similar.)
- 5. Now that this window is open, select "Use the following IP address:" and type in the IP address that is associated with the computer you are on. Set the subnet mask to match the other computers, as seen in Figure 10-4. After this, you can hit OK and exit out of the windows that were opened. Make sure to change all computers' subnet masks to match each other. IP addresses should be kept the same as before and should NOT match across computers.

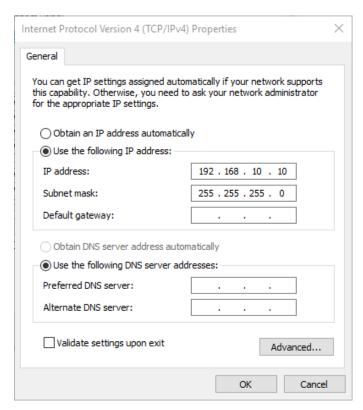


Figure 10-4



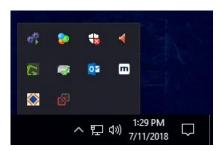


Figure 10-5

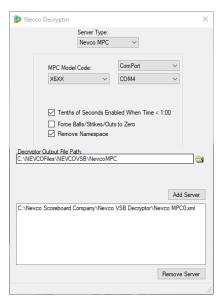


Figure 10-6

10.3 VIRTUAL SCORING

Virtual scoring is the ability to create a scoreboard on an LED display. This can be done on a single or a multiple display system. When setting up a VSB for a multiple system, the controller is connected to the client computer. Setting up the virtual scoreboard (or VSB) has a few points of failure. This section assumes that Display Director is working normally for all other aspects and features. Following are common problems and solutions for virtual scoring.

10.3.1 Problem: My virtual scoreboard is not working. The screen is blank.

Solution: There are many different reasons why this may be. Check all of the solutions in this list (in order):

- i. The VSB Decryptor should be set up. There will be an icon on your desktop that shows three colored spheres (blue, green, and orange). Click on this and now there will be an icon in your status bar (lower right corner) with the same image, see Figure 10-5. Double click the spheres shown in your status bar. This will pull up a window, seen in Figure 10-6; In this window, ensure that the Server Type, Input File Path (FinishLynx), MPC Model Code (MPC), and COM Port (MPC) are all correct and match your system setup. Now, the Decryptor Output File Path must be correct. This output file path should be in the NEVCOFiles\NEVCOVSB and then the corresponding data type. Click "Add Server," and now the gears should be in your status bar, as seen in Figure 10-5.
 - a. If the gears are in your status bar, take a look at them if the symbol next to them flashes between a green "play" symbol and a red "record" symbol, the MPC is sending data and the Decryptor is receiving data. There may also be a blue "pause" symbol; this is okay as long as no data is changing at the moment. When data is changed, it should no longer show only the blue "pause" symbol, though. You may have to double check the Decryptor settings if this is not as described.





- b. Another thing to look at is the actual output file. Go to C:\NEVCOFiles\NEVCOVSB (on the director computer if single mode and on the client computer if in multiple mode). Now choose the data being used for the VSB. There should be a Nevco MPC0.xml file. Take a look at the last date and time the file was modified (make sure you are in "details" view). If you are feeding it data, it should be the current date and time.
- c. If using a multiple display setup, the Output File Path in Decryptor must be pointing to the client computer. This is done by setting the file path to be something like "\COMPUTER\NEVCOFiles\StatCrew\GAME.xml" and replacing COMPUTER to be the client's computer name or IP address and replacing GAME to be the file name. For a MPC the path will look something like this: "\COMPUTER\NEVCOFiles\NEVCOVSB\NevcoMPC\Nevco MPC0.xml" where the 0 changes based on how many output files are setup in Decryptor.
- ii. Ensure that the Data Reader Setup includes your data reader. See section 6 of this manual for more information on the Data Reader and setting it up. Make sure that the output file path for Decryptor is the input file that the data reader is setup to read.
- iii. It is possible that virtual scoreboards are disabled. To enable, open Display Director, go to the main menu and find "Tools," from here select "Edit Display Properties." Now the window in Figure 10-7 will open. In this window, there is a section labeled "Scoreboard Options," Underneath, Enable Stats must be checked and Scoreboard Data Source must be set to Nevco MPC; other virtual scoring methods will still work. For a multiple system, this also should be checked and changed if incorrect on the client computer. To do this, go to the panel in the bottom left of the client computer and click "PROPERTIES". This will pull up a dialog similar to Figure 10-7. Now, virtual scoring should be enabled.

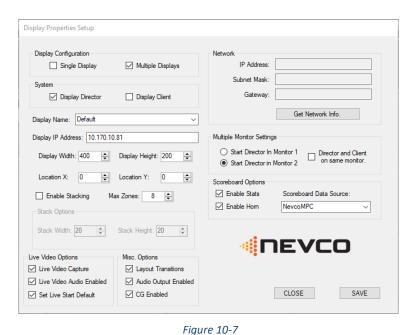




Figure 10-8





- iv. The CG Overlay should be checked that the correct values are being used. When adding a data item, there is an options window as seen in Figure 10-8. For StatCrew, ensure that the Data Source is StatCrew and that the rest of the fields are selected so that the data you are trying display is correct. Keep in mind that if the Data Reader is setup to read a file, that file needs to have the Data Field's information, otherwise it will not show up. If using FinishLynx, HyTek, or Nevco's MPC, the Data Source should be set to NEVCO. After this, the Type must be selected accordingly. The type "VSB" is for using a Nevco MPC. The last two fields are now what you are trying to display on the VSB. Keep in mind that if using the Data Field of PlayerH or PlayerV, the player number must be set in the lower left corner of the CG Overlay Creator user interface.
- v. Ensure that the program you are using to input the data (MPC, StatCrew, FinishLynx, HyTek, or Stalker Radar) is turned on and operational or that the file being edited is saved. If using the Nevco MPC, ensure that the correct sport model is selected on the MPC.
- vi. Make sure that the CG Overlay is applied to the button that you are using.

10.3.2 Problem: On a multiple system setup, there is data displayed on the client, but it will not update unless the "send files" icon is used.

Solution: The VSB Decryptor is not set up to output the file in the correct location. It is setup to output to the director computer and instead of the client computer. Review problem 10.3.1, subbullet i.c.

10.3.3 Problem: There is data on my VSB, but it is incorrect.

Solution: First check that your problem does not fall under problem 10.3.1. If it does not, this means that there must be one setting somewhere that is not correct. The possible settings that you can check are:

- i. If using a MPC, check the sport model being used on the MPC and check the model code that is being used on the Decryptor software. Review problem 10.3.1, bullets i and v.
- ii. Make sure the CG Overlay has the correct information, and possibly player number. Review problem 10.3.1, bullet iv.
- iii. Double check that the correct CG Overlay was added (possibly opening CG Overlay Creator and verifying the data, not just the file name). Review problem 10.3.1, bullet vi.



Nevco MyCloudDisplay User's Manual

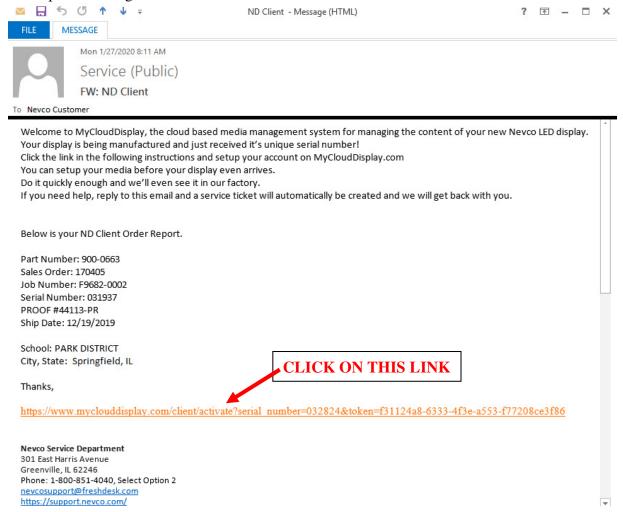


Retain this manual in your permanent file.

1/27/20 135-0281

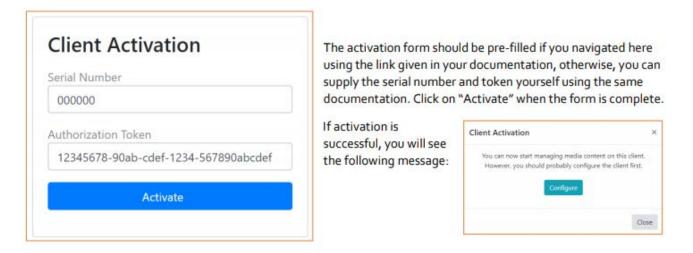
Section 1: Account Creation

The owner of the message center provides their email address to the Nevco sales representative at the time of order placement. When the manufacturing process begins, a serial number is assigned to the display and a registration email goes out to the email address provided. This email contains instructions and a link for a new user to register their display and link it to their MyCloudDisplay user account. If they do not yet have an account, they will be prompted to create one as part of the registration process. Here is an example of the registration email:

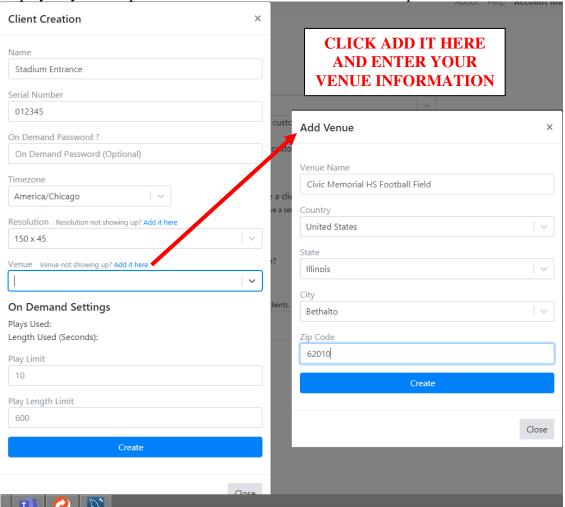


Activating Your Client:

When you click on the link you will be taken to the MyCloudDisplay.com website and prompted through account creation, then you will be prompted with a client activation window having the serial number and token information already filled in. If they are not filled in due to browser security settings you can type or paste them in from the contents of the email.



It is very important when you create your Client to setup the venue and location information or the display may not keep the correct time and show the correct temperature:



Section 2: Account Management

The Account Management tab to the right of the screen allows the owner of the display to manage user access to change content on the display.

1. Inviting other users

To invite other users to manage the content on the display, the owner simply clicks the invite user button and enters that person's email, and sets their permission level. This allows each user to keep their credentials secured and prevent unwanted content that could result from the sharing of username and passwords between individuals. After a user accepts their invitation they can login with their own credentials and change the display content. The owner account can revoke this access at any time.

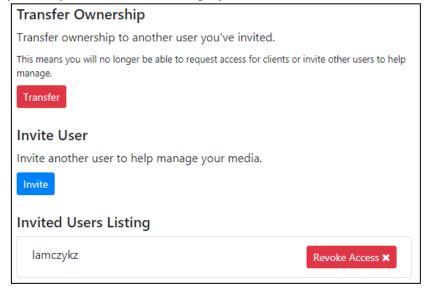
There are two types of user's:

- A. An "on demand" content user can change content that is triggered live during an event using the Nevco ondemand app. More on that later.
- B. A FULL permission user can change the scheduled media that will play in a rotation on the message center based on date, time, and its order in the sequence and on demand content.

A user's access can be revoked at any time by the owner of the display

2. Transferring Ownership

In the event that an owner of the display, wins the lottery, wishes to retire, or for any reason wants to pass the baton on to another responsible party to manage the display they may do so using the transfer ownership button. The user that accepts the transfer will become the owner and may then revoke the access of the original owner to change content on the display.

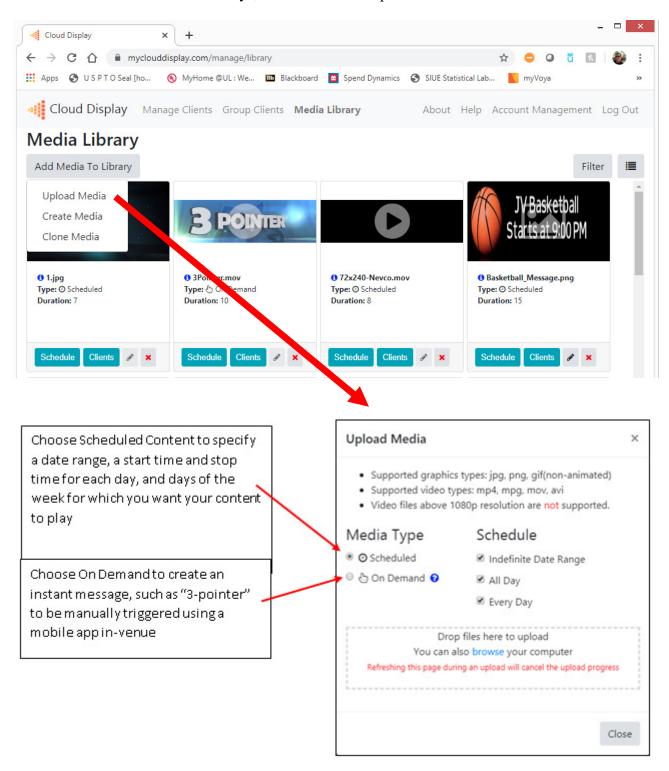


Section 3: Media Library

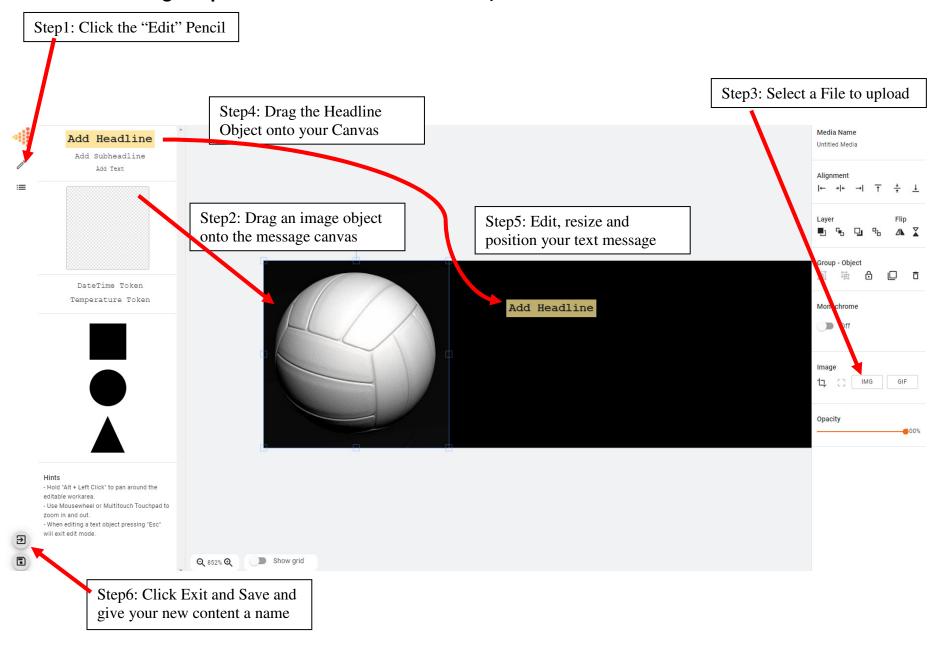
The Media library stores all of your graphics. You can add new content to the library in two ways:

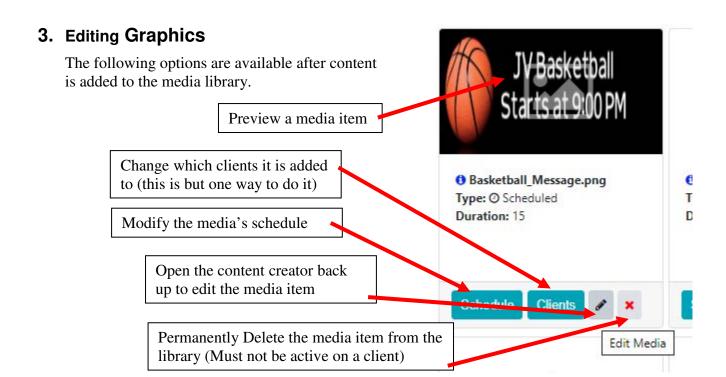
1. Uploading Graphics

Select "Add Media To Library", and then select "Upload Media".



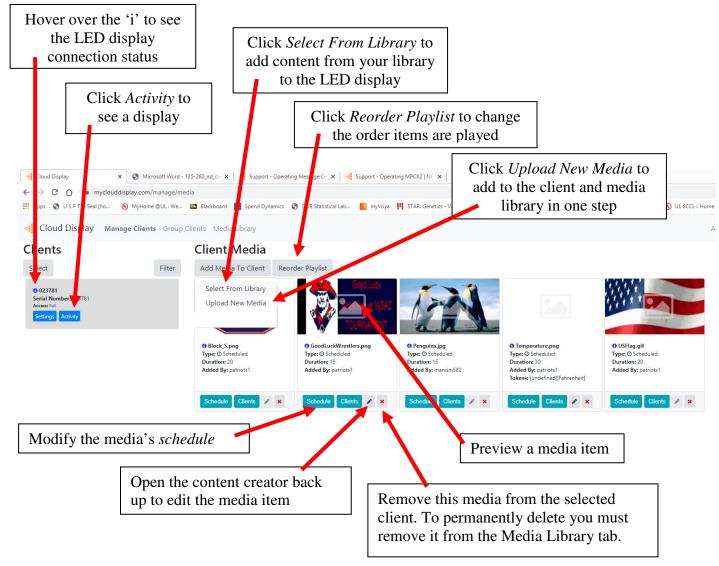
2. Creating Graphics Select "Add Media To Library", and then select "Create Media".





Section 4: Manage Clients

The managing clients tab allows the user to see the content currently loaded on the client, add/remove items, directly modify content or schedule, look at an activity log for the client, and monitor the current connection status of the display to the Cloud Server. See the annotated window below:



Section 5: On Demand Content

In order to trigger on demand content at the venue during an event, you will need the Nevco ondemand app available from the app store: <u>Get the ondemand app</u>. Detailed instructions for using the app are found here: https://support.nevco.com/operating-equipment/message-center/

Section 6: Connecting your display to the internet

Please reference the **client setup** installation instructions here: https://support.nevco.com/installation/outdoor/controls-and-software/cloud-connected-devices/



NEVCO GUARANTEE

NEVCO GUARANTEE

To view or receive the most recent copy of the Guarantee, please visit our website, www.nevco.com or call 1-618-664-0360

NEVCO, Inc. 301 East Harris Avenue Greenville, IL 62246-2151 USA

USA TOLL-FREE 800-851-4040 CANADA TOLL-FREE 800-461-8550 International Telephone: +1-618-664-0360

> Website: www.nevco.com Email: info@nevco.com

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This class A digital apparatus meets all requirements of the Canadian Interference- Causing Equipment Regulations.

Cet appareil numerique de la classe A repecte toutes les exigences du Reglement sure le materiel brouller du Canada.

Scoreboard Operator's Instructions MPC-7X2 Control



Some features on the keyboard overlay may not be included on the particular model being operated.



Since 1934

3/4/2019 135-0215RC

These Instructions are for the Following Models:

ED M. I.I.

LED Models				Ind	cande	escent		
3500	36xx*	7504	76xx	1515	3400	7004	1015	
3502	86xx	7505		1615	3402	7005		
3504	88xx	7516		1620	3404	7404		
3514		7520		1625	3414	7405		
3515		7524		1632	3415	7415		
3516		7525		DGT-5	3416	7416		
3520		7530		DGT-6	3425	7424		
3525		7000		9505	3434	7425		
					9005 9405	7430		
3534		*does not		9605	DGT2			
3550		include 3657		9715	DG12			
		merade 3037			1			

FOOTBALL

Thank You

Thank You for choosing NEVCO. We appreciate your business.

The following instructions will help you become familiar with the operation and features of the scoreboard system. Please take a few minutes to study this manual, and to practice with the control.

If you ever have any questions or comments, please call or email us.

NEVCO, Inc. 301 East Harris Avenue Greenville, IL 62246-2151 USA	
USA TOLL-FREE 800-851-4040	

CANADA TOLL-FREE 800-461-8550 International Telephone: +1-618-664-0360

> Website: www.nevco.com Email: info@nevco.com

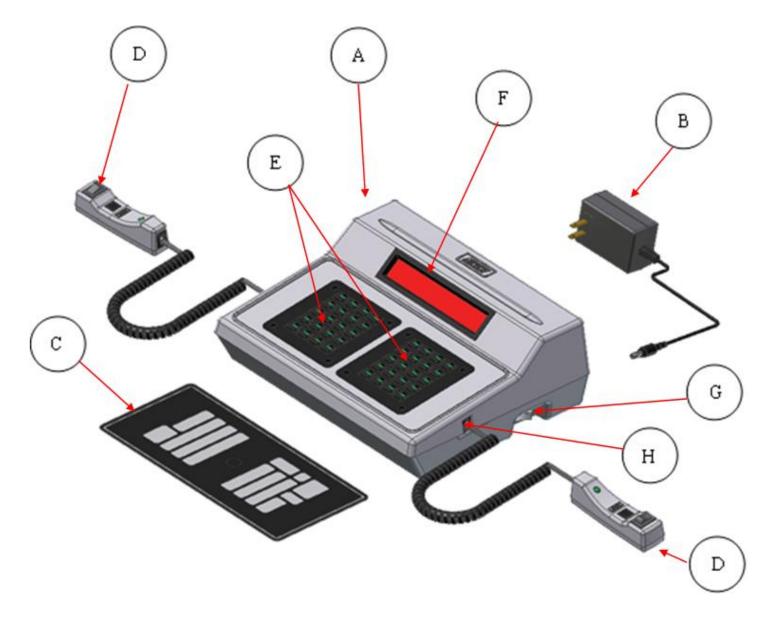


Figure 1 – MPC Control (front view)

A.	MPC Control	Can operate scoreboards for a wide range of sports and features.
B.	Power Supply	9 V DC (included with the control)
C.	Overlay	Fits on top of control to label the keys (included with system)
D.	Hand Held Switch	A TCS-7 time control switch is included with each control.
		Other switches are included with the accessories they operate.
E.	Keypads	Left and Right (20 keys each)
F.	16 character display	Bright LED for better visibility
G.	Power On / Off switch	Removes power from the control only (does NOT turn power off to scoreboard)
Н.	Jack for hand held switch	One on each side of control (use either jack for any Hand Held switch)

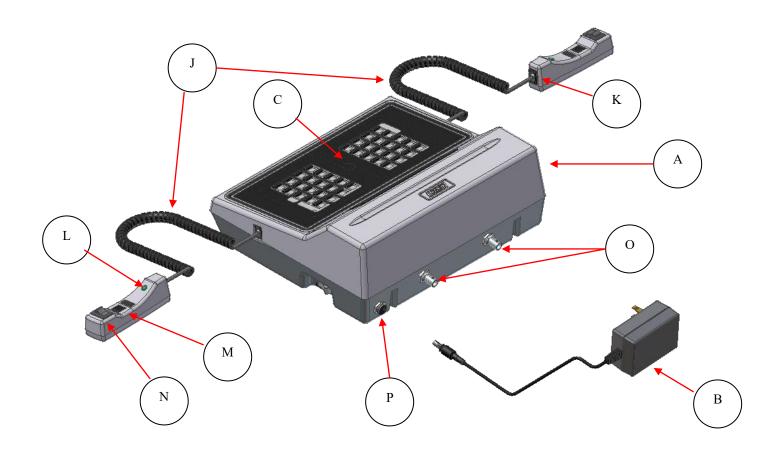


Figure 2 – MPC Control (rear view)

A.	MPC Control	Universal – to change sports, change the Overlay and enter the new Model Code.
B.	Power Supply	9 V DC (included with control)
C.	Overlay	For the sports used with the scoreboard
J.	Coiled Cord	Stretches to over 4 ft. (included with switch)
K.	Socket for coiled cord	Makes it easy to replace the cord
L.	LED test indicator	Verifies that the Hand Held switch is working
M.	Remote push button switch	Function depends on type of Hand Held switch (on TCS-7 – sounds the horn)
N.	Remote rocker switch	Function depends on type of Hand Held switch (on TCS-7 – controls the time)
O.	Output to scoreboard	BNC connector for coax cable (use either or both as needed)
P.	Jack for power input	9 V DC

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SETUP

Upon first power up of the MPC-7X2 control the control is configured to operate with an x6xx scoreboard as a football control.

New Sport

Scroll Profiles changes the MPC-7X2's input and output to operate a new sport. Profiles settings are set with the last profile loaded or saved in that sport. To change sports:

Place the desired sport overlay on the control.



the MPC-7X2 will display.



Enter the sport name using the keyboard or continue to press

Scroll Profiles until the desired sport is displayed.

Refer to the top of the overlay for what to enter into the control.

- The letters are on the right side of the keys.
- All sports are entered in all capital letters
- Once the control can distinguish the sport entered it will auto complete the rest
- If the wrong sport is entered press NO/CANCEL and begin again



Press YES once the desired sport is entered, the control will then change to the sport.

Scoreboard Model

The scoreboard model setting must be set to match the scoreboard being operated.

It is highly recommended to create a profile to save this setting if the MPC-7 is going to be used to control multiple board models.

Scoreboard model will be fully covered in the Sport OPTIONS portion of this manual

NOTE: The scoreboard model should be set before connecting to a Scoreboard.

To change the scoreboard model:

1. Press until the MPC-7X2 displays

2. Press Press until the desired scoreboard series is displayed

4. Press Pre

Model >>

Wireless

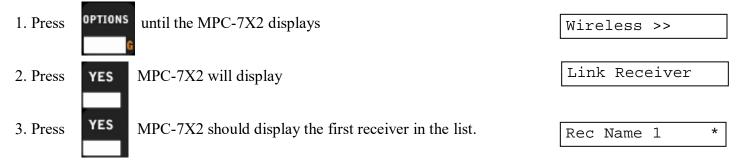
- The MPC-7X2 can operate one or more selectable wireless receivers depending on the customer's need.
- The receivers can be linked or unlinked depending on the operational requirements at game time.

It is strongly recommended to save wireless settings in each profile used.

Different wireless settings should be saved to different profiles.

Note: The receiver desired to be linked has to be programmed into the MPC-7X2. To do this follow the instructions in the OPTIONS section of this manual. Wireless will be further explained in the OPTIONS portion of this manual

To Link or Unlink receivers:



Press YES again to link or unlink that receiver. The "*" displayed on the control next to the receiver name means the receiver is linked

4. To link another receiver:

Press to cycle through available receivers

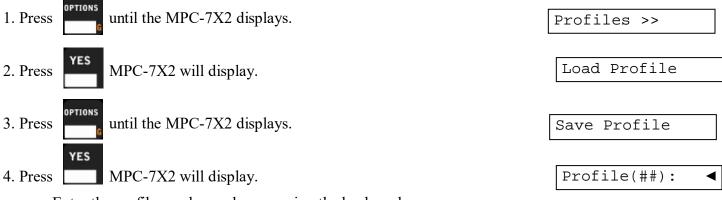
Rec Name 2

Press YES to link that receiver.

Creating a Profile

A profile needs to be created after the scoreboard model and wireless settings are set. It is recommended to save this profile to profile number 1.

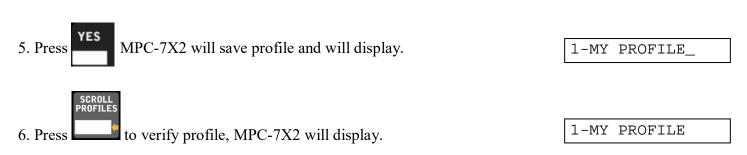
To create a profile:



Enter the profile number and name using the keyboard.

Refer to the top of the overlay for what to enter into the control.

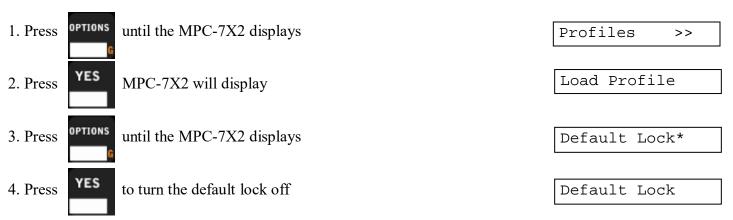
- The letters are on the right side of the keys.
- If the wrong profile is entered press NO/CANCEL and begin again



For more information about profiles refer to the OPTIONS section of this manual

Note: A default profile for each sport is programmed at the factory for your scoreboard model. If you wish to use a different profile you must turn off the default lock setting before you can load the profile you have created. Each time the control is powered on the default lock is automatically turned on.

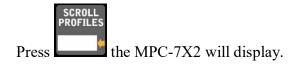
To Turn off the Profile Default Lock:



START UP

New Game

Scroll Profiles changes the MPC-7X2's input and output to operate a new game or sport. Profiles settings are set with the last profile loaded or saved in that sport. To start a new game or sport:



##-PROFILE NAME

Enter the profile name using the keyboard or continue to press

Scroll Profiles until the desired profile is displayed.

Refer to the top of the overlay for what to enter into the control.

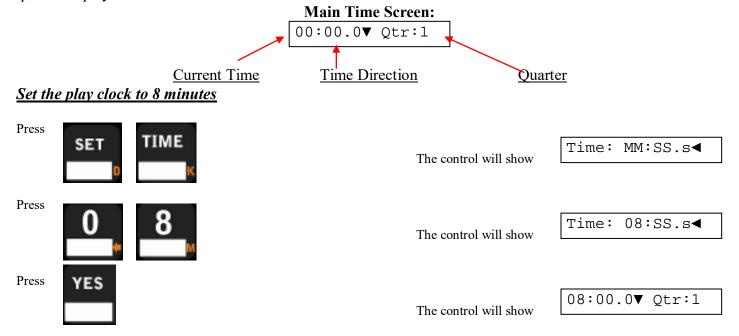
- The letters are on the right side of the keys.
- All sports are entered in all capital letters
- Once the control can distinguish the sport entered it will auto complete the rest
- If the wrong sport is entered press NO/CANCEL and begin again

Press ____ when the desired profile is displayed, the control will then change to that profile.

For more information about profiles refer to the options menu section of this manual

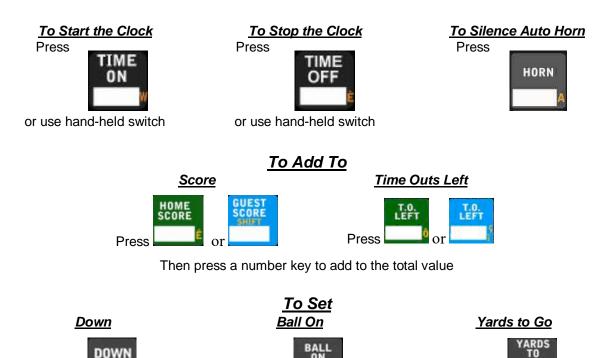
QUICK START GUIDE

With the scoreboard on and the control on the main time screen you are ready to set the time for the first quarter of play.



You are now ready for the game to begin.

Press



Then press a number key to set the value

Press

Press

Keyboard Function

YES key



Use to accept settings, confirm data input, and to navigate through options menu

NO key



Use to cancel an operation, reset changes in the process of making them, exit a sub-options menu, and to send the MPC-7X2 back to the screen that displays the name of the sport being played.

SET key



Use ahead of a function key to directly enter a value, set times, and correct errors. These functions will be further described throughout the manual

HORN key



Press to sound the scoreboard horn. Release the key to stop the horn.

NOTE: The duration of the horn is limited to 4 seconds.

SCROLL PROFILES key



Press to view profiles and sports. Each key press moves to the next profile/sport.

OPTIONS key



Press to enter and move through the options menu. Each press of the OPTIONS key moves to the next option in the options menu

Time Function

STANDARD TIME FUNCTIONS

- 1. Main Time Main time is the time displayed to keep track of game time.
- 2. Quarter A number to keep track of which ¼th the game is on
- 3. Time Out Time Out consists of 5 settable timers used to time a time out.
- 4. Time Of Day The MPC-7X2 will keep track of time of day

TIME CONTROLS

The standard keys used for time control.

Hand Held Switch



Two Position Switch

• Right is Time On Left is Time Off

Horn Switch

- Press to sound horn
- Release to silence the horn
- Horn will sound for up to 4 seconds

Indicator Light

• Flashes when connected to a powered up MPC-7X2

TIME ON Key



Turns Main Time on and can be used to turn on the Aux timer and Segment Timer if used

TIME OFF Key



Stops Main Time and can be used to stop the Aux Timer and Segment Time if used

Note:

- 1. Aux timer and Segment timer are fully explained in the OPTIONS section of this manual
- 2. The Time On and Time Off keys are disabled if the hand held time control switch is plugged in to the control.
- 3. To make these two keys active again, turn the control power off, disconnect the hand held time control switch, and restart the control.

TIME Key



Press to return to main time screen

Press from main time screen will display aux timer or segment timer

Press from aux timer or segment timer screen to return to main time screen

QUARTER Key



Press QUARTER to set the game quarter

MISC DELAY TIME Key



Press MISC DELAY TIME to run a delay of game timer

TIME OF DAY Key



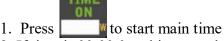
Press TIME OF DAY to verify the time set within the control and display the time on the scoreboard.

MAIN TIME

- Is the time displayed on the scoreboard to keep track of game time
- Can count down or up

To change direction of main time refer to the OPTIONS section of this manual

To Start and Stop Main Time



- 2. If time is 00:00.0 and is set to down time needs to be reset to start
- 3. If time is set to up time will start anywhere

There are two ways to stop main time

- 1. End time If time reaches 00:00.0 when time is set to down. The auto horn will sound for four seconds
- 2. Press to stop main time

To Set Main Time

1. Press



then



the control will then display

Time: MM:SS.s◀

- 2. Enter the Minutes, Seconds, and Tenth Second as needed.
 - a. After all five digits are filled it automatically accepts the time.
 - b. If less than 5 digits are entered and YES is pressed, then zeros will be placed in the unfilled digits and the time will be accepted.

Example

- 1. An entry of 1, 2, 3, 4, 5 will set the time to 12 minutes 34 seconds and 5 10s of second (12:34.5)
- 2. An entry of 1, 2, YES/CONFIRM will set time to 12 minutes (12:00.0)

Note: Pressing NO at any point before the 5th digit is pressed in the time entry process will reset time to previous values

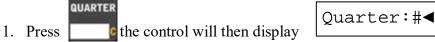
Example

- 1. Time is set to 10:00.0
- 2. SET > TIME is pressed and an entry of 1, 2, 3, 4 is entered.
- 3. NO/CANCEL is pressed.
- 4. Time will then be set to 10:00.0

QUARTER

In addition to the game time, the quarter helps keep track of where the game is.

To Set the Quarter



- 2. Press the number corresponding to the Quarter
- 3. The Quarter will be set and the MPC-7X2 will then navigate to the main time screen

TIME OUT

- Time out is functionally a set of timers used to organize time outs in a game.
- There is a choice of five programmable timers.
- Time out timer key will not be functional until time is set to off.
- It is optional to display the time out timer on the scoreboard
- Each timer has a programmable warning time.

Warning Time – Is a signal that the end of a time out is approaching. The scoreboard will sound a 2 second horn and the MPC-7X2 will navigate itself back to the time out time screen.

Note: Refer to the OPTIONS section of this manual to

- 1. Set time out timers
- 2. Set warning times
- 3. To display or not display the time out timer on the scoreboard

Example

A typical set of time out timers

Time Out	Time	Warning	
1	1:00.0	0:30.0	
2	2:00.0	1:00.0	
3	3:00.0	1:00.0	
4	4:00.0	1:00.0	
5	5:00.0	1:00.0	

To Start a Time Out



Press TIME OUT TIMER the MPC-7X2 will display The last time out timer used will display as an option to use this timer press YES

Time Out: (1-5)

4 5 6 1 2 3 Use the number keys 1-5 to choose the time out
The time out number selected will automatically begin counting

- The horn will sound for two seconds at the warning time
- The horn will sound for four seconds at the end of the time out.

Time2: 02:00.0

To Conclude a Time out Early

There may be a desire to skip to the warning time and/or conclude the time out early. To do this while the time is counting:



First, to use this function the MPC-7X2 must be on the time out timer screen To reenter the time out screen press the TIME OUT TIMER key. If on the time out timer screen press the TIME OUT TIMER key

Time2:

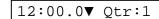


- The timer should skip to the warning time.
- The scoreboard's horn should sound for 2 seconds
- The MPC-7X2 should beep for 2 seconds



Press the TIME OUT TIMER key again to conclude the time out

- The MPC-7X2 will go back to the main time screen
- The scoreboard's horn should sound for 4 seconds
- The MPC-7X2 should beep for 4 seconds



Time2:

MISC DELAY TIME

This function is usually used to provide the delay of game time between plays and can be displayed on a Nevco delay of game timer.

- The Left reset switch (Reset1) is programmed by default to 40 seconds
- The Right reset switch (Reset2) is programmed by default to 25 seconds
- The Button starts or stops the Delay of Game time running.

TIME OF DAY

When Time Of Day is set the MPC-7X2 will keep track of Time of Day:

- Time Of Day can function with the 12 and 24 hour clock
- A press of TIME OF DAY will display time of day on the scoreboard in the main time place
- Compatible scoreboards can display time of day while the scoreboard is turned off

Note: Refer to the OPTIONS section of this manual to stick time of day (displays the time while the control is turned off) and change the Time of Day from 12 to 24 hours

To Set Time of Day

1. Press



then



; the control will then display

ToD: HH:MM ◀

- 2. Enter the Hours and Minutes.
 - a. After all four digits are filled it automatically accepts the time.
 - b. If less than 4 digits are entered and YES is pressed, then zeros will be placed in the unfilled digits and the time will be accepted.
 - c. If less than 4 digits are entered and there is an error press NO/Cancel.
 - i. The previous value is set
 - ii. The control goes back to the main screen

In-Game Stats

In-Game Stats are entries in the control that can or will display on the scoreboard.

Note: Not all in game stats are available to display on all scoreboards.

Football In-Game Stats are HOME and GUESTS:

SCORE FLAG DOWN TIME OUTS LEFT

BALL POSSESSION BALL ON YARDS TO GO

Following are descriptions of the In-Game Stats in detail and how to use them.

Depending on the stat's function there is a possibility of entering game time stats three ways: adding, setting, and indicating.

Adding – Adding is the usual function for In-Game Stats after the stat key (Score, Shots, Etc) is pressed the following number key pressed is added to the total. To add more, press the stat key again. For direct entry, corrections, and SUB IN/OUT refer to <u>Setting</u>.

Example

HOME SCORE is pressed and the screen displays:

6 is pressed the result is:

3+	Score	4
9+	Score	4

Setting – Rather than add to the total stat selected one can directly enter it. This is setting. It is typically used to directly set the stat selected or correct a previous add.

Example

SET then HOME SCORE is pressed and the screen displays:

1 then 2 are pressed the result is:

Or 1 then YES/CONFIRM is pressed. The result is:

13◀	Score	4
12	Score	4
1	Score	4

Indicating – Indicating illuminates an indicator light or designated digits to indicate events within a game. For example: possession, penalties, hits, errors, and time outs left. Not all scoreboard models have this function.

Example

Press HOME BALL POSS and the home possession indicator displays on a 3504 Scoreboard Press HOME BALL POSS again and the home possession indicator goes out

Note:

- 1. The # represents numerical values in the following examples
- 2. The "+" indicates the MPC-7X2 is in add mode. The side the "+" is on is what side is being added to.
- 3. The "◄" or the "▶" indicates the MPC-7X2 is in set mode. The side the "◄" or the "▶" is on is what side is being set.
- 4. The left or right is relative to the side of the board that value is going to be displayed, not home or guests. This setting can be changed using the Swap Home&Guests option.
 - a. Refer to the OPTIONS section of this manual

SCORE



Press **HOME SCORE** to enter the home score ADD mode.

The control will display ##+ Score ##



Pressing GUEST SCORE will enter the guest score ADD mode.

The control will display ## Score +##

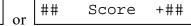
Adding to Score





1. Press

- 2. The control will display
- ##+ Score ##



- 3. Enter any value 0-9 and it will add that value to the value with the "+".
 - a. To add more start from step 1

Note:

1. You cannot subtract from the value. To correct a mistake refer to Setting Score

Setting Score

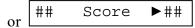






2. The control will display





- 3. 1st digit: Enter any value 0-9
 - a. If that single digit value is the desired setting, then press YES, if not continue to step 4
- 4. 2nd digit: Enter any value 0-9

Note:

1. A zero in the 10's spot will automatically be removed and leave a single digit value.

At any time before the 1's digit is placed can be pressed to restore the previous value and cancel the function.

BALL POSSESSION

If the Ball Possession screen is not active the first time the button is pressed then the control will display the current ball possession settings.



Press Home BALL POSS to turn on or off the home possession indicator

If the Guests is turned on and Home BALL POSS is pressed the Guests will turn off and the Home will turn on.

The MPC-7X2 will display: H Possession



Press Guests BALL POSS to turn on or off the Guests possession indicator

If the Home is turned on and Guests BALL POSS is pressed the Home will turn off and the Guests will turn on.

+##

The MPC-7X2 will display: Possession G

TIME OUTS LEFT



Press **HOME T.O. LEFT** to enter the home score ADD mode.

The control will display ##+ Time Outs ##



Press GUESTS T.O. LEFT to enter the home score ADD mode.

The control will display ##+ Time Outs +##

Adding to Time Outs Left



- 2. The control will display
- splay ##+ Time Outs ## or ## Time Outs
- 3. Enter any value 0-9 and it will add that value to the value with the "+".

Note:

1. You cannot subtract from the value. To correct a mistake refer to Setting Time Outs Left

Setting Time Outs Left



3. Enter any value 0-9

Note:

1. A zero in the 10's spot will automatically be removed and leave a single digit value.

FLAG



Press FLAG to turn on or off the Flag indicator

BALL ON



Press BALL ON to enter the Ball On SET mode

Ball On: ## ◀ The control will display

Setting Ball On



- 1. Press
- Ball On: The control will display
- 3. 1st digit: Enter any value 0-9
 - a. If that single digit value is the desired setting, then press , if not continue to step 4

YES

4. 2nd digit: Enter any value 0-9

1. A zero in the 10's spot will automatically be removed and leave a single digit value.

DOWN



Press **DOWN** to enter the Down SET mode

The control will display

Setting Down



- 1. Press
- Down: The control will display
- 3. Enter any value 0-9 to set the down

YARDS TO GO



Press YARDS TO GO to enter the Yards to Go SET mode

Yards The control will display

Setting Yards to Go



- Yards To Go: The control will display
- 3. 1st digit: Enter any value 0-9
 - a. If that single digit value is the desired setting, then press , if not continue to step 4
- 4. 2nd digit: Enter any value 0-9

Note:

1. A zero in the 10's spot will automatically be removed and leave a single digit value.

YARDS TO GO Special features

On boards supporting the Nevco Intelligent Caption feature, the caption plate indicating yards "TO GO" can change to show "INCHES" or "GOAL". It is not intended on these scoreboard models to indicate the number of inches to gain a 1st down, but rather add to the excitement that there are merely "inches" to get it. Also a 1st, 2nd, 3rd or 4th and GOAL situation can be displayed rather than just blanking the digits or duplicating the BALL ON field.



Press TO GO prior to entering the yards TO GO SET mode, and the intelligent caption models will switch to read "TO GO" and display a number from blank, 0-99.

YES

Press INCHES and the intelligent caption models will switch to read "INCHES" and the digits are automatically blanked.

Press GOAL and the intelligent caption models will switch to read "GOAL".

Football Options

There is one unique option for football. It is Delay of Game Timer Reset.

Delay of Game Timer Reset

This allows you to set default times for the delay of game timer. Each time the time on key is pushed the delay of game timer will display the default time that has been entered. If you do not desire two different reset times, Nevco recommends programming them both to your desired Delay of Game reset time.

OPTIONS Press OPTIONS until the MPC-7X2 display reads	DGT Reset1: 40.0
Press YES, and then the enter value	DGT Reset1: SS.s
OPTIONS Press OPTIONS until the MPC-7X2 display reads	DGT Reset2: 25.0
Press YES, and then the enter value	DGT Reset1: SS.s

SCOREBOARD CAPTIONS

Changeable captions aren't applicable to all scoreboards. For those whom are operating a scoreboard with changeable captions it may be desired to set the scoreboard captions to something other than the default. <u>It is highly recommended to create or add this setting to a profile to save the caption settings</u>.

Scoreboard captions will be further explained in the Sport Options portion of this manual.



Press OPTIONS until the MPC-7X2 displays

Captions >>



Press YES



Press OPTIONS to toggle through each caption until the caption desired displays

CHANGE CAPTIONS

Change Captions is a scoreboard feature that allows one to display different data in designated locations on the scoreboard. To get to the Change Captions Menu:



Press OPTIONS until the control displays

Change Captions

Press to enter Captions Menu. Control displays

Dwn ToGo BO QTR *

Note

- 1. A "*" in the change captions menu represents the current captions setting.
- 2. This feature is only available in the x6xx series scoreboards with football function.
- 3. Not all scoreboards with this feature have all four sets (set = home and guest) of changeable captions.
 - a. For example if there are two sets of captions the scoreboard will display the two on the left of the configuration

Caption Configurations

As stated earlier in this manual the default football captions are Dwn (Down) ToGo (To Go) BO (Ball On) QTR (Quarter) and BO (Ball On) Dwn (Down) ToGo (To Go) QTR (Quarter).

OPTIONS

The OPTIONS menu consists of game settings and added features useable during a game or practice. The OPTIONS are set into 13 possible selections:

1. Brightness

2. Team Names

3. Profiles4. Main Time

5. Aux Time

6. Segment Timer

7. Time Out Timer

8. Swap Home & Guests

9. Aux Display

10. Horn Settings

11. Wireless

12. Scoreboard Model

13. Time of Day

Each press of the OPTIONS key will toggle through these options. Press a function key or cancel to abort the options mode. It is important to note that unless you save the profile these option settings will revert when the new game key is pressed, so after changing the brightness, programming timeout timers, etc. Go to the Profiles section.

OPTIONS menu Navigation

There are three keys to use to navigate through the OPTIONS menu: OPTIONS, YES, and NO/CANCEL.

OPTIONS key



Use to scroll to the next option in the OPTION menu and sub-options menus.

YES key



- 1. Used to select an option or enter a sub-option menu
- 2. Used to confirm changes made
- 3. Used to change a value

NO/CANCEL key



- 1. Used to exit a sub-option.
- 2. If pressed enough times it will bring one back to the screen that displays the name of the sport being played.

displays.

3. Used to Cancel/Reset a change if the change has not been completed or confirmed

Navigation Example 1

- 1. **OPTIONS** is pressed until
- 2. YES is pressed to enter the Segment Timer menu
- 3. NO/CANCEL is pressed to Exit the segment timer menu

Navigation Example 2

- 1. Left Team name is entered to
- 2. YES is pressed to confirm changes made
- 3. If **NO/CANCEL** is pressed rather than YES it will cancel the name entered and cease modifying Left Team Name

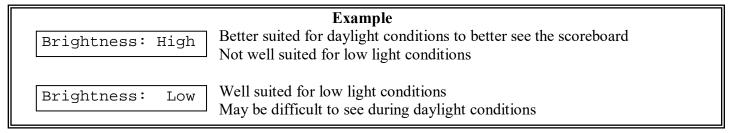
Navigation Example 3

Brightness: Low

- 1. **OPTIONS** is pressed until displays.
- 2. YES is pressed to change the Brightness to High
- 3. NO/CANCEL is pressed to exit the options menu back to the main screen

BRIGHTNESS

Ambient lighting conditions may cause the scoreboard to be too bright or dim. To remedy this go to the brightness options to toggle scoreboard brightness between bright or dim.



To Change Brightness:



Press OPTIONS until the MPC-7X2 display reads **Note:** "****" represents High or Low

Brightness: ****

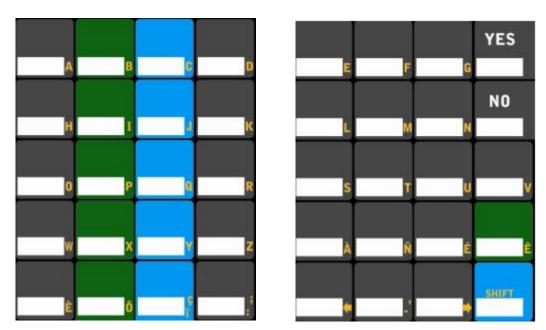
To toggle between High or Low scoreboard brightness

TEAM NAMES

The team names option works with the Electronic Team Names (ETN) package in a Nevco scoreboard system. Using this system can replace the usual vinyl HOME and GUESTS with an LED display used for displaying the team names.

Electronic Team Name keypad

The Team name keypad is marked in the orange color on the MPC-7X2 keypad.



Note: The standard function text and symbols have been removed for example only.

The letter and number keys are self explanatory. There is however a few function keys that are important to know in the Electronic Team Name keypad.

Backspace



The key is used as a backspace button while entering team names

Space



The key is used as a space during while entering team names

Shift Key

Default: uppercase letter state



1st press "♥": Changes to lowercase letters

2nd press "#": Changes from letter entry to number entry

3rd press "♣": Back to uppercase letters

Changing Team Names

First enter the Team Names Menu



Press OPTIONS until the displays reads

Team Names >>



Press to enter Team Names Menu display reads

Home Team Name

Guest Team Name

ABCdef123000

Note:

- During entry of a team name
- 2. Team names can be up to 12 characters
- 3. Depending on the display, if the team name is long enough it will shrink both left and right displays to fit one or both

be pressed to cancel changes and move to another selection

Guests Team name

Guests Team Name is the default entry point to the team names menu

Press to modify guest team name

- a. This enters the Guests team name editing screen
- Enter the team name using the letters (upper and lower case), numbers, backspaces, and spaces as required.

Press. ■ to confirm the team name entry

a. Menu will then go to the Home team name option

Home Team Name

GUESTS

Home Team name

Home Team Name is automatically the option after modifying the right team name.

YES 1. Press on the left team name screen

- a. This enters the HOME team name editing screen
- Enter the team name using the letters (upper and lower case), numbers, backspaces,
- and spaces as required. YES
- to confirm the team name entry Press Control will then go back to the option to edit Guests team name
 - b. Press YES if there is a correction required if not;
- to return to the main OPTIONS menu or press Press Ito return to main time screen.





Guest Team Name

TIME

MAIN TIME

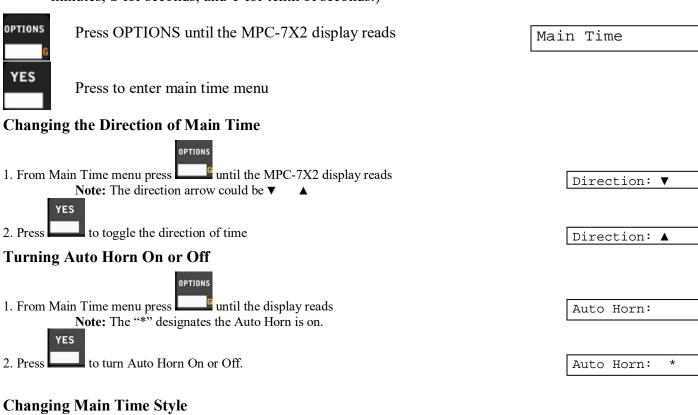
Main time options are:

Direction – Main time can count up or down

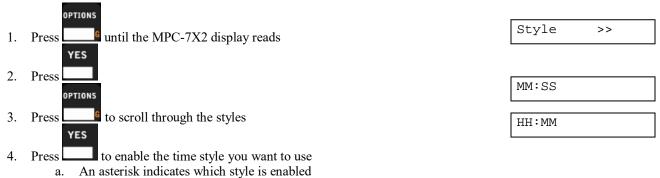
Auto Horn – The horn sounding when time runs out or when time reaches Stop Time.

Style – Allows you to display main time in hour/minute format or minute/second format.

Disable 0.1 – When main time is under a minute, it will shift to display SS.TT instead of MM:SS. This is the default behavior. When "Disable .1" is selected, then main time will always display as MM:SS. (M for minutes, S for seconds, and T for tenth of seconds.)



Within Main Time menu:



Disabling and Enabling 0.1 Seconds Time Shift

OPTIONS	
1. From Main Time menu press until the display reads	Disable .1
Note: The "*" designates the Disable .1 is on. (Will not shift time)	
YES	
2. Press to disable 0.1 seconds shift.	Disable .1 *
	

AUX TIME

The control has a built in auxiliary timer that can be used for many purposes. It can be configured to count up or down. It can run continuously or only when the main time is running. It can be displayed on the control by pressing the time key twice in succession. It can also be configured to display on an auxiliary time display if one is part of your system. Some uses for the auxiliary timer include timing field/facility usage or it can be used to determining how far into a game a certain event happened.

Aux Time Options are:

- 1. Setting Aux Time Aux time can be set to count down or up from a certain settable time. To set the time use this option
- 2. *Direction* Aux time can count up or down according to the need or desire of the user. Use this option to adjust Aux time to run up or down.
- 3. *Time switch Operation* Aux time can be operated with the same time switch used to operate main time.
- 4. Setting Aux Stop Time Aux stop time is functionally the same as stop time for main time. It is the set time where Aux time will cease counting. Note: Aux stop time will not stop time if set to 00:00 and Aux Time is cycling from 99:59.9 to 00:00.0 . It is treated as 100 hours
- 5. Style Aux time can be entered in hour/minute format or minute/second format.

To get to Aux Time options:



Press OPTIONS until the MPC-7X2 display reads

Aux Time >>



Press to enter aux time menu

Setting Aux Time

Within Aux Time menu:

OPTIONS

YES

1. Press until the MPC-7X2 display reads Aux time.

a. If Aux time has never been set up before or Aux time has counted down to zero the MPC-7X2 display will read

Aux: 00:00.0▲

Press to begin editing Aux time
 Enter the minutes, seconds, and 10th of seconds.

a. After all five digits are filled it automatically accepts the time.

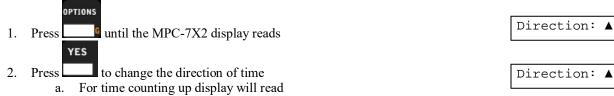
- b. If less than 5 digits are entered and YES is pressed, then zeros will be placed in the
- unfilled digits and the time will be accepted.

 c. If NO/CANCEL is pressed before all 5 digits are entered it restores the previous value and completes the editing process

Aux: MM:SS.S◀

Changing Direction of Aux Time

Within Aux Time menu:

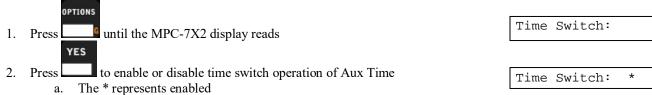


b. For time counting down display will read

Direction: ▼

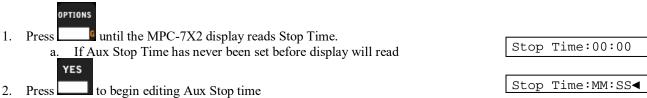
Setting Time Switch Operation

Within Aux Time menu:



Setting Aux Stop Time

Within Aux Time menu:

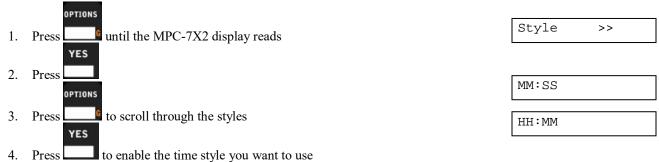


- 3. Enter the Minutes and Seconds.
 - a. After all four digits are filled it automatically accepts the stop time.
 - b. If less than 4 digits are entered and YES is pressed then zeros will be placed in the unfilled digits and the time will be accepted.
 - c. If NO/CANCEL is pressed before all 4 digits are entered it restores the previous value and completes the editing process

a. An asterisk indicates which style is enabled

Changing Aux Time Style

Within Aux Time menu:



SEGMENT TIMER

A **segment timer** is used for pacing organized practices, as an interval horn, and can be used for other practical uses as well. As an example: a segment consists of a practice event (playbook time, running drills, breaks, etc) that is run for a set period of time. Once the time has expired, a new segment is entered and the drill changes. The segment timer will count down from the programmed segment time to zero. The MPC-7X2 segment timer function has a maximum of 20 segments.

There are three settings to be set in each segment: time, auto horn, and auto advance. **Auto horn** sounds the horn at the end of a time segment. If **Auto Advance** is enabled, when the current segment completes the next segment time begins counting automatically.

Segment Timer Projects

As stated earlier a segment timer project has a maximum of 20 segments.

Saving a Segment Timer Project

To save segment timer project create one, then save it using the Profiles option in the OPTIONS menu. Segment timer projects can take some time to set up. If a standard segment timer project is desired for regular use it is highly recommended to save it.

Interval Horn

The simplest segment timer project is the **interval horn**. An interval horn is used to sound the horn every time the set time completes. The interval horn is a one segment, segment timer project with auto horn and auto advance enabled. The project cycles through the allotted segment time, sounds the horn, and goes back to the beginning to start the process over again. A good example for interval horn use is little league hockey. In many little league hockey leagues they use an interval horn to signal on ice shift changes. Here are the settings to set to operate an interval horn project

Example: Interval Horn					
Segment Sett	<u>ings</u>	<u>Result</u>			
Segment Time	1:00	4			
Auto Horn	ON	1 minute counts to 0. Horn Sounds at the end of time. Segment 1 restarts			
Auto Advance	ON	the end of time. Segment Trestaits			
	Segment Sett Segment Time Auto Horn	Segment Settings Segment Time 1:00 Auto Horn ON			

Practice Timer

A typical segment timer project is a practice timer. The practice timer is used to organize practice into segments for different practice functions. Each segment is set to a certain time representing a required time for a practice event. When the next segment begins the team moves to the next event in the schedule.

Segments can be set to automatically begin if required or to begin upon pressing the TIME ON key on the MPC-7X2 by toggling the auto advance function in the edit segment menu. Segment end can be signaled by the sounding of the horn or not by setting the Auto Horn function in the edit segment menu. Here is an example of a practice timer project:

Example: Organized Practice				
Segment 1	Segment Settii	ngs	Result	
	Segment Time	10:00	10 minutes counts to 0. Horn Sounds	
Stretching and Calisthenics	Auto Horn	ON	at the end of time. Segment 2 is	
-	Auto Advance	OFF	prompted but not counting	
Segment 2	Segment Settii	ngs	Result	
	Segment Time	10:00	10 minutes counts to 0. Horn Sounds	
Agility Training	Auto Horn	ON	at the end of time. Segment 3 begins	
	Auto Advance	ON	counting	
Segment 3	Segment Settings		Result	
Linemen to sleds. Backs,	Segment Time	2:00	0	
Receivers, TE, and QBs to	Auto Horn	OFF	2 minutes counts to 0. Segmer 4 begins counting	
drill routes Etc.	Auto Advance	ON		
Segment 4	Segment Settii	ngs	<u>Result</u>	
Diavage and accepted basis	Segment Time	10:00	10 minutes counts to 0. Horn Sounds	
Players and coaches begin position specific drills	Auto Horn	ON	at the end of time. Segment 5 begins	
position specific diffis	Auto Advance	ON	counting	
Segment 5	Segment Settii	ngs	<u>Result</u>	
Office and Defense is a to	Segment Time	20:00	20 minutes counts to 0. Horn Sounds	
Offence and Defense join to run plays	Auto Horn	ON	at the end of time. Segment 6 begins	
run plays	Auto Advance	ON	counting	
Segment 6	Segment Setti	ngs	<u>Result</u>	
	Segment Time	20:00	20 minutes counts to 0. Horn Sounds	
Team Strategy meeting	Auto Horn	ON	at the end of time.	
	Auto Advance	OFF	at the end of time.	

Main Menu

There are three options in the main segment timer menu.

- 1. Enable Enables or disables the segment timer function in the control. Disable will remove a displayed segment timer from the scoreboard.
- 2. Display on Scoreboard Option to display or not display segment timer in place of standard Main Time on the scoreboard. This option is unusable if the segment timer is disabled
- 3. Edit Segment Use this option to edit segments, and create a segment timer project.



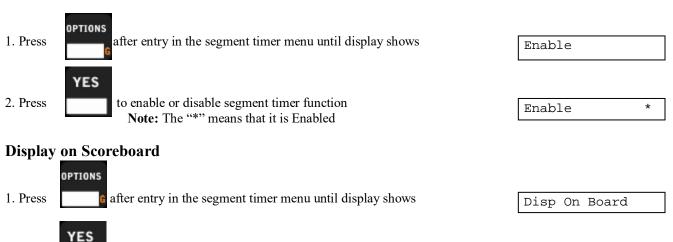
Press OPTIONS until the MPC-7X2 display reads

Segment Timer >>



Press YES to enter Segment Timer Menu

Enable or Disable



Note: The "*" means that it is Enabled

to display segment timer on the scoreboard

Edit Segment

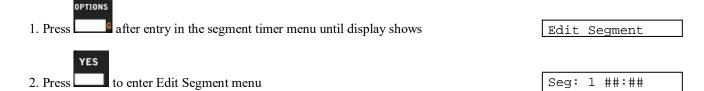
2. Press

The Edit Segment menu is used to edit segments and edit the segment timer project. There are 6 options in the Edit Segment menu.

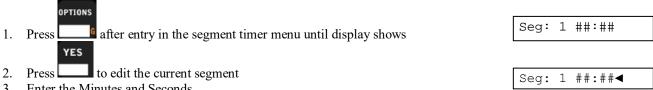
Disp On Board

- Segment Main Time Option to edit segment main time
- Auto Horn Enables or disables Auto Horn function
- Auto Advance Enables or disables Auto Advance function
- Next Segment To edit the next segment in the project. If the project is less than 20 (the others are set to 0.0 time) then it adds a segment to the project
- Insert Segment Moves the current segment forward and edits another segment in place of it
- Delete segment Deletes current segment

Entering Editing Segment menu



Editing Segment Main Time



- Enter the Minutes and Seconds.
 - a. After all four digits are filled it automatically accepts the time.
 - If less than 4 digits are entered and YES is pressed then zeros will be placed in the unfilled digits and the time will be accepted.
 - c. If NO/CANCEL is pressed before all 4 digits are entered it restores the previous value and completes the editing process

Toggling Auto Horn

1. Press after entry in the edit segment timer menu until display shows

Seg: # Auto Hrn

2. Press to toggle the auto horn function in the selected segment

Seg: # Auto Hrn*

a. The "*" represents Auto Horn is enabled

Toggling Auto Advance

OPTIONS

YES

YES

1. Press after entry in the edit segment timer menu until display shows

Seg: # Auto Adv

2. Press to toggle the auto advance function in the selected segment

Seg: # Auto Adv*

a. The "*" represents Auto Advance is enabled

Next Segment

1. Press after entry in the edit segment timer menu until display shows

Seg: # Next Seg

2. Press to advance the segment number

a. Segment number only goes up to twenty and rolls back to 1

Insert Segment

1. Press after entry in the edit segment timer menu until display shows

Insert Segment

2. Press to insert a segment into the current segment position

Seg: 1 ##:##◀

3. Enter the Minutes and Seconds.

a. After all four digits are filled it automatically accepts the time.

b. If less than 4 digits are entered and YES is pressed then zeros will be placed in the unfilled digits and the time will be accepted.

Delete Segment

OPTIONS

1. Press after entry in the segment timer menu until display shows

Delete Segment

2. Press to delete the current segment

. All subsequent segments will move up in position to fill the spot of the deleted segment

Seg: 1 ##:##◀

TIME OUT TIMER

Time out timer options are:

Display On Scoreboard – If enabled a running time out timer will display on the scoreboard Edit Time Outs – To change time out times or time out warning times select this option



Press OPTIONS until the MPC-7X2 display reads

TimeOut Timer >>

Press YES to ent

Press YES to enter main time menu

Display Time Out Timer on Scoreboard

The first selection in the Time Out Timer menu should be the display on scoreboard option.



If required to cycle back to the display on scoreboard screen

Disp On Board

YES

To display or not display the time out timer on the scoreboard

Disp On Board*

Note: the asterisk means that it is enabled

Edit Time Outs Menu

There are 3 options within the "Edit Time Outs" menu

- 1. Edit Current Time out There are 5 individual time out timers that can be set individually. The first time out entered is either the last time out used or defaults to time out timer 1.
- 2. Edit current warning time Each time out timer has a settable warning time
- 3. Next time out To edit another of the five time out timers.



Press until MPC-7X2 display reads

Edit Time Outs

To enter the Edit Time Outs menu

Time#: ##:##.#

Next Time Out

OPTIONS

YES

If the current time out isn't the time out that is desired to be edited:

1. Press until the MPC-7X2 display shows

Next Time Out

a. The number next to it is the current time out to be edited

2. Press until the MPC-7X2 display shows the desired time out to be edited

Time#: ##:##.#

3. Press to go back to editing that time out

Edit Current Time Out

YES

If the current time out is the time out desired to be edited:

1. If not <u>currently</u> on the edit time out screen press until MPC-7X2 displays

Time#: ##:##.#

Time#: MM:SS.s ◀

2. Press The MPC-7X2 will display

- Enter the minutes, seconds, and 10th of seconds.
 - a. After all five digits are filled it automatically accepts the time.
 - b. If less than 5 digits are entered and YES is pressed, then zeros will be placed in the unfilled digits and the time will be accepted.
 - c. If NO/CANCEL is pressed before all 5 digits are entered, it restores the previous value and completes the editing process

Edit Current Time Out's Warning Time

If the current time out is the time out desired to be edited:

1. If not currently on the edit warning screen press until the MPC-7X2 displays

Warn#: ##:##.#

Warn#: MM:SS.s ◀

- 2. Press : The MPC-7X2 will display
- 3. Enter the minutes, seconds, and 10th of seconds.
 - a. After all five digits are filled it automatically accepts the time.
 - b. If less than 5 digits are entered and YES is pressed, then zeros will be placed in the unfilled digits and the time will be accepted.
 - c. If NO/CANCEL is pressed before all 5 digits are entered, it restores the previous value and completes the editing process

SWAP HOME AND GUEST

This function does just as it says. All Home and Guests values switch places on the display and in the control's display. Home and Guests team names switch if the scoreboard has electronic team names. **Note:** Home and Guest keys do not swap on the MPC-7X2

OPTIONS G Press after entry in the segment timer menu until display shows

Swap Home&Guest

YES

Press to switch all values of home and guests

Swap Home&Guest*

AUXILIARY DISPLAY

This function allows you to choose one of the following to display on the auxiliary timer: main time, auxiliary time, or time of day.

OPTIONS G Press OPTIONS until the MPC-7X2 display reads

Aux Display >>

YES

Press YES to enter the Auxiliary Display menu

Display Main

Press OPTIONS to scroll through the list



Press YES to enable the time you want to display on the auxiliary timer

Display Main*

enabled

Note: An asterisk indicates which option is

HORN SETTINGS

Each horn type can be changed from a selection of 9 different tones. The horn output volume can be changed as well. This is done within the horn settings option. (Only available on select models)

NOTE: Horn settings may not affect scoreboards that are not in the outdoor x6xx series.

Tones can be described as:

Tone Setting	Description
Tone $= 0$, or blank	Mute
Tone = 1	Yelp
Tone $= 2$	Buzzer
Tone $= 3$	Car Horn
Tone $= 4$	Fog Horn
Tone $= 5$	156 Hz
Tone $= 6$	270 Hz
Tone $= 7$	285 Hz
Tone = 8	303 Hz
Tone = 9	385 Hz



Press OPTIONS until the MPC-7X2 display reads

Horn Settings >>

To enter the Horn Settings menu

Volume: #

BLANK

Horn Volume

Adjusting the horn volume affects all 5 different horns. To adjust the horn volume:

- Press if not already on the horn volume screen until the display shows YES
- the MPC-7X2 will display

Volume: # Volume:

Press the desired volume number key from 0 (muted) to 9 (max), or to disable the horn press

a. Volume is then set.

EOP Horn Tone

This setting will change the EOP (end of period) tone and main stop time tone. To change the tone:

- Press until the display shows YES
- Press L the MPC-7X2 will display

EOP Tone: # EOP Tone: #◀

Press the desired horn tone key from 0 to 9; or to disable the EOP horn

Horn Key Tone

This setting will change tone of the horn that sounds when the horn key is pressed. To change the tone:



3. Press the desired horn tone key from 0 to 9; or to disable the horn key

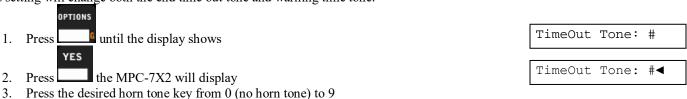
Aux Horn Tone

This setting will change both the Aux stop time and end time horn tone.



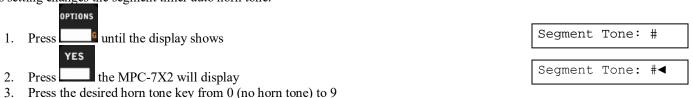
Time out Timer Tone

This setting will change both the end time out tone and warning time tone.



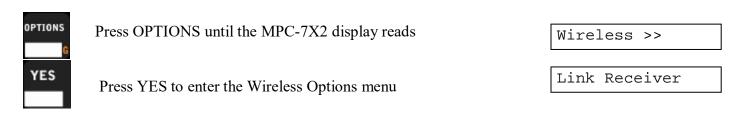
Segment Timer Horn Tone

This setting changes the segment timer auto horn tone.



WIRELESS

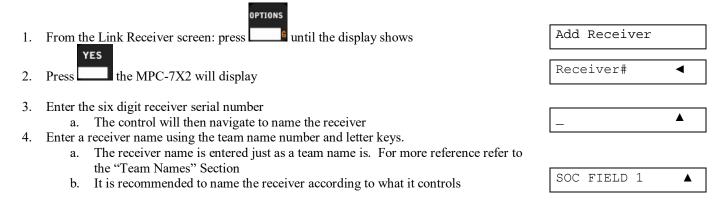
The Wireless options are to link receivers, add receivers, and delete receivers from the control. To set the wireless options:



Add Receiver

The MPC-7X2 stores any receivers it uses in memory. If a new receiver is required because of a new scoreboard installation, maintenance, or a new component in the existing Nevco, Inc. scoring system begin by adding a receiver.

Be sure to have the receiver serial number ready it will be needed to add a receiver to the MPC-7X2. From the "Link Receiver" screen:



Note: Once a new receiver is added it is added to all profiles as linked. If this is not a desirable state then for each profile used save it according to what the receiver needs are.

Link Receiver

The MPC-7X2 allows the user to choose which wireless receivers to use during operation. The receivers used default to being linked this setting allows one to toggle the use of each receiver added to the MPC-7X2. To link or unlink a receiver:

YES

- 1. If using profiles load the profile desired to change the wireless settings
 - a. Refer to the Profiles section of this manual
- 2. Enter the wireless options menu by pressing OPTIONS until "Wireless" displays and pressing YES. MPC-7X2 will display the Link Receiver screen.
- the MPC-7X2 will display the first receiver added to the MPC-7X2
- 4. If that receiver is desired to link or be unlinked press
- a. The asterisk designates a Linked state
- 5. If there are more receivers within the MPC-7X2 press OPTIONS to go through each
- 6. Repeat steps 3 thru 5 until all receivers are at their desired state
- 7. If using profiles save the current profile

YES

8. If using profiles repeat steps 1 thru 7 for all profiles with different wireless settings.

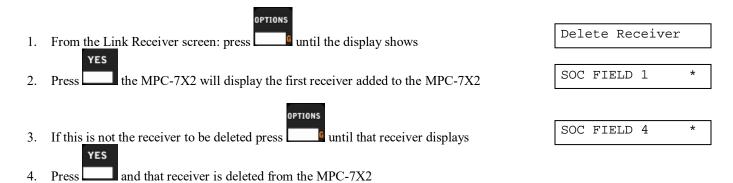
Link Receiver

SOC FIELD 1 *

Delete Receiver

The MPC-7X2 stores added receivers it uses in memory. If it is necessary to delete a receiver because it is no longer in use, defective, etc the Delete Receiver menu is used.

Warning: Deleted receivers are deleted from the control as a whole. To make a receiver not operate in certain circumstance refer to the "Link Receiver" process.



Note: Once a receiver is deleted it is deleted from all profiles and is not remembered by the control. To correct a mistakenly deleted receiver refer to "Add receiver" and "Link Receiver" as needed.

TIME OF DAY

Use this option to:

- Stick time of day on the scoreboard when the MPC-7X2 is turned off
- Toggle the clock between 12 and 24 hours



Press OPTIONS until the MPC-7X2 display reads

Time Of Day >>

Press YES to enter the Time of Day Options menu

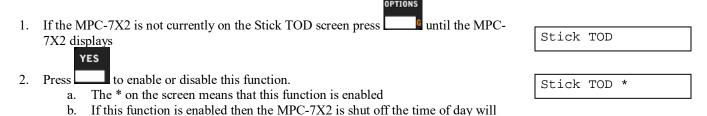
Stick TOD

Stick TOD

When this function is enabled the scoreboard will display the time of day after the MPC-7X2 is shut off. This feature does not support 24 hour format.

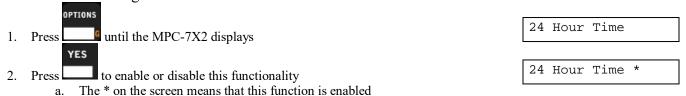
To enable or disable this function from the Time of Day Options menu:

display in the scoreboard's main time spot



24 Hour Time

This function will change the time from the 12 hour structure to the 24 hour structure



PROFILES



Press OPTIONS until the MPC-7X2 displays

Profiles >>



Press YES to enter the Profiles menu

Load Profile

A Profile retains all settings within the control for future use. A large amount of our customers may only need the default profile for each sport in the MPC-7X2 for the entirety of its use. The New Game key will access the last profile saved or loaded within each sport and there is no need to create multiple unique profiles. However, there are some instances where profiles are strongly encouraged for ease of use.

If:

- There are multiple settings that are to be set for different times the scoreboard is in use
- The MPC-7X2 is being used on different scoreboard types
- Segment Timer projects are being used
- There are different wireless configurations for different games

Then: A unique profile may make the MPC-7X2 control much more convenient to use.

The MPC-7X2 can save up to 100 profiles. Each sport's profiles save the following:

Half/Period/Quarter
All Game Time Stats
Main Time Options
Caption Settings
Team Names
Time Out Options
Stop Time
Swap Home and Guest
Scoreboard Brightness
Segment Timer Options
Scoreboard Model

<u>To keep track profile settings and numbers it is recommended to keep good notes on profiles.</u>
A Profile worksheet is provided in the Appendix for these notes

There are three options in the Profiles menu "Load Profile", "Default Lock" and "Save Profile". The procedures for these options are covered in START UP and SET UP. To recap:

Load Profile

Load profile is the first option within the Profile Options

Load Profile

- 1. From the Load Profile Screen: Press the MPC-7X2 will display
 - a. The profile number here will be the last profile loaded or saved

YES

YES

- 2. If the displayed profile is the profile required then press
- 3. If the profile displaying is not the required profile then enter the two digit number of the profile required.
 - a. If it is a single digit enter the number and press YES to load

The MPC-7X2 will then begin the process of loading a profile.

- The MPC-7X2 beeper will sound
- The MPC-7X2 will display the MPC-7X2 revision screen
- The scoreboard will blank
- The MPC-7X2 will display the sport
- The scoreboard will load

Profile(##):## ◀

Save Profile

Save profile is the second option from within the Profile Options

Set all applicable settings before saving a profile.

It is useful to press the new game key to clear the board before making all of the options changes desired prior to saving a profile. If you don't blank the board, your profile will be saved with time and score that will be recalled every time the new game key is pressed. This can be useful if you want the time to be set to 8:00 in basketball for example, or if you prefer the fouls to be '0' by default instead of

of

| Solution | Soluti

1. Upon entry into the Profile Options; Press

1. Upon entry into the Profile Options; Press

2. Press

the MPC-7X2 will display

a. The profile number here will be the last profile loaded or saved

Profile (##):## ◀

3. If the displayed profile is the profile required then press

- 4. If the profile displaying is not the required profile then enter the two digit number of the profile required.
 - a. If it is a single digit enter the number and press YES to load

The MPC-7X2 will then begin the process of loading a profile.

• The MPC-7X2 beeper will sound while saving.

Mistakes in a saved profile

If a mistake was made in the saved profile's settings simply:

- 1. Load the profile in question
- 2. Change the setting
- 3. Save the profile again

Default Lock

Default Lock is the third option within the Profile Options. When enabled, the control will prevent the user from overwriting the default profile created at the factory. The following are the default profile numbers for each sport:

Sport	Default Profile ##
Soccer	88
Football	89
Track	90
Baseball / Softball	91
Lacrosse	92
Basketball	93
Volleyball	94
Wrestling	95
Hockey / Field Hockey	96

To preserve the factory defaults and retain the ability to return the control back to a known state avoid overwriting the factory default profile numbers.

1. Upon entry into the Profile Options; Press until the MPC-7X2 displays

Default Lock*

- 2. Press to turn the Default Lock off
 - a. Default Lock automatically turns on each time the control is powered on
 - b. An asterisk indicates that default lock is turned on

Backup / Restore

Used at the factory to output the contents of the profile / wireless data

TROUBLESHOOTING CHART

Problem Cause Solution

		10 0 - 1 - 1 - 0
Cannot access the OPTIONS menu	Time is running	Turn time off before attempting to change settings
	Auto horn is turned off	Enable the auto horn in the Main Time OPTIONS menu
Horn does not sound when time has expired	Volume is set to zero	Change the volume to something other than zero in the Horn OPTIONS menu
1	EOP horn is set to zero	Change the EOP horn in the Horn OPTIONS menu to the desired horn sound
Timer counts in wrong direction	Timer direction is set wrong	Change the direction of time in the Main Time OPTIONS menu
Cannot subtract from score	Score keys will add only	Use SET then HOME or GUESTS SCORE key and enter the correct score directly
Cannot clear Time Out Timer from scoreboard without sounding warning horn (teams are ready to play)	Clearing the Time Out Timer forces it to drop to the warning time which sounds the warning horn	Press TIME OUT TIMER twice. The warning horn will be skipped and the time out timer end horn will sound
Tenth second does not show on scoreboard	Main clock is counting up.	Tenth second will not show when main time is counting up
scoreboard	Time is above one minute	None this is standard operation
Time of day will not display on scoreboard when I press Time of day	Time of day key is not enabled	Use SET TIME OF DAY to enable it
Aux time is displayed on the	Hours and minutes are being displayed. The display will change only once each minute	Minutes and seconds will be displayed during the last hour of remaining time
auxiliary time display, but it is not counting	Time switch is off	Aux time is set to run with the time switch. Either turn the time switch to on/press TIME ON or go to options and disable the option to run with the time switch
The horn randomly goes off during game time while main time is	Aux timer is running	Start a new game. Go to Aux timer OPTIONS menu and set the aux timer to 00:00. Save the profile
running	Segment Timer is running	Start a new game when possible. Go to Segment Timer options menu and disable segment timer. Save the profile.
The Horn randomly goes off while the control is on. Main time is not running.	Aux timer is set to run without the time switch	Start a new game. Go to Aux timer OPTIONS menu and set the aux timer to 00:00 and set the aux timer to run with the time switch. Save the profile
The Horn goes off when turning on the control after transferring it from another scoreboard.	The Model is not set correctly	Go to Options > Model and select the correct Scoreboard Model

If the problem persists please contact the Nevco Service Department. 800-851-4040

GLOSSARY

ALTERNATE TIME CONTROL SWITCHES (keys): Located on the keypad, these 2 keys, TIME ON and TIME OFF, may be used instead of the Hand Held Time Control Switch.

NOTE: These 2 keys are inactive while the Hand Held Time Control Switch is plugged in. To enable them, turn the control off, unplug the Hand Held Switch and restart the control. You may use "Start Where Left off Last" if you wish.

AUTO HORN: Sounds for a minimum of 4 seconds when the main time has expired, stop time is reached, segment timer ends a segment (if set), time out ends, aux time ends, or aux time reaches aux stop time. Main time Auto horn can be disabled through the main time options menu.

NOTE: Auto Horn tones and volumes can be changed via the Horn Options menu

AUX TIMER: An auxiliary timer, separate from the main timer, that can be configured to count up or down and to start and stop with the time control switch or run continuously. It can be viewed on the control by pressing TIME twice, going to Aux Time Options, or on an AUXILIARY TIME DISPLAY. Some uses for the aux timer include timing field or facility usage, or determining how far into a game a certain event happened.

AUXILIARY TIME DISPLAY: Consisting only of a timer, it can display the main time, the AUX TIME or the Time of Day Clock. Auxiliary Time Display models include: 9410, 9510, 9405 and 9505.

BATTERY: Battery powered memory saves the settings and data in the control in case of power failure. It also maintains the accuracy of the time of day when the control is unplugged.

BEEPER: Confirms each key press and alerts operator when time expires.

PROFILE: Saves the current control settings and data so it can be easily recalled later. Up to 100 profiles can be saved for each sport.

BRIGHTNESS LEVEL: The scoreboard can be set to bright or dim for best viewing. Indoor scoreboards default to bright; outdoor scoreboards default to dim.

TIME OF DAY: Time of Day Clock. Once the correct time has been set, the accuracy of the time of day is maintained even while the control power is unplugged. During normal operation, the time of day can be displayed on the control and scoreboard by pressing a single key.

NOTE: Pressing the TIME key or turning the time on will return the main time to the display(s).

DISPLAY: A 16 character display on the control prompts the operator for input and can monitor the scoreboard data.

HAND HELD TIME CONTROL SWITCH: A hand held switch with a coiled cord that plugs into either side of the control. When connected, the alternate time control switches (keys) are disabled. (Makes it easier for another person to control the main time or sound the horn).

INTERVAL HORN: A horn that sounds repeatedly at preset intervals throughout the game. An example of use is to signal when little league hockey teams should change lines. The Interval Horn has been replaced by a more versatile SEGMENT TIMER which can function just the same. (See Segment Timer)

OPTIONS: Consist of game settings and added features useable during a game or practice.

OVERLAY: A flat plastic panel that fits over and around the keys on the control. Tabs at the top and bottom hold it in place. Each overlay provides the proper labeling for each key, Nevco contact information, and the sport name. When you want to change to a different sport, install the correct overlay and enter the sport name on the new sport screen.

SEGMENT TIMER: Sometimes called Practice Timer, it allows a list of time segments to be programmed into the control. As an example the list can then be used for a practice routine or drill. When started, the first segment on the list is loaded into the main timer and starts counting down. When zero is reached, the timer moves to the next segment in the segment timer project. If Auto horn is enabled then the horn will sound for 4 seconds. If Auto advance is enabled the next segment will begin counting if not Time On will need to be pressed.

NOTE: The Segment Timer has replaced the Interval Horn and can mimic it exactly.

STOP TIME: Is a time set for main time or aux time to automatically cease counting. It functionally acts the same as time running out on the clock. The Auto horn will sound if it is set to within the main time options and the horn options.

TENTH SECOND SHIFT TIMER: Automatically shifts from displaying minutes and seconds to seconds and tenths of seconds during the last minute of count down time. (May be disabled if desired)

TIME OUT TIMER: Programmable for different time out lengths and with optional warning horn and an option to display the Time Out time remaining on the scoreboard. (Five different time out timers are available.)

Appendix (Profile Chart)

ProfileSport	-		
ProfileSport	-		
ProfileSport	-		
ProfileSport	-		
ProfileSport	- - -		

Appendix (Segment Timer)

Troubleshooting Chart

Problem Cause **Solution**

I have to set up the same segment	Not saved in the profile being used. Or using the wrong profile	Go to Profiles in the OPTIONS menu and load the profile that has the segment timer desired saved in it	
timer project every time I change sports	Not saved in any profile	Set up the timer as needed, then from the OPTIONS Profiles menu, save a profile. When you start the control, go to the options menu and load the desired profile to use.	
I cannot restart a segment No you cannot restart a segment.		You can change the segment's currently displayed time. As soon as it expires, the next segment in the list is loaded. (The original time remains unchanged.)	
The drills are fine, but we need time to get ready for the next drill.	Auto Advance is on	Go to Edit Segment in the Segment Timer Options and turn Auto Advance off for the desired segment.	
	No extra segments have been set up for time between drills.	Set up an extra segment, for time to get ready, for each drill.	
I cannot tell when all the segments have expired.	If one cannot display segment timer on the Scoreboard or the display is just a timer.	Set up an extra segment or two at the end of the segment list. Set these segments to a short amount of time. Each should have auto horn and auto advance Enabled. The horn sound will alert to the end of the segment timer project	
	IF one can display segment timer project on the scoreboard	The segment number is displayed in the Guests place on a standard scoreboard	
The horn keeps randomly sounding. (Hockey)	Interval horn is enabled	Go to Interval horn in the options menu, and turn off the Interval Enable option.	

If the problem persists please contact the Nevco Service Department. 800-851-4040

Appendix
(Segment Timer)

Segment Timer Project	Profile
9	

Segment #	Duration	Drill

Nevco x6xx Outdoor LED Scoreboard Installation Set (IBC 2012)



Retain this manual in your permanent file.

Rev. 06/25/18 135-0235

	Outdoor Install Instructions		135-0213.pdf
Model #	Installation Configuration	Installation Method	Drawing #
DGT-6 9605 PSD-6	1 Post	Pier	241-0367.pdf
1600 1608 1609 1610 1615 1620 1625 1630 1632 1635 1640 1650 3600 3602 3614 3634 3650 3655 3656 3658 3658 3658 3658 3650 5625 5632 5633 5634 5635 5634 7604 7614 7624 7680 9650 9652 9660 PSD-08 PSD-10 PSD-16 PSD-16 PSD-18 7605	2 Post	Pier Mechanical Spread Footing	241-0405.pdf 241-0413.pdf 241-0418.pdf 241-0409.pdf
7615 7625 7630 7631 7632 7685	3 Post	Pier Mechanical Spread Footing	241-0406.pdf 241-0414.pdf 241-0410.pdf

Rev. 06/25/18 135-0235

1604			
1606			
3615			
3617		5.	044.0407
3618		Pier Mechanical	241-0407.pdf
3619	2 Post w/ Laterals	Spread Footing	241-0415.pdf 241-0411.pdf
3621		Opicad rooting	241-0411.pdi
3682			
3685			
8601			
8602			
1603		Pier	241-0407.pdf
3604	3 Post w/ Laterals	Mechanical	241-0415.pdf
3616	3 Post W/ Laterais	Spread Footing	241-0411.pdf
3620			
3657		Pier	241-0408.pdf
3688		Mechanical	241-0416.pdf
7616	4 Post	Spread Footing	241-0412.pdf
7620			
7688			

Base Plate and Anchor Installation	DWG-0818.pdf
Spread Footing and Pier Installation	DWG-0819.pdf
Electrical and Signal Connections Outdoor	275-0193.pdf
Wireless MPCW-7 Receiver Installation	275-0681.pdf
MPCX Receiver Raintight Installation	275-0131.pdf
Add-On Power/Communication Installation	275-0693.pdf

Rev. 06/25/18 135-0235

Section 1: Installation Instructions

Installation consists of three steps (Unpacking the Equipment, Scoreboard mounting, and Electrical Connections). Be sure to read and understand all of the instructions before installing the equipment. Consult the "installer's troubleshooting guide" following this section for verification that each step has been completed correctly and that the scoreboard is working correctly.

Number of **Scoreboard Models Columns** 1 Post DGT-6, DGT-6-T14, 9605, PCD, PCD-1, PSD-6 2 Post 1600, 1608, 1609, 1610, 1615, 1620, 1625, 1630, 1632, 1635, 1640, 1650, 3600, 3602, 3614, 3625, 3634, 3650, 3655, 3656, 3658, 3680, 5625, 5632, 5633, 5634, 5635, 7604, 7614, 7624, 7680, 9660, 9652, PCD-08, PCD-08-1, PCD-10, PCD-10-1, PCD-16, PCD-16-1, PCD-18, PCD-18-1 2 Post with 1604, 1606, 3615, 3617, 3618, 3619, 3621, 3685, 5642, 5643, 7605, 7615, 7625, 7630, 7631, 7632, 7685 Laterals 1604, 1606, 3615, 3617, 3618, 3619, 3621, 3682 3685, 5642, 5643 3 Post 7605, 7615, 7625, 7630, 7631, 7632, 7685 3 Post with 1603, 3604, 3616, 3620, 3657, 3688, 7616, 7620 Laterals 4 Post 1603, 3604, 3616, 3620, 3688, 3657, 7616, 7620, 7688

Table 1: Column Requirements

1.1 Unpacking the Equipment

- Inspect the shipping container for damage. If any damage can be seen, contact the carrier immediately.
- Carefully remove all equipment from its packing carton. **Do not** pry against the scoreboard in any way.

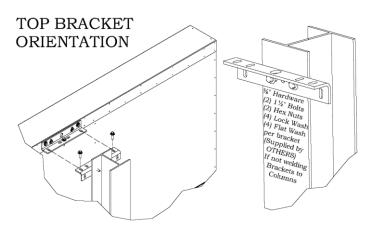
3.2 Assembling Sectional Scoreboard

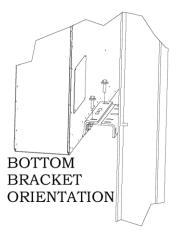
- For scoreboards with multiple sections, slide the pieces together aligning the pre-drilled holes. Fasten sections with the sheet metal screws provided. Make sure to install a screw in each hole of the splice flange (front and back). Note: The screws are shipped in the same box as the mounting brackets.
- Use clear silicon caulk and join vertical seams with screws provided. Always install bottom row of cabinets first and work upward.
- Locate and remove the access doors on the back of the scoreboard. Make sure all cables are connected as necessary at cabinet joints behind these access doors. Labels are located near connectors. Labels will be marked "1", "2", "3" or "4". While connecting cables from section to section, make sure to connect cables with matching labels.
- Check all electronic devices for loose connectors. See Installation Print for detail.

1.3 Scoreboard Mounting

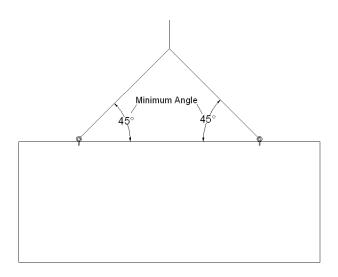
Note: For scoreboards that are shipped in more than one section, doors on the back of the scoreboard provide access to cables that must be connected and routed between sections during installation.

- Refer to installation prints for mounting method, mounting dimensions, power service location, and cable routings.
- A wide flanged steel beam system (columns) is recommended by Nevco on the installation print. Recommendations for column and pier dimensions can be found on this print for 90, 130 and 150 mph wind regions. This may not be adequate for some locales. Nevco strongly encourages you to check local codes before beginning the installation. You may wish to contact a local engineer, architect, or sign installer for assistance. Your Nevco Sales Representative may be able to assist you in finding professional installers who are familiar with this type of equipment.
- All scoreboards come with mounting brackets included in a box along with these instructions. Install
 one bracket on the back of the scoreboard using the provided 3/8" serrated flange bolts with integrated
 lock and flat washers in each location marked with the labels showing proper orientation of the bracket
 for both top/bottom brackets. Top/Bottom being relative to each individual section of the scoreboard
 cabinet.





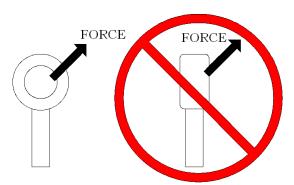
• Mount brackets by welding or bolting to columns using 3/8 bolts, nuts and washers (supplied by others). See detail above for bracket orientation.



bar is recommended)

- Install 3/8 hanger bolt and nut (no washer) into top brackets on <u>scoreboard</u>. This bolt will act as a catch pin allowing you to hang the scoreboard section on the columns like a picture frame.
- Install 3/8 eye bolts (supplied by others) in top of board at threaded locations for lifting. Note the detail to lower right for using eye bolts. The lifting force must be in the same plane as the ring of the eye bolt. (WARNING: Lifting cables cannot be less than 45 degrees from top of cabinet to cable while lifting.

See detail to right. The use of a spreader



- Carefully lift scoreboard and set into place utilizing the hanger bolts as shown in the detail above. They will go into large holes on front of brackets attached to column. These should be used for alignment only. (WARNING: Do not removed lifting device until all brackets have been bolted together)
- Bolt all brackets together using 3/8 bolts removed from bracket sets during previous step.

Always use good mechanical practices when mounting the scoreboard:

- The distance between the vertical mounting posts (center to center) must be maintained within a tolerance of ± 0.5 in. so that the mounting devices can be properly secured.
- Use only plated fastening devices to prevent rust or corrosion.

Section 2: Electrical & Signal Connections

3.2 Electrical Requirements

- Refer to installation prints for illustration of electrical connections.
- This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.
- Consult Table 2 on sheet 4 for Full Load power requirements for your scoreboard model. Provide for a 30% safety factor when sizing wire and selecting breakers to guard against tripping of the circuit breaker under low line conditions. According to Article 600.5 branch circuits should be limited to 20A.
- Be sure to include any lighted signs, and message centers when sizing the supply wiring necessary to support the circuit load.
- A disconnect switch should be lockable or within sight of the sign per NEC article 600.
- Two knockouts on the back of the scoreboard provide an entrance point for the power and the coax signal cable. You may make your own entry points if desired; take care not to drill into or damage any of the internal components of the scoreboard. A removable panel on the front of the scoreboard opposite the knockouts in the back allows access to an Electrical Enclosure box. Remove the cover of the Electrical Enclosure box to gain access to the power splice box where the scoreboard power connections are made. The coax signal cable terminates on a BNC connector on the bottom of the Electrical Enclosure box (see installation print for more details).
- If controlling the scoreboard wirelessly, do not remove knockout intended for wired coax signal.
- Electronic Team Names, on the large 3616 and 7616 require separate power to be run to each ETN (HOME and GUEST). Knockouts for incoming power are labeled and located directly behind each ETN.
- All other ETN model scoreboards do not require the installer to make any connections.

3.2 Rain Tight Enclosure Box

• For scoreboards that will be operated wirelessly using an MPCX handheld control, a rain tight enclosure box must be mounted on one of the posts that the scoreboard is mounted on or anywhere within 18' of the signal-in knockout on the back of the board. This rain tight box houses the wireless MPCX receiver and must be mounted on the same side of the post as the scoreboard (Clear line-of-sight, facing the operator's control) and must have power supplied to it (see installation print).

Note: Wireless installations that use a MPCW control do not use this rain-tight box. See MPCW wireless installation print for details.

Table 2a: Power Requirements (RED & AMBER LED's ONLY)

1 at	nc za. i owei neq	•		
	ΑΑ	mps @ 120 VAC		mps @ 240 VAC
Ma -1 -1 -4	W/ ETN	W/O ETN	W/ ETN	W/O ETN
Model #	Amps	AMPS	Amps	AMPS
1600	1.7	0.8	0.9	0.4
1603	6.1	4.9	3.0	2.5
1604	4.1	3.0	2.1	1.5
1606	4.1	3.0	2.1	1.5
1608	3.1	1.9	1.5	1.0
1609	2.8	1.6	1.4	0.8
1610	N/A	0.7	N/A	0.3
1615	2.3	1.3	1.2	0.7
1620	N/A	8.0	N/A	0.4
1625	N/A	1.1	N/A	0.5
1630	3.1	2.0	1.6	1.0
1632	2.2	1.2	1.1	0.6
1635	2.0	1.1	1.0	0.5
1640	2.9	1.8	1.5	0.9
1650	N/A	0.4	N/A	0.2
3600	3.6	2.4	1.8	1.2
3602	2.2	1.2	1.1	0.6
3604	4.9	3.2	2.5	1.6
3614	3.9	2.7	1.9	1.4
3615	3.9	2.7	1.9	1.4
3616	8.0	4.5	4.0	2.2
3617	4.2	3.0	2.1	1.5
3618	3.9	2.8	2.0	1.4
3619	4.2	3.0	2.1	1.5
3620	4.6	3.4	2.3	1.7
3621	4.1	2.9	2.0	1.4
3625	3.7	2.6	1.9	1.3
3634	4.0	2.8	2.0	1.4
3650	N/A	0.7	N/A	0.4
3655	2.7	1.7	1.3	0.9
		3.2	2.2	
3656	4.4			1.6
3657	5.3	5.3	2.7	2.7
3658	2.6	1.6	1.3	0.8
3680-EC	6.3	N/A	3.2	N/A
3682-EC	6.4	N/A	3.2	N/A
3685-EC	6.5	N/A	3.2	N/A
3688-EC	6.9	N/A	3.5	N/A
5625	N/A	2.8	N/A	1.4
5632	N/A	2.5	N/A	1.3
5633	N/A	1.3	N/A	0.6
5634	3.7	2.5	1.8	1.3
5635	4.9	3.8	2.5	1.9
5642	1.3	N/A	0.7	N/A
5643	2.7	N/A	1.4	N/A
7604	4.5	3.3	2.2	1.6
7605	5.3	4.2	2.7	2.1
7614	4.3	3.1	2.1	1.6
7615	5.1	4.0	2.6	2.0
7616	8.6	5.0	4.3	2.5
7620	5.2	4.0	2.6	2.0

4.1	2.9	2.0	1.5
5.0	3.8	2.5	1.9
4.4	3.2	2.2	1.6
4.5	3.4	2.3	1.7
4.7	3.5	2.4	1.8
7.0	N/A	3.5	N/A
7.0	N/A	3.5	N/A
7.0	N/A	3.5	N/A
2.7	1.5	1.4	0.8
2.7	1.6	1.4	0.8
N/A	0.5	N/A	0.3
N/A	0.5	N/A	0.3
N/A	0.4	N/A	0.2
N/A	0.7	N/A	0.4
N/A	2.8	N/A	1.4
N/A	1.5	N/A	0.8
N/A	0.6	N/A	0.3
N/A	0.7	N/A	0.3
N/A	0.3	N/A	0.1
	5.0 4.4 4.5 4.7 7.0 7.0 7.0 2.7 2.7 N/A N/A N/A N/A N/A	5.0 3.8 4.4 3.2 4.5 3.4 4.7 3.5 7.0 N/A 7.0 N/A 7.0 N/A 2.7 1.5 2.7 1.6 N/A 0.5 N/A 0.5 N/A 0.4 N/A 0.7 N/A 0.7 N/A 0.7 N/A 0.7 N/A 0.7 N/A 0.6 N/A 0.6 N/A 0.7	5.0 3.8 2.5 4.4 3.2 2.2 4.5 3.4 2.3 4.7 3.5 2.4 7.0 N/A 3.5 7.0 N/A 3.5 7.0 N/A 3.5 2.7 1.5 1.4 2.7 1.6 1.4 N/A 0.5 N/A N/A 0.5 N/A N/A 0.4 N/A N/A 0.7 N/A N/A 1.5 N/A N/A 0.6 N/A N/A 0.7 N/A N/A 0.7 N/A N/A 0.7 N/A

Table 2b: Power Requirements (WHITE LED's ONLY)

	A	Amps @ 120 VAC	А	mps @ 240 VAC
	W/ ETN	W/O ETN	W/ ETN	W/O ETN
Model #	Amps	AMPS	Amps	AMPS
1600	2.2	1.3	1.1	0.7
1603	9.5	8.5	4.8	4.2
1604	6.2	5.1	3.1	2.6
1606	6.2	5.1	3.1	2.6
1608	4.4	3.3	2.2	1.6
1609	3.9	2.8	1.9	1.4
1610	N/A	1.2	N/A	0.6
1615	3.1	2.2	1.6	1.1
1620	N/A	1.5	N/A	0.7
1625	N/A	1.7	N/A	0.9
1630	4.5	3.4	2.2	1.7
1632	3.0	2.1	1.5	1.0
1635	2.7	1.8	1.4	0.9
1640	4.1	3.0	2.0	1.5
1650	N/A	0.7	N/A	0.4
3600	5.1	4.1	2.6	2.0
3602	3.0	2.1	1.5	1.0
3604	7.0	5.4	3.5	2.7
3614	5.7	4.6	2.8	2.3
3615	5.7	4.6	2.8	2.3
3616	10.9	7.7	5.4	3.8
3617	6.2	5.1	3.1	2.5
3618	5.7	4.7	2.9	2.3
3619	6.2	5.1	3.1	2.5
3620	6.9	5.8	3.5	2.9
3621	6.0	4.9	3.0	2.5
3625	5.4	4.4	2.7	2.2
3634	5.9	4.8	2.9	2.4

3650	N/A	1.2	N/A	0.6
3655	3.8	2.9	1.9	1.4
3656	6.5	5.4	3.2	2.7
3657	8.1	7.1	4.1	3.5
3658	3.6	2.7	1.8	1.3
3680-EC	8.3	N/A	4.2	N/A
3682-EC	8.4	N/A	4.2	N/A
3685-EC	8.6	N/A	4.3	N/A
3688-EC	9.3	N/A	4.7	N/A
5625	N/A	4.7	N/A	2.4
5632	N/A	4.4	N/A	2.2
5633	N/A	2.2	N/A	1.1
5634	5.3	4.2	2.7	2.1
5635	7.5	6.4	3.7	3.2
5642	2.1	N/A	1.1	N/A
5643	4.3	N/A	2.2	N/A
7604	6.7	5.6	3.3	2.8
7605	8.2	7.1	4.1	3.6
7614	6.4	5.3	3.2	2.7
7615	7.8	6.8	3.9	3.4
7616	11.8	8.6	5.9	4.3
7620	7.9	6.8	3.9	3.4
7624	6.0	5.0	3.0	2.5
7625	7.5	6.5	3.8	3.2
7630	6.5	5.4	3.2	2.7
7631	6.8	5.7	3.4	2.9
7632	7.1	6.0	3.5	3.0
7680-EC	9.5	N/A	4.7	N/A
7685-EC	9.5	N/A	4.7	N/A
7688-EC	9.5	N/A	4.7	N/A
8600 TOP	3.7	2.6	1.8	1.3
8601/2	3.7	2.6	1.8	1.3
9605	N/A	0.9	N/A	0.4
9620	N/A	8.0	N/A	0.4
9651	N/A	0.7	N/A	0.4
9652	N/A	1.3	N/A	0.6
9650	N/A	4.8	N/A	2.4
9660	N/A	2.7	N/A	1.3
DGT-6/PSD	N/A	1.0	N/A	0.5
DGT-6-T14	N/A	1.1	N/A	0.6
PCD, PCD-1, PCD-8, PCD-8-1, PCD-10, PCD-10-1, PCD-16, PCD-16-1, PCD-18, PCD-18-1	N/A	0.6	N/A	0.3

2.3 Signal Connections

2-Wire Coax Cable (RG58/U)

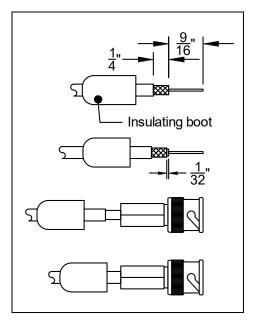
- All 2-WIRE cable ordered from Nevco is direct burial type. It has a minimum dielectric strength of 300V, and conforms to UL standard 1365.
- If the wiring is buried above the freeze line, bury the cable with sand to provide drainage and prevent damage from shifting soil.

Installing Cable Connectors

• The 2-WIRE cable that comes with your scoreboard does not have connectors attached. Refer to the detail and instructions below to install these connectors.

Instructions for installing connectors on each end of the cable:

- 1. Slide the insulating boot onto the cable and trim the cable as shown.
- 2. Twist the outer braid in a **clockwise** direction so that at least 1/32 in. of the inner dielectric is bared and the braid is left flat. Be sure no strands of the outer braid are touching the center conductor.
- 3. Insert the center conductor into the back of the connector, feeding it into the guide hole.
- 4. Push the cable as far as possible into the connector.
- 5. Screw the connector onto the cable in a clockwise direction until the connector stops turning.
- 6. Slip the insulating boot over the back of the connector.

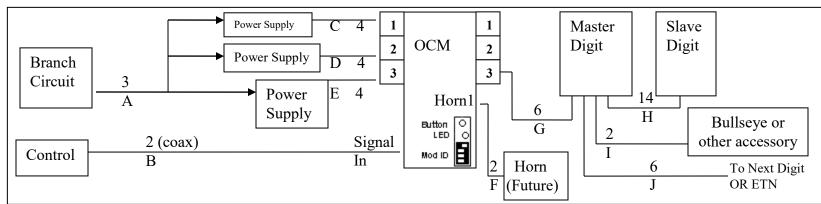


"Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at this own expense."

APPENDIX A: (TROUBLESHOOTING GUIDES)

WIRED TROUBLE SHOOTING GUIDE

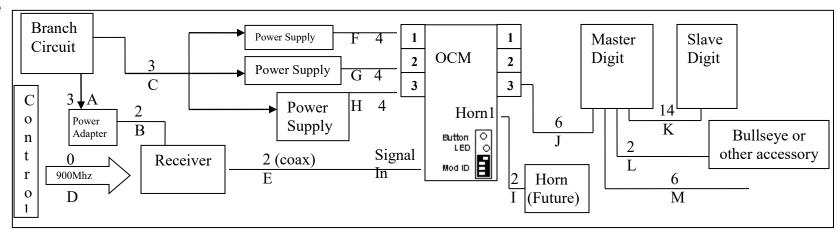
The figure to the right labels the connections made by the installer from A &B as well as other useful internal connections C - J. The chart below lists the problem that can be identified should each connection be faulty. Check the control and service manual for more detailed information.



Situation	Symptom	Connection	Solution
			Check branch circuit breaker, connections, and disconnect switch external to scoreboard
	The fans on ALL the power supplies are not		Check connections in disconnect box (power hookup)
	running	A	Check Power Switch on disconnect box inside scoreboard
			Replace Power supply
The Scoreboard	OCM LED ON solid	В	Check Coax connections. Plug control directly into OCM to eliminate buried coax cable. If that works, the cable run or terminations are bad. Try the scoreboard test in the options menu, see control users manual on testing.
has no digits illuminated	Gen EED en sona		Holding the Button on the OCM down for 4 seconds will display a test pattern on the scoreboard digits further confirming that the signal connection is bad
		None	Incompatible model code, check control model setting in options menu
	OCM LED is flashing rapidly	C or D	The power cable plugged into port 3 powers the OCM, but connections to power supplies on plug 1 & 2 power the digits/ETN's powered by 1 & 2 outputs
		G	Check connections on OCM outputs 1, 2, & 3 as well as first master digits
	OCM LED is completely OFF	Е	OCM board has no power. Check connection E, power supply feeding E, and connections to the power supply E.
Some digits or	Only one digit	Н	Check 14-pin connection on Driver card and 2-pin on segments
indicators not illuminated	Horn, colon, decimal, possession indicator, etc.	I	Check 2-pin connection on Driver card and on accessory
	More than one Digit, starts at one point in cabling	J	Check 6-pin connection from working driver card to next digit driver card
ETN or EC's not illuminated	Display incorrect Home/Guest data	R1/R2 on ELB	Verify that the home ribbon cable connects to R1 and Guest to R2 on the ELB card
or not correct	Electronic caption data not in correct location	Y jumper on ELB	Verify ELB 'Y' jumper and/or R1(R2) connections, see service manual
	ETN or EC's not lit at all	J	Check 6-pin connections going to ETN or EC, likely between on-site assembled sections

Wireless (MPCX) Trouble shooting Guide

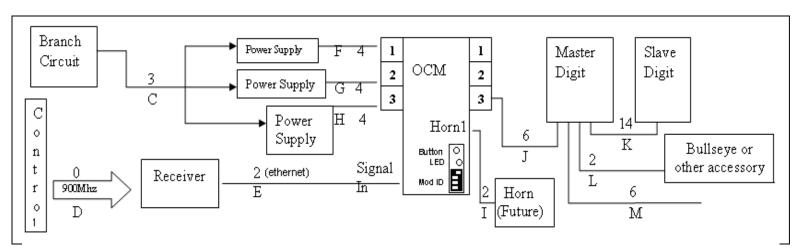
The figure to the right labels the connections potentially made by the installer (A – E) and other internal connections (F – M) useful to troubleshooting. The chart below lists the problem that can be identified should each connection be faulty. Check the control and service manual for more detailed information.



Situation	Symptom	Connection	Solution
			Check branch circuit breaker, connections, and disconnect switch external to scoreboard
	The fans on the ALL power supplies are not running		Check connections in disconnect box (power hookup)
	The fails on the ALL power supplies are not running	С	Check Power Switch on disconnect box inside scoreboard
			Replace Power supply
		A	Check branch circuit breaker, connections, duplex receptacle, and disconnect switch external to scoreboard
	Receiver has No LEDs illuminated during first 5 seconds after		If the duplex receptacle has power, but the adapter LED is OFF, replace adapter
The Scoreboard	power up	В	Ensure DC plug is fully seated in receiver DC jack and making good connection
has no digits			Replace Receiver
illuminated	Receiver LED Not ON solid		Follow control troubleshooting procedures, wrong wireless group, etc.
		D	Receiver should be in clear line of sight from control.
		_	Check Coax connections. Plug control directly into OCM to eliminate buried coax cable. If that works, the cable run or terminations are bad. Try the 301 Model code, see control users manual on testing.
	OCM LED ON solid	E	Holding the Button on the OCM down for 4 seconds will display a test pattern on the scoreboard digits further confirming that the signal connection is bad
	OCM LED is flashing rapidly	F or G	The power cable plugged into port 3 powers the OCM, but connections to power supplies on plug 1 & 2 power the digits/ETN's powered by 1 & 2 outputs
	Con 222 is missing repress	G	Check connections on OCM outputs 1, 2, & 3 as well as first master digits
	OCM LED is completely OFF	Н	OCM board has no power. Check connection H, power supply feeding H, and connections to the power supply H.
Some digits not illuminated, or	Only one digit	K	Check 14-pin connection on Driver card and 2-pin on segments
non-working	Horn, colon, decimal, possession indicator, etc.	L	Check 2-pin connection on Driver card and on accessory
accessory	More than one Digit, starts at one point in cabling	M	Check 6-pin connection from working driver card to next digit driver card

Wireless (MPCW) Troubleshooting Guide

The figure to the right labels the connections potentially made by the installer (C-E) and other internal connections (F-M) useful to troubleshooting. The chart below lists the problem that can be identified should each connection be faulty. Check the control and service manual for more detailed information.



Situation	Symptom	Connection	Solution
			Check branch circuit breaker, connections, and disconnect switch external to scoreboard
	TI C d AII		Check connections in disconnect box (power hookup)
	The fans on the ALL power supplies are not running	С	Check Power Switch on disconnect box inside scoreboard
			Replace Power supply
The Scoreboard has no digits illuminated	The Receiver ID number does not display on Scoreboard after power up swirl	Е	Check Receiver to OCM cable E connection
	OCM LED ON solid		Follow control troubleshooting procedures, wrong wireless group, etc.
		D	Receiver should be in clear line of sight from control.
	OCM LED is flashing rapidly	F or G	The power cable plugged into port 3 powers the OCM, but connections to power supplies on plug 1 & 2 power the digits/ETN's powered by 1 & 2 outputs
		G	Check connections on OCM outputs 1, 2, & 3 as well as first master digits
	OCM LED is completely OFF	Н	OCM board has no power. Check connection H, power supply feeding H, and connections to the power supply H.
Some digits not illuminated, or	Only one digit	K	Check 14-pin connection on Driver card and 2-pin on segments
non-working	Horn, colon, decimal, possession indicator, etc.	L	Check 2-pin connection on Driver card and on accessory
accessory	More than one Digit, starts at one point in cabling	M	Check 6-pin connection from working driver card to next digit driver card



NEVCO GUARANTEE

NEVCO GUARANTEE

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USA TOLL-FREE 800-851-4040 CANADA TOLL-FREE 800-461-8550 International Telephone: +1-618-664-0360

> Website: www.nevco.com Email: info@nevco.com

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This class A digital apparatus meets all requirements of the Canadian Interference- Causing Equipment Regulations.

Cet appareil numerique de la classe A repecte toutes les exigences du Reglement sure le materiel brouller du Canada.

	Dimensions and Steel Requirements							
Model Number	Dim "A"	Dim "B"	Dim "C"	Tube Length	Cabinet Weight			
9605B	72"	36"	5' 6"	16' 6"	60 lbs			
PCD / PCD-1	60"	36"	5' 6"	16'6"	50 lbs			
DGT-6B	48"	48"	5'	17'	50 lbs			
PSD-6B	48"	48"	5'	17'	50 lbs			
9651	60"	48"	5'6"	17'	60 lbs			
9620	48"	3'6"	5'	16'6"	45 1hs			

Notes:

- 1. Minimum steel tubing is 3½" x 3½" x ¼" (ASTM A-500) at length shown. Tubing length shown will result in approximately 96" clearance to ground level. Trim tubing to achieve clearance if necessary.
- 2. Pier depth is figured with 96" clearance from bottom of cabinet to ground level.
- 3. Pier depth figured using Exposure "C"
- 4. Cabinets have extra knockouts on back for power and signal to accommodate lateral or column installation

Coarse aggregate aggregate to the concrete The concrete The concrete The concrete to the concr

4

96 in

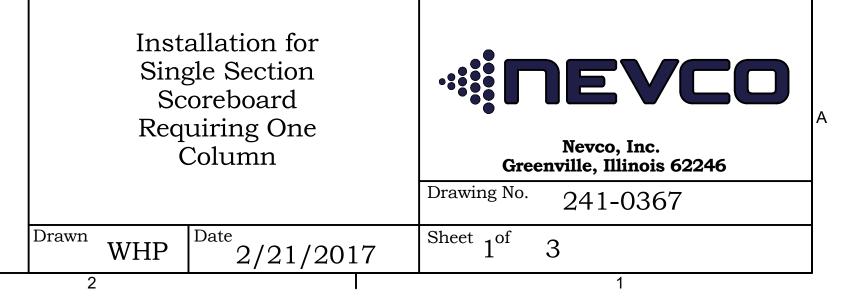
Important. Read before installation*

This is not an engineered drawing. It is intended for representation purposes only. The dimensions called out on this drawing are intended to be used as a guide only, and are not intended to be suitable for all conditions. Information specific to the scoreboard being used, such as assembly instructions and electrical connections, may be found in the installation manual for that scoreboard.

Nevco recommends that you consult a professional engineer or architect familiar with the area before attempting installation. They can verify that the brackets, screws, and other hardware items supplied by you or Nevco are adequate for your local soil conditions, wind loads and other conditions. If procedures are used that are not covered in this drawing, careful analysis of the installation is urged.

Front View (9605 shown)

Dim "A"



Rev

Dim "B"

Steel tube (see note 1)

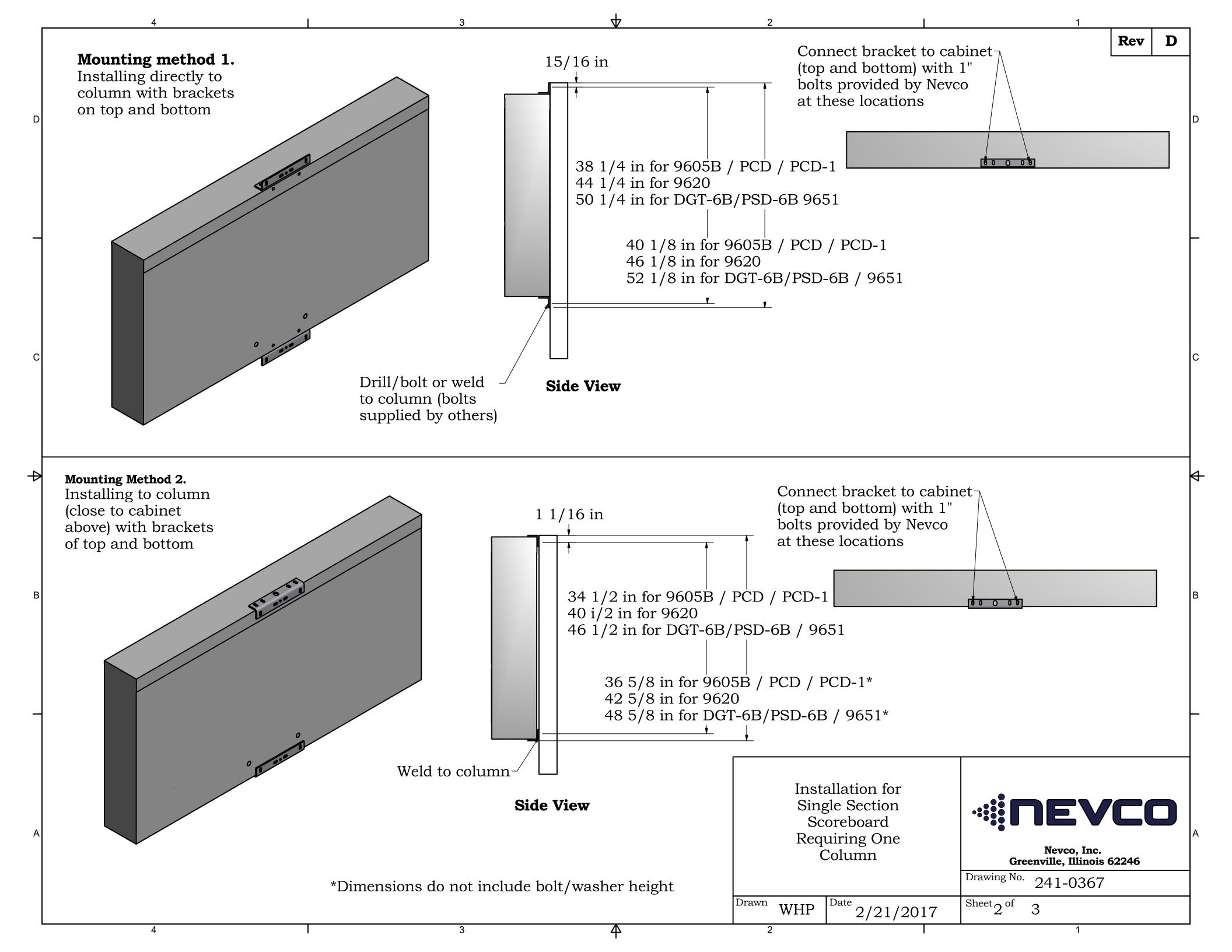
Check electrical prints

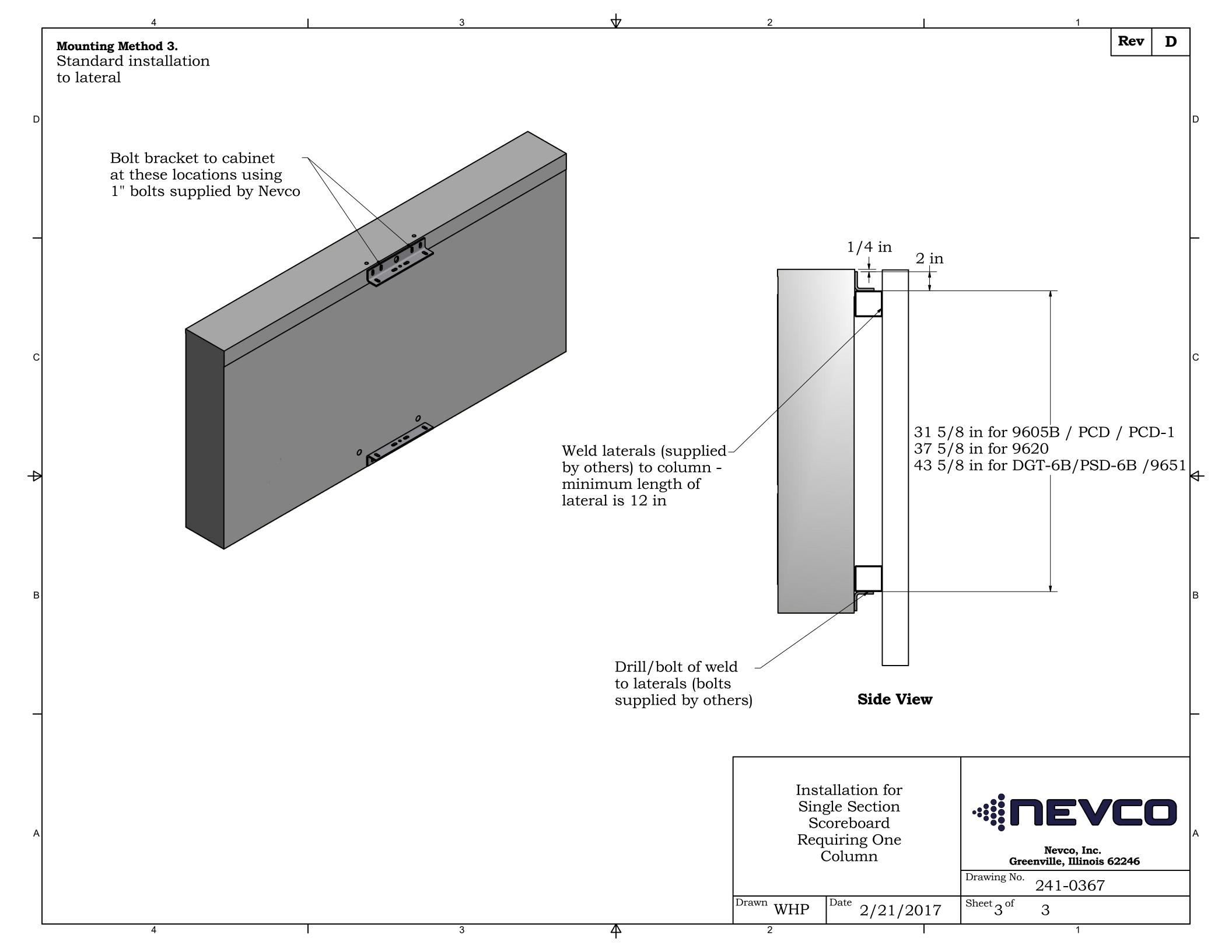
to determine conduit

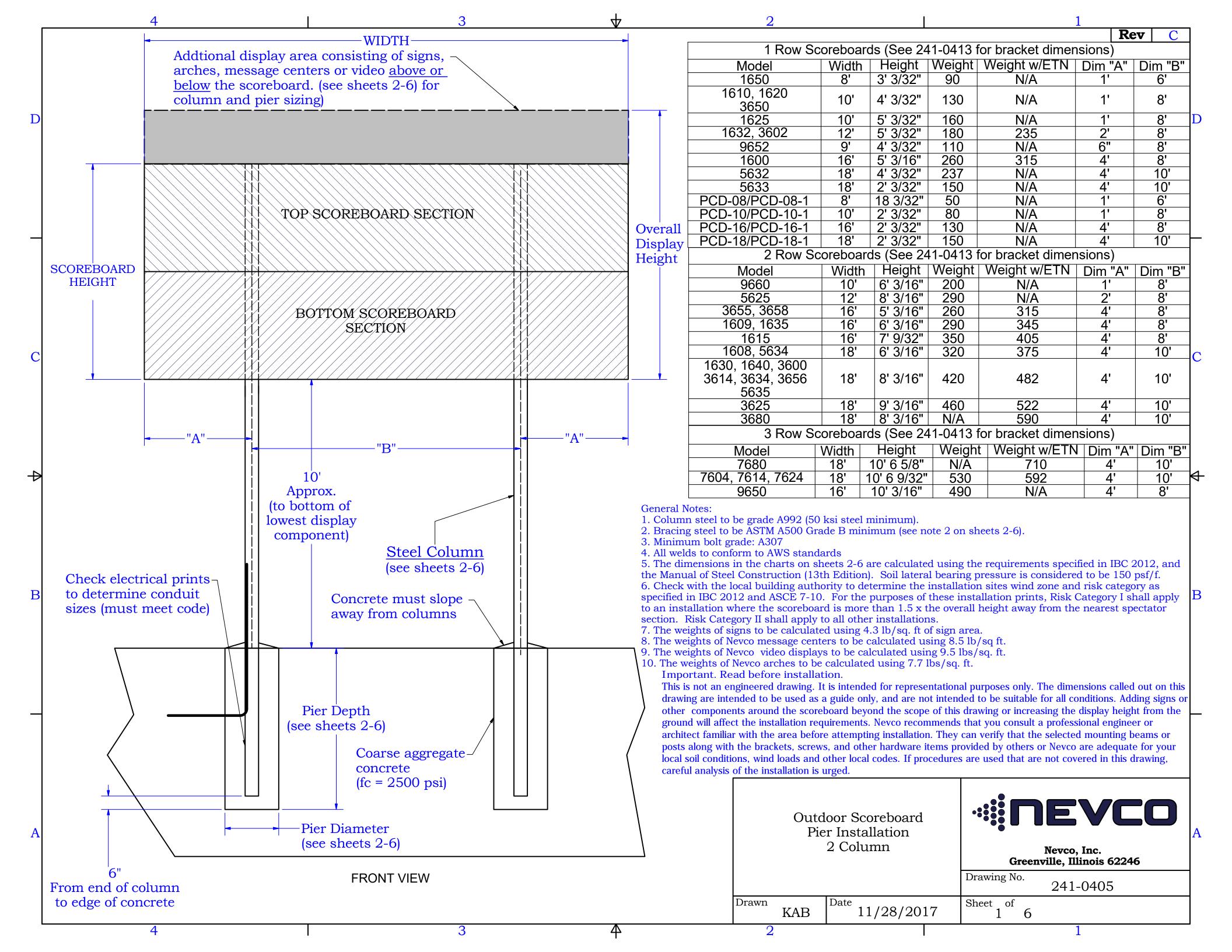
requirements (must

meet codes)

 \mathbf{D}







EXPOSURE C (See Note 3)

105 MPH WIND ZONES

EXPOSURE B (See Note 4)

	Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
6'	W8x21	W10x17	2'	8.	23'			
8'	W8x24	W8x21	2'	g	26'			
9'	W12x26	W8x21	2'	9'6"	276"			
10'	W12x30	W10x22	2'	10'	29'			
10'6"	W10x33	W10x22	2'	10'	296			
12'	W10x33	W10x26	2'	10'6"	316"			
14'	W10x39	W12x26	2'	11'6"	346"			
16'	W10x45	W12x30	2 (3)	12' (10'6")	37 (356")			
18'	W10x49	W14x30	2 (3)	13' (1 1')	40' (38')			
20'	W10x60	W18x35	2 (3)	14'6" (11'6")	43'6" (40'6")			
22'	W12x65	W16x40	2 (3)	15'6" (12')	46'6" (43')			
25'	W12x72	W21x44	2 (3)	17'6" (13'6")	51'6" (47'6")			
30'	W12x96	W18x55	2 (3)	20' (15'6")	59' (54'6")			
35'	W14x109	W21x62	2 (3)	23' (18')	67' (62')			
40'	W14x132	W21x68	2 (3)	26' (20')	75' (69')			

18 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
6'	W8x18	W12x14	2'	7	22'	
8'	W8x21	W10x17	2'	7'6"	246	
9'	W8x24	W8x18	2'	8.	26'	
10'	W8x24	W8x18	2'	8'6"	276"	
10'6 "	W8x24	W8x18	2'	8'6"	28'	
12'	W8x28	W8x21	2'	g	30'	
14'	W10x33	W10x22	2'	10'	33'	
16'	W8x35	W10x26	2 (3)	10'6" (9')	356" (34')	
18'	W14x43	W12x26	2 (3)	11' (9'6")	38' (36'6")	
20'	W8x48	W12x30	2 (3)	12' (10')	41' (38')	
22'	W12x53	W14x30	2 (3)	12'6" (10'6")	43' (41'6")	
25'	W10x60	W18x35	2 (3)	14' (11'6")	48' (45'6")	
30'	W10x77	W14x43	2'(3')	16'6" (13')	556" (52')	
35'	W12x96	W18x50	2'(3')	18'6" (14'6")	62'6" (58'6")	
40'	W14x109	W21x55	2'(3')	21' (16'6")	70' (65'6")	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
5'	W8x18	W10x15	2'	7	21'		
6'	W8x21	W10x17	2'	7'6"	226"		
7'	W8x21	W8x18	2'	8	24'		
8'	W8x24	W8x18	2'	8'6"	25'6"		
10"	W8x28	W8x21	2'	9'6"	286"		
12'	W10x33	W10x22	2'	10'	31'		
14'	W10x39	W10x26	2'	11'	34'		
16'	W14x43	W12x26	2 (3)	11'6" (10')	36'6" (35')		

16 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
5'	W8x15	W8x13	2'	6	20'	
6'	W8x18	W8x13	2'	6'6"	21'6"	
7'	W8x18	W10x15	2'	7	23'	
8'	W8x21	W8x15	2'	7'6"	246"	
10'	W8x24	W8x18	2'	8.	27'	
12'	W8x28	W8x21	2'	g	30'	
14'	W10x33	W10x22	2'	9'6"	326"	
16'	W8x35	W10x22	2'(3')	10' (8'6")	35' (33'6")	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
5'	W10x17	W8x13	2'	6'6"	206"		
8'	W8x21	W10x17	2'	8.	25'		
10'	W8x24	W8x18	2'	8'6"	276"		
12'	W8x28	W8x21	2'(3')	9'(8')	30' (29')		
15'	W8x35	W14x22	2'(3')	10'(9')	34' (33')		

12 FEET WIDE
INSTALLATIONS

	Column and Foundation Requirements (Based on ASCE 7-10)							
Display He ight	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
5'	W10x15	W8x13	2'	5 '6"	19'6"			
8'	W8x18	W12x14	2'	7	24'			
10'	W8x21	W8x15	2'	7'6"	266"			
12'	W8x24	W8x18	2 (3)	8' (7')	29' (28')			
15'	W10x33	W8x21	2 (3)	9' (7'6")	33' (31'6")			

	Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
4'	W12x14	W8x13	2'	6	19'			
5'	W8x15	W8x13	2'	6'6"	206"			
6'	W8x18	W8x13	2'	6'6"	21'6"			
8,	W8x21	W8x15	2'	7'6"	246"			
10'	W8x24	W8x18	2'	8	27'			
12'	W8x28	W8x18	2 (3)	8'6" (7'6")	29'6" (28'6")			
15'	W10x33	W10x22	2'(3')	9'6" (8'6")	33'6" (32'6")			

10 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column							
4'	W8x13	W8x13	2'	5	18'		
5'	W8x13	W8x13	2'	5 '6"	19'6"		
6'	W8x15	W8x13	2'	6	21'		
8'	W8x18	W8x13	2'	6'6"	23'6"		
10'	W8x21	W10x15	2'	7	26'		
12'	W8x24	W10x17	2 (3)	7'6" (6'6")	28'6" (27'6")		
15'	W8x28	W8x18	2 (3)	8'6" (7'6")	32'6" (31'6")		

Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Length					
4' W8x13 W8x13 2' 5'6" 18'6"					

9 F	EET	WIDE
INST	`ALL	ATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Length					
4'	4' W8x13 W8x13 2' 5'6" 18'6"					

Column and Foundation Requirements (Based on ASCE 7-10)							
Display He ight	Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column						
3'	W8x13	W8x13	2'	5	17'		
6'	W10x17	W8x13	2'	6'6"	216"		
8'	W8x18	W12x14	2'	7	24'		
10'	W8x21	W10x17	2'	7'6"	266"		
12'	W8x24	W8x18	2'	8	29'		
15'	W10x33	W8x21	2 (3)	9' (7'6")	33' (31'6")		
	<u> </u>	_	<u> </u>	<u> </u>	·		

8 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)					
Display He ight	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
3'	W8x13	W8x13	2'	4'6"	16'6"
6'	W8x13	W8x13	2'	5 '6"	206"
8'	W10x17	W8x13	2'	6	23'
10"	W8x18	W8x13	2'	6'6"	256
12'	W8x21	W10x15	2'	7	28'
15'	W8x24	W10x17	2 (3)	8' (6'6")	32' (30'6")

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.
- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

 4. Wind loading figured at **Exposure** "B" **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2 Column



Rev

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0405

Date 11/28/2017 Sheet 2 of 6 Drawn KAB

120 MPH WIND ZONES

18 FEET WIDE **INSTALLATIONS**

16 FEET WIDE

INSTALLATIONS

12 FEET WIDE **INSTALLATIONS**

10 FEET WIDE **INSTALLATIONS**

9 FEET WIDE

INSTALLATIONS

8 FEET WIDE

INSTALLATIONS

EXPOSURE B (See Note 4)

Rev

	EXPOSURE C (See Note 3)							
	Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
6'	W10x22	W8x18	2'	g	24'			
8'	W8x28	W10x22	2' (3')	10 (8'6")	27 (256")			
9'	W12x30	W10x22	2' (3')	10'6" (9')	286" (27)			
10"	W10x33	W10x26	2' (3')	11' (9'6")	30 (286")			
10'6"	W10x33	W10x26	2' (3')	11' (9'6")	306" (29)			
12'	W10x39	W12x26	2' (3')	11'6" (10')	326" (31')			
14	W10x45	W12x30	2' (3')	12'6" (10'6")	35 6" (33 6")			
16'	W10x49	W14x34	2' (3')	14 (116")	39 (366")			
18'	W10x60	W16x36	2' (3')	15' (12')	42' (39')			
20"	W12x65	W16x40	2' (3')	17' (13')	46' (42')			
22	W12x72	W21x44	2' (3')	18'6" (14'6")	49'6" (45'6")			
25	W18x86	W18x50	2' (3')	20'6" (16')	546" (50')			
30	W12x96	W21x62	3' (4')	186" (156")	57'6" (54'6")			
35	W14x132	W24x68	3' (4')	21' (18')	65' (62')			
40'	W14x159	W24x84	3' (4')	24' (20')	73' (69')			

Column Length	
24'	
27 (2567)	
28'6" (27')	
30 (286°)	
306" (29)	
326" (31')	
356" (336")	
39 (366")	
42' (39')	
46' (42')	
49'6" (45'6")	
5 46" (50')	
57'6" (54'6")	
65' (62')	

	Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
6'	W8x21	W10x17	2'	76	226	
8'	W8x24	W8x18	2' (3')	8'6" (7'6")	25'6" (24'6")	
9'	W8x24	W8x21	2' (3')	9' (7'6")	27 (256")	
10'	W8x28	W8x21	2' (3')	96" (8)	286" (27')	
10'6"	W8x28	W10x22	2' (3')	9'6" (8'6")	29' (28')	
12'	W10x33	W10x22	2' (3')	10' (8'6")	31' (29'6")	
14	W10x39	W10x26	2' (3')	11' (9'6")	34 (326")	
16'	W14x43	W12x26	2' (3')	11'6" (10')	366" (35')	
18'	W8x48	W12x30	2' (3')	12 (106")	39 (376")	
20'	W12x53	W14x34	2' (3')	13'6" (11')	42'6" (40')	
22'	W10x60	W16x36	2' (3')	146" (12')	456" (43')	
25	W12x65	W16x40	2' (3')	166" (13')	50'6" (47')	
30'	W12x87	W18x50	3' (4')	15 (1267)	5 4 (51'6")	
35	W12x106	W21x55	3' (4')	17 (146")	61' (58'6")	
40'	W14x120	W21x68	3' (4')	196" (166")	68'6" (65'6")	

Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
5'	W8x21	W10x17	2'	8	22'
6'	W8x21	W8x18	2'	8'6"	23'6"
7'	W8x24	W8x21	2'	g	25'
8'	W12x26	W8x21	2' (3')	96" (8)	266" (25')
10'	W10x33	W14x22	2' (3')	10'6" (9')	296" (28')
12'	W10x39	W12x26	2' (3')	11' (9'6")	32 (3067)
14	W14x43	W12x30	2' (3')	12 (1067)	35 (336")
16	W10x49	W14x30	2' (3')	13' (11')	38' (36')

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
5'	W8x18	W8x13	2'	7	21'			
6'	W8x18	W10x15	2'	7'6"	226			
7'	W8x21	W10x17	2'	8	24'			
8'	W10x22	W8x18	2' (3')	8' (7')	25' (24')			
10'	W12x26	W8x21	2' (3')	9' (8')	28' (27')			
12'	W10x33	W10x22	2' (3')	9'6" (8'6")	30'6" (29'6")			
14	W10x33	W10x26	2' (3')	10'6" (9')	336" (32)			
16'	W10x39	W12x26	2' (3')	11' (9'6")	36 (346")			

Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height	eight Unbraced Column Braced Column* Pier Dia. Pier Depth Column Len								
5'	W8x18	W10x15	2'	7'6"	216"				
8'	W8x24	W8x18	2'	8'6"	25'6"				
10'	W8x28	W8x21	2'	9'6"	286"				
12'	W10x33	W10x22	2' (3')	10 (86")	31' (296")				
15	W10x39	W12x26	2'(3')	11'6" (9'6")	35'6" (33'6")				

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
5'	W10x17	W8x13	2'	6'6"	20'6"			
8'	W8x21	W8x15	2'	7'6"	246"			
10"	W8x24	W8x18	2'	8	27'			
12	W8x28	W8x21	2' (3')	9 (76")	30 (2867)			
15	W10x33	W10x22	2'(3')	10' (8'6")	34 (326")			

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Leng								
4'	W8x15	W8x13	2'	6'6"	19'6"			
5'	W8x18	W12x14	2'	7	21'			
6'	W8x18	W8x15	2'	76	226"			
8'	W10x22	W8x18	2'	8	25'			
10"	W8x24	W8x18	2'	g	28'			
12	W10x33	W10x22	2'	96	30'6"			
15	W8x35	W10x26	2'	10'6"	34'6"			

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Co							
4'	W8x13	W8x13	2'	5 '6"	18'6"			
5'	W10x15	W8x13	2'	6	20'			
6'	W8x18	W8x13	2'	6'6"	21'6"			
8'	W8x18	W10x15	2'	7	24'			
10"	W10x22	W10x17	2'	7'6"	26'6"			
12'	W8x24	W8x18	2'	86	296"			
15	W10x33	W8x21	2'	g	33'			

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Length							
4' W8x15 W8x13 2' 6'6" 19'6"							

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth							
4'	W8x13	W8x13	2'	5'6"				

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column L								
3'	W8x13	W8x13	2'	5 6	17'6"			
6'	W8x18	W12x14	2'	7	22'			
8'	W8x21	W10x17	2'	76	24'6"			
10'	W8x24	W8x18	2'	8'6"	276"			
12'	W8x28	W8x21	2'	g	30'			
15	W10x33	W10x22	2'	10'	34'			

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
3'	W8x13	W8x13	2'	5	17'			
6'	W8x15	W8x13	2'	6	21'			
8'	W8x18	W8x13	2'	6'6"	23'6"			
10'	W8x21	W10x15	2'	7	26'			
12'	W8x24	W10x17	2'	8	29'			
15	W8x28	W8x18	2'	8'6"	326"			

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.

2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.

3. Wind loading figured at **Exposure "C" - Open terrain** with scattered obstructions having heights generally less

than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

4. Wind loading figured at **Exposure** "B" - **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2 Column

56

Column Length

186"

Nevco, Inc. Greenville, Illinois 62246

241-0405

Drawing No.

Drawn KAB Date 11/28/2017 Sheet 3 of

EXPOSURE C (See Note 3)

	Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
6'	W8x24	W8x21	2'	9'6"	246"				
8'	W12x30	W10x22	2' (3')	10'6" (9')	27'6" (26')				
9'	W10x33	W10x26	2' (3')	11' (9'6")	29' (276")				
10'	W14x38	W12x26	2' (3')	11'6" (10')	30'6" (29')				
10'6"	W10x39	W12x26	2' (3')	11'6" (10')	31' (296")				
12'	W12x40	W12x30	2' (3')	12'6" (10'6")	33'6" (31'6")				
14	W10x49	W14x34	2' (3')	14" (116")	37 (346")				
16'	W12x53	W16x36	2' (3')	156" (12')	40'6" (37')				
18'	W14x61	W16x40	2' (3')	17' (13')	44' (40')				
20"	W12x72	W21x44	2' (3')	19' (146")	48' (43'6")				
22	W12x79	W18x50	2' (3')	206" (16")	51'6" (47')				
25	W12x96	W21x55	2' (3')	22'6" (17'6")	56'6" (51'6")				
30	W14x109	W21x68	3' (4')	20'6" (17')	59'6" (56')				
35	W14x145	W24x76	3' (4')	23'6" (196")	67'6" (63'6")				
40'	W14x176	W24x94	3' (4')	26'6" (22')	75'6" (71')				

18 FEET WIDE INSTALLATIONS

25

30

35

W12x72

W12x96

W14x109

W14x132

	Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
6'	W8x21	W8x 18	2'	8.	23'				
8'	W8x24	W8x21	2' (3')	9' (8')	26' (25')				
9'	W12x26	W8x21	2' (3')	96"(8)	27'6" (26')				
10"	W12x30	W10x22	2' (3')	10' (8'6")	29 (276")				
10'6"	W10x33	W10x22	2' (3')	10' (9')	29'6" (28'6")				
12'	W10x33	W10x26	2' (3')	11' (9'6")	32 (306")				
14	W10x39	W12x26	2' (3')	11'6" (10')	34'6" (33')				
16'	W10x45	W12x30	2' (3')	12' (106")	37 (356")				
18'	W10x49	W14x34	2' (3')	13'6" (11')	40'6" (38')				
20	W10x60	W16x36	2' (3')	15' (12')	44' (41')				
22	W12x65	W16x40	2' (3')	16' (126")	47 (436")				

2 (3)

3' (4')

3' (4')

3' (4')

18' (14')

166" (14")

19' (16')

21'6" (18')

W21x44

W18x55

W21x62

W24x68

EXPOSURE B (See Note 4)

Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
5'	W8x21	W8x 18	2'	8'6"	226				
6'	W8x24	W8x21	2'	9'	24'				
7'	W8x24	W8x21	2'	9'6"	256"				
8'	W8x28	W10x22	2'(3')	10' (8'6")	27 (256")				
10'	W10x33	W10x26	2'(3')	11' (9'6")	30 (286")				
12'	W10x39	W12x26	2' (3')	12' (10')	33' (31')				
14	W10x45	W14x30	2'(3')	13' (11')	36' (34')				
16'	W12x53	W14x34	2'(3')	14'6" (11'6")	39'6" (36'6")				

16 FEET WIDE
INSTALLATIONS

	Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
5'	W8x18	W10x15	2'	7'6"	21'6"		
6'	W8x21	W10x17	2'	8.	23'		
7'	W10x22	W8x 18	2'	8,	24'		
8'	W8x24	W8x 18	2' (3')	86" (76")	25'6" (24'6")		
10'	W8x28	W8x21	2'(3')	96" (8')	28'6" (27')		
12'	W10x33	W14x22	2' (3')	10'6" (9')	31'6" (30')		
14	W10x39	W10x26	2' (3')	11' (9'6")	34' (326")		
16'	W14x43	W12x26	2' (3')	11'6" (10')	36'6" (35')		

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
5'	W8x18	W10x17	2'	7'6"	21'6"	
8'	W8x24	W8x21	2'	9'	26'	
10'	W12x30	W10x22	2'	10'	29'	
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')	
15	W14x43	W12x30	2' (3')	12' (106")	36' (346")	

12 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
5'	W8x18	W8x 13	2'	6'6"	20'6"	
8'	W8x21	W10x17	2'	8	25'	
10"	W8x24	W8x 18	2'	8'6"	276"	
12'	W8x28	W8x21	2'(3')	96" (8')	30'6" (29')	
15	W8x35	W10x26	2' (3')	10'6" (9')	34'6" (33')	

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
4'	W10x17	W8x 13	2'	7	20'	
5'	W8x18	W10x15	2'	7'6"	21'6"	
6'	W8x21	W10x17	2'	8'	23'	
8'	W8x24	W8x 18	2'	8'6"	256"	
10"	W8x28	W8x21	2'	9'6"	286"	
12'	W10x33	W10x22	2'	10'	31'	
15	W10x39	W12x26	2'	11'	35'	

10 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
4'	W10x15	W8x 13	2'	6'	19'		
5'	W10x17	W8x 13	2'	6'6"	20'6"		
6'	W8x18	W8x 13	2'	T	22'		
8'	W8x21	W8x 15	2'	7'6"	2 4 6"		
10"	W8x24	W8x 18	2'	8.	27'		
12'	W8x28	W8x21	2'	9'	30'		
15	W10x33	W10x22	2'	10"	34'		

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
4'	W10x17	W8x 13	2'	6'6"	19'6"	

9 FEET WIDE
NSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
4'	W8x13	W8x 13	2'	5'6"	18'6"	

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
3'	W8x13	W8x 13	2'	6'	18'	
6'	W8x18	W10x15	2'	7'6"	226"	
8'	W10x22	W8x 18	2'	8'	25'	
10"	W8x24	W8x 18	2'	9'	28'	
12'	W10x33	W10x22	2'	9'6"	306"	
15	W8x35	W10x26	2'	10'6"	346"	

8 FEET WIDE INSTALLATIONS

	Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
3'	W8x13	W8x 13	2'	5'	17'		
6'	W10x17	W8x 13	2'	6'6"	21'6"		
8'	W8x18	W12x14	2'	7	24'		
10'	W10x22	W10x17	2'	7'6"	266		
12'	W8x24	W8x 18	2'	8	29'		
15	W10x33	W8x21	2'	9'	33'		

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- * Requires that braces be placed approximately 10' from ground level that spans both columns. If installation is taller than 20', place braces on 10' spacing.
 Wind loading figured at Exposure "C" Open terrain with scattered obstructions having heights generally less
- Wind loading figured at **Exposure "C" Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
 Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous
- 4. Wind loading figured at **Exposure** "B" **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2 Column #INEVCO

Rev

52'(48')

556" (53')

63'(60')

70'6" (67')

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0405

6

Drawn KAB Date 11/28/2017 Sheet 4 of

3 \triangle 2

80'6" (75'6")

31'6" (26'6")

EXPOSURE C (See Note 3)

				- •		
Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
6'	W12x26	W10x22	2 (3')	10'6" (9')	256" (24')	
8'	W10x33	W12x26	2' (3')	11'6" (10')	286" (27')	
9'	W10x39	W12x30	2' (3')	12' (10'6")	30' (28'6")	
10'	W12x40	W12x30	2' (3')	13' (11')	32' (30')	
10'6"	W14x43	W14x30	2 (3')	136"(11")	33 (306")	
12'	W14x48	W14x34	3' (4')	12 (106")	33 (316")	
14'	W12x53	W16x40	3 (4')	13' (11'6")	36 (346")	
16'	W14x61	W21x44	3' (4')	14' (12')	39' (37')	
18'	W12x72	W16x50	3' (4')	156" (13')	426" (40')	
20'	W18x86	W18x55	3' (4')	17'6" (14'6")	46'6" (43'6")	
22'	W12x96	W21x55	3' (4')	19' (16')	50' (47')	
25'	W24x104	W21x68	3' (4')	21' (17'6")	55' (51'6")	
30'	W18x143	W24x76	3' (4')	24'6" (20'6")	63'6" (59'6")	
35'	W18v175	W2AyQA	3' (4')	28 (2367)	72 (6767)	

18 FEET WIDE **INSTALLATIONS**

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
6'	W8x24	W8x18	2' (3')	9' (7'6")	24 (226")	
8'	W8x28	W10x22	2' (3')	10' (8'6")	27 (256")	
9'	W10x33	W14x22	2 (3')	10'6" (9')	286" (27')	
10'	W10x33	W10x26	2' (3')	11' (9'6")	30 (286")	
10'6"	W8x35	W12x26	2 (3')	11'6" (9'6")	31' (29')	
12'	W10x39	W12x26	3' (4')	10'6" (9'6")	31'6" (30'6")	
14'	W14x48	W14x30	3' (4')	11' (10')	34' (33')	
16'	W12x53	W14x34	3 (4')	11'6" (10'6")	36'6" (35'6")	
18'	W10x60	W16x40	3' (4')	126"(11")	396" (38')	
20'	W12x65	W21x44	3' (4')	14' (12')	43' (41')	
22'	W18x76	W16x50	3' (4')	15 (1267)	46 (436")	
25'	W12x87	W18x55	3' (4')	17' (14')	51' (48')	
30'	W14x109	W21x62	3' (4')	19'6" (16'6")	58'6" (55'6")	
35'	W14x132	W24x76	3 (4')	226"(19")	66'6" (63')	

EXPOSURE B (See Note 4)

	Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
5'	W8x24	W8x21	2'	9'6"	236		
6'	W12x26	W10x22	2'	10'	25'		
7'	W12x30	W14x22	2' (3')	10'6" (9')	26'6" (25')		
8'	W10x33	W10x26	2' (3')	11' (9'6")	28 (2667)		
10'	W10x39	W12x30	2' (3')	12'6" (10'6")	31'6" (29'6")		
12'	W12x45	W14x34	2' (3')	14 (1167)	35 (326")		
14'	W12x53	W16x36	3 (4')	12' (11')	35' (34')		
16'	W14x61	W16x40	3' (4')	13'6" (11'6")	38'6" (36'6")		

W24x104

W24x207

16 FEET WIDE
INSTALLATIONS

	Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
5'	W8x21	W10x17	2'	8.	22'		
6'	W10x22	W8x18	2'	8'6"	236"		
7'	W8x24	W8x21	2' (3')	9' (8')	25' (24')		
8'	W12x26	W8x21	2 (3')	9'6" (8'6")	26'6" (25'6")		
10'	W10x33	W10x26	2 (3')	10'6" (9')	296" (28')		
12'	W10x39	W12x26	2 (3')	11'6" (10')	32'6" (31')		
14'	W14x43	W12x30	3 (4')	10'6" (9'6")	33'6" (32'6")		
16'	W10x49	W14x34	3' (4')	11' (10')	36' (35')		

W24x94

W14x159

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
5'	W8x21	W8x18	2'	8'6"	226"	
8'	W8x28	W10x22	2 (3')	10'(9')	27' (26')	
10'	W10x33	W10x26	2 (3')	11' (9'6")	30 (286")	
12'	W10x39	W12x26	2 (3')	12' (10')	33' (31')	
15'	W10x49	W14x34	2 (3')	14' (116")	38 (356")	

12 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
5'	W8x18	W10x15	2'	7'6"	216"	
8'	W8x24	W8x18	2 (3')	9' (7'6")	26' (24'6")	
10'	W8x28	W10x22	2 (3')	9'6" (8'6")	28'6" (27'6")	
12'	W10x33	W14x22	2 (3')	10'6" (9')	31'6" (30')	
15'	W14x43	W12x26	2 (3')	11'6" (10')	356" (34')	

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
4'	W8x18	W8x15	2'	7'6"	206"	
5'	W8x21	W8x18	2'	8.	22'	
6'	W10x22	W8x18	2'	8'6"	236"	
8'	W12x26	W8x21	2'	9'6"	266"	
10"	W10x33	W14x22	2' (3')	10'6" (9')	296" (28')	
12'	W10x39	W12x26	2 (3')	116"(10')	326" (31')	
15'	W10x45	W12x30	2' (3')	12'6" (10'6")	36'6" (34'6")	

10 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
4'	W10x17	W8x13	2'	6'6"	196"	
5'	W8x18	W12x14	2'	7	21'	
6'	W8x18	W8x15	2'	7'6"	226"	
8'	W10x22	W8x18	2'	8'6"	256"	
10"	W12x26	W8x21	2' (3')	9, (8,)	28' (27')	
12'	W10x33	W10x22	2 (3')	10' (8'6")	31' (296")	
15'	W10x39	W10x26	2 (3')	11' (9'6")	35 (336")	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
4'	W8x18	W10x15	2'	7'6"	206"		

9	FEE	CT V	WIL	ÞΕ
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Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
4'	W8x15	W8x13	2'	6'6"	196"		

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
3'	W8x15	W8x13	2'	6'6"	186"			
6'	W8x21	W8x18	2'	8	23'			
8'	W8x24	W8x21	2'	g	26'			
10'	W8x28	W10x22	2'	10'	29'			
12'	W10x33	W10x26	2'	10'6"	316"			
15'	W14x43	W12x26	2' (3')	11'6" (10')	356" (34')			

8 FEET WIDE **INSTALLATIONS**

	Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
3'	W8x13	W8x13	2'	5 '6"	176"				
6'	W8x18	W12x14	2'	7	22'				
8'	W8x21	W10x17	2'	7'6"	246				
10'	W8x24	W8x18	2'	8'6"	276"				
12'	W8x28	W8x21	2'	g	30'				
15'	W10x33	W10x22	2 (3')	10' (8'6")	34 (326")				

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.

- If the display height is between chart values shown above, use the next highest value.
 * Requires that braces be placed approximately 10' from ground level that spans both columns. If total height of display is over 20', place another set of braces on 10' spacing.
 Wind loading figured at **Exposure "C" Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
 Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2 Column



Rev

74'6" (70'6")

25'6" (21'6")

Nevco, Inc. Greenville, Illinois 62246

241-0405

Drawing No.

Drawn

Date 11/28/2017 KAB

Sheet of 5 6

EXPOSURE C (See Note 3)

	Column and Fo	oundation Requirem	ents (Based o	on ASCE 7-10)					
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
6'	W10x33	W12x26	2' (3')	12' (10')	27'(25')				
8'	W12x40	W14x30	2' (3')	14 (116")	31' (28'6")				
9'	W14x43	W14x34	2' (3')	156" (12')	336" (30')				
10'	W12x53	W16x36	2' (3')	166" (13')	356" (32')				
10'6 "	W12x53	W16x40	2' (3')	17'6" (13'6")	37'(33')				
12'	W14x61	W21x44	3' (4')	146"(12")	356" (33')				
14'	W16x67	W16x50	3' (4')	16'6" (13'6")	39'6" (36'6")				
16'	W18x76	W18x55	3' (4')	18' (15')	43'(40')				
18'	W18x86	W21x62	3' (4')	19'6" (16'6")	46'6" (43'6")				
20'	W21x101	W21x68	3' (4')	22 (1867)	51' (47'6")				
22'	W21x111	W24x68	3' (4')	24' (20')	55'(51')				
25'	W24x131	W24x84	3' (4')	266" (22")	60'6" (56')				
30'	W18x175	W24x103	3' (4')	31' (26')	70'(65')				
35'	W14x233	W24x131	3' (4')	36 (2967)	80' (73'6")				
40'	W18x258	W24x146	3' (4')	40'6" (33'6")	89'6" (82'6")				

18 FEET WIDE **INSTALLATIONS**

16 FEET WIDE **INSTALLATIONS**

12 FEET WIDE **INSTALLATIONS**

10 FEET WIDE **INSTALLATIONS**

	Column and Foundation Requirements (Based on ASCE 7-10)								
Display He ight	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
6'	W12x26	W10x22	2' (3')	10'6" (9')	25'6" (24')				
8'	W10x33	W12x26	2' (3')	11'6" (10')	286"(27')				
9'	W10x39	W12x26	2' (3')	12 (1067)	30' (28'6")				
10'	W12x40	W12x30	2' (3')	13' (11')	32'(30')				
10'6 "	W14x43	W14x30	2' (3')	136" (11')	33' (30'6")				
12'	W14x48	W14x34	3' (4')	12' (106")	33' (31'6")				
14'	W12x53	W16x40	3' (4')	13' (116")	36' (34'6")				
16'	W14x61	W21x44	3' (4')	14' (12')	39'(37')				
18'	W12x72	W16x50	3' (4')	15'6" (13')	42'6" (40')				
20'	W18x86	W18x55	3' (4')	17'6" (14'6")	46'6" (43'6")				
22'	W12x96	W21x55	3' (4')	19' (16')	50'(47')				
25'	W14x109	W21x68	3' (4')	21' (176")	55' (51 '6")				
30'	W18x148	W24x76	3' (4')	25 (206")	64' (59'6")				
35'	W18x175	W21x101	3' (4')	286" (24")	72'6" (68')				
40'	W14x211	W24x117	3' (4')	326" (27")	81'6" (76')				

EXPOSURE B (See Note 4)

	Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length					
5'	W10x22	W8x21	2'	9'	23'					
6'	W10x26	W10x22	2'	10'	25'					
7'	W10x30	W10x22	2' (3')	10'6" (9')	266" (25')					
8'	W10x33	W10x26	2' (3')	11' (9'6")	28 (266")					
10'	W10x39	W12x30	2' (3')	12' (106")	31' (29'6")					
12'	W12x45	W14x34	2' (3')	14 (1167)	35' (32'6")					
14'	W12x53	W18x35	3' (4')	12' (11')	35'(34')					
16'	W14x61	W16x40	3' (4')	13' (116")	40' (37'6")					

	Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Lengt										
5'	W8x21	W8x 18	2'	8'6"	226					
8'	W8x28	W10x22	2' (3')	10' (8'6")	27 (256")					
10"	W10x33	W10x26	2' (3')	11' (9'6")	30' (28'6")					
12"	W10x39	W12x26	2' (3')	12' (10')	33'(31')					
15'	W10x49	W14x34	2' (3')	14 (116")	38' (35'6")					

	Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length					
4'	W8x18	W8x15	2'	7'6"	20'6"					
5'	W8x21	W10x17	2'	8,	22'					
6'	W10x22	W8x 18	2'	8'6"	236"					
8'	W12x26	W8x21	2'	9'6"	266"					
10"	W10x33	W10x22	2' (3')	10'6" (9')	296" (28')					
12'	W10x39	W12x26	2' (3')	11'6" (9'6")	32'6" (30'6")					
15'	W10x45	W12x30	2' (3')	12'6" (10'6")	36'6" (34'6")					

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Length							
4'	W8x18	W10x15	2'	7'6"	20'6"		

	Column and Foundation Requirements (Based on ASCE 7-10)								
Display He ight	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
3'	W8x15	W8x13	2'	6'6"	186"				
6'	W8x21	W10x17	2'	8.	23'				
8'	W8x24	W8x 18	2'	9'	26'				
10'	W8x28	W10x22	2'	9'6"	286"				
12'	W10x33	W10x26	2'	10'6"	31'6"				
15'	W14x43	W12x26	2' (3')	11'6" (10')	35'6" (34')				

Column and Foundation Requirements (Based on ASCE 7-10)							
Display He ight	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
5'	W12x26	W14x22	2'	10'6"	246"		
6'	W12x30	W10x26	2'	11'6"	266"		
7'	W12x35	W12x26	2' (3')	12 (106")	28' (26'6")		
8'	W10x39	W12x30	2' (3')	13' (11')	30'(28')		
10'	W14x48	W18x35	2' (3')	156" (12')	34'6" (31')		
12'	W12x53	W16x40	2' (3')	17'6" (13'6")	38'6" (34'6")		
14'	W14x61	W21x44	3' (4')	15 (126")	38' (356")		
16'	W12x72	W18x50	3' (4')	166" (14")	41'6" (39')		

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
5'	W8x24	W8x21	2'	10'	24'		
8'	W10x33	W12x26	2' (3')	11'6" (10')	286" (27')		
10"	W12x40	W12x30	2' (3')	13' (11')	32'(30')		
12"	W14x48	W14x34	2' (3')	14'6" (11'6")	35'6" (32'6")		
15'	W14x61	W16x40	2'(3')	17'6" (13'6")	41'6" (37'6")		

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
4'	W8x21	W8x 18	2'	8'6"	216"		
5'	W10x22	W8x21	2'	9'6"	236		
6'	W10x26	W10x22	2'	10'	25'		
8'	W10x33	W10x26	2'	11'	28'		
10"	W10x39	W12x26	2' (3')	12' (10')	31'(29')		
12'	W10x45	W14x30	2' (3')	136"(11)	346"(32')		
15'	W12x53	W16x36	2' (3')	16 (1265	40' (36'6")		

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Lengt					
4'	W8x21	W8x 18	2'	8'6"	216"	

Column and Foundation Requirements (Based on ASCE 7-10)						
Display He ight	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
3'	W8x18	W8x 15	2'	7'6"	196"	
6'	W8x24	W8x21	2'	9'6"	24'6"	
8'	W10x30	W10x22	2'	10'	27'	
10'	W10x33	W10x26	2'	11'	30'	
12'	W10x39	W12x30	2'	12'	33'	
15'	W10x49	W14x34	2' (3')	14 (116")	38" (35'6")	

8 FEET WIDE **INSTALLATIONS**

9 FEET WIDE **INSTALLATIONS**

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.

 3. Wind loading figured at **Exposure "C" - Open terrain** with scattered obstructions having heights generally less
- than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous
- closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2 Column

Nevco, Inc. Greenville, Illinois 62246

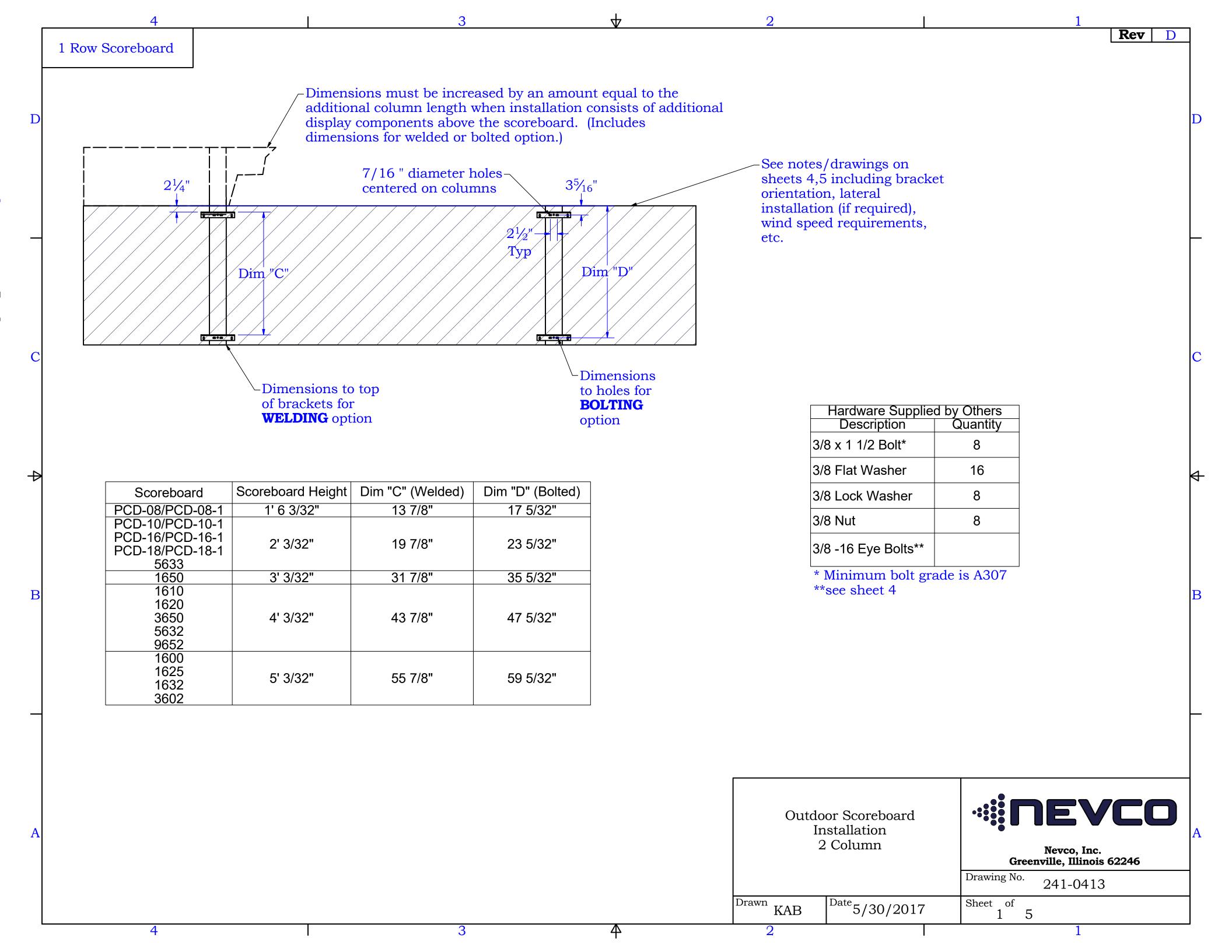
TEVCO

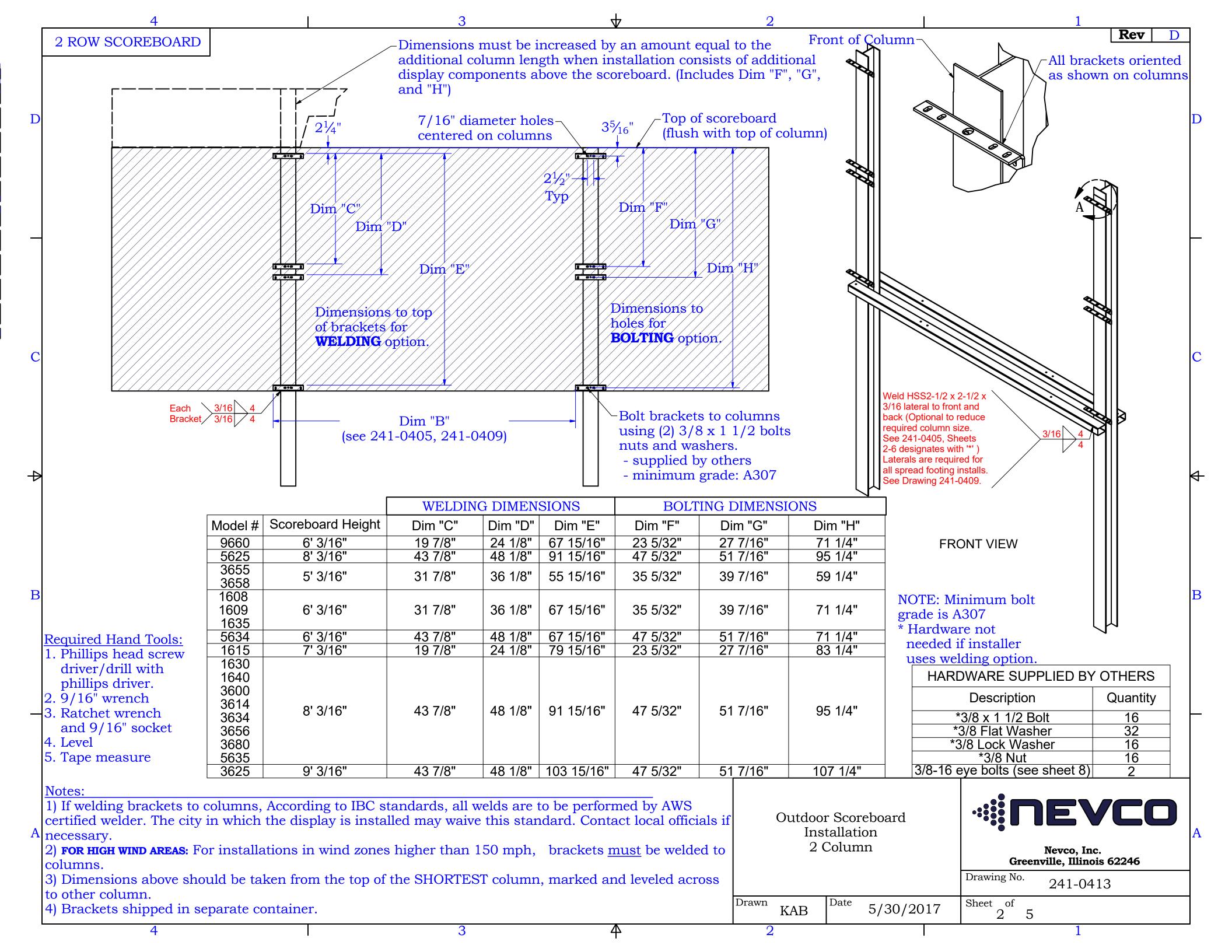
Rev

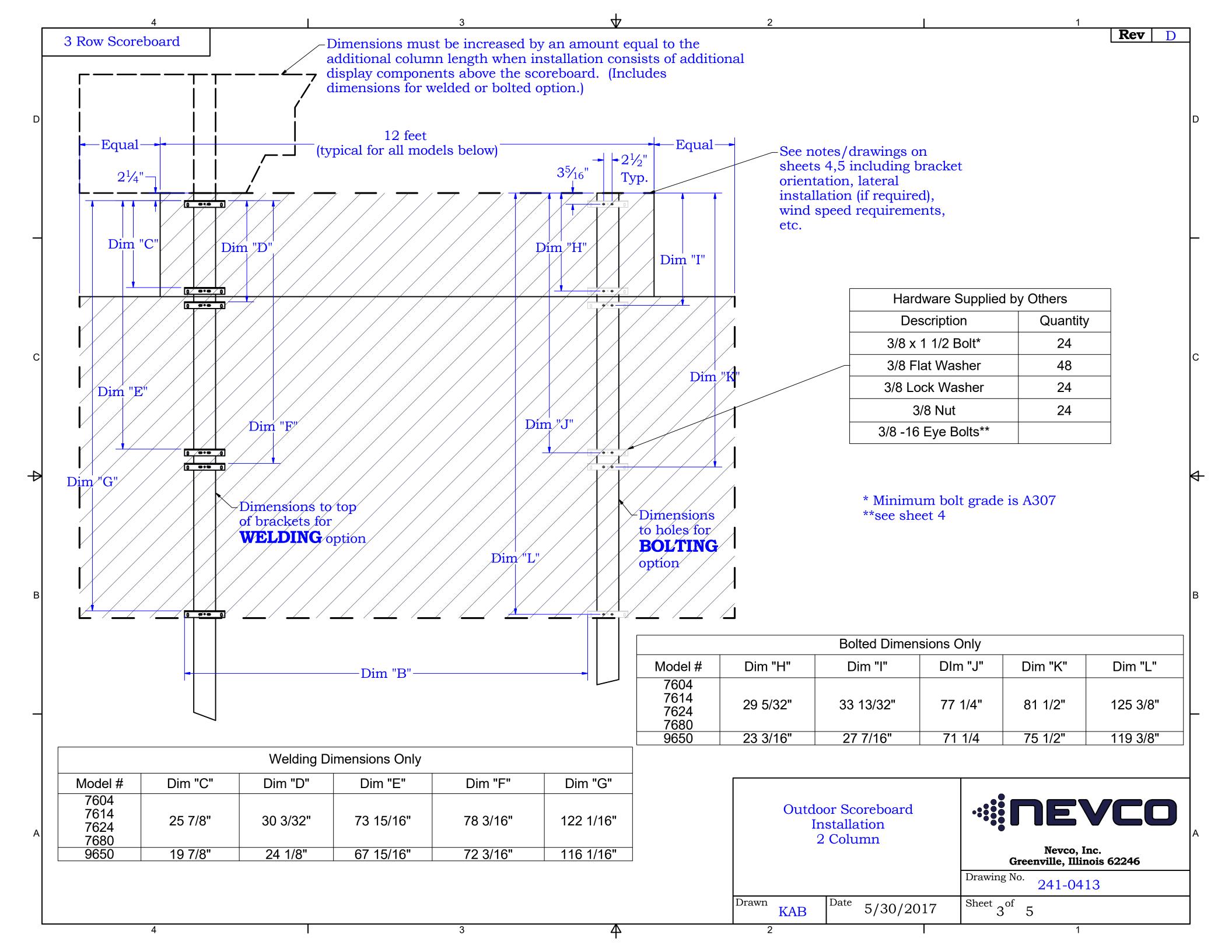
Drawing No. 241-0405

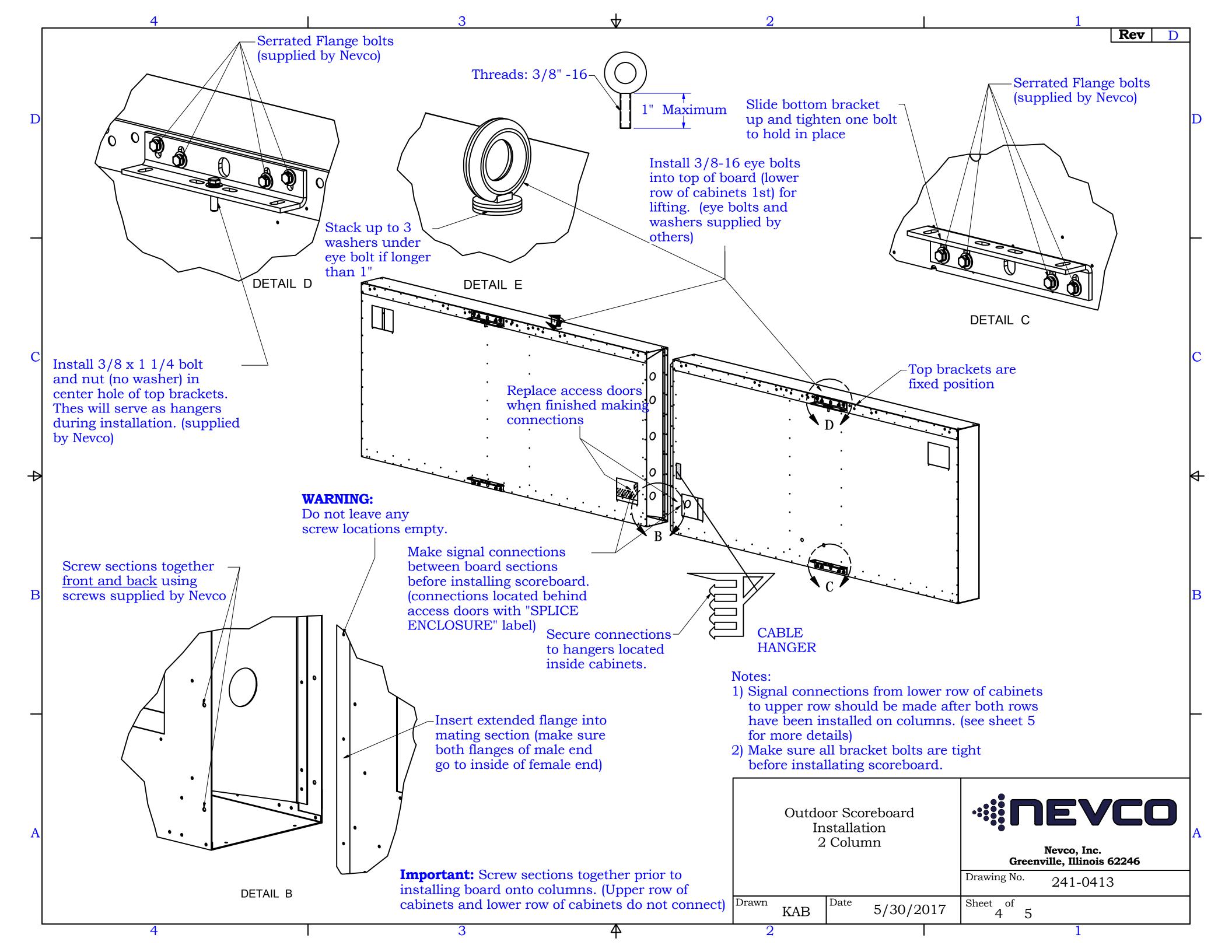
Drawn Sheet of 11/28/2017 KAB 6

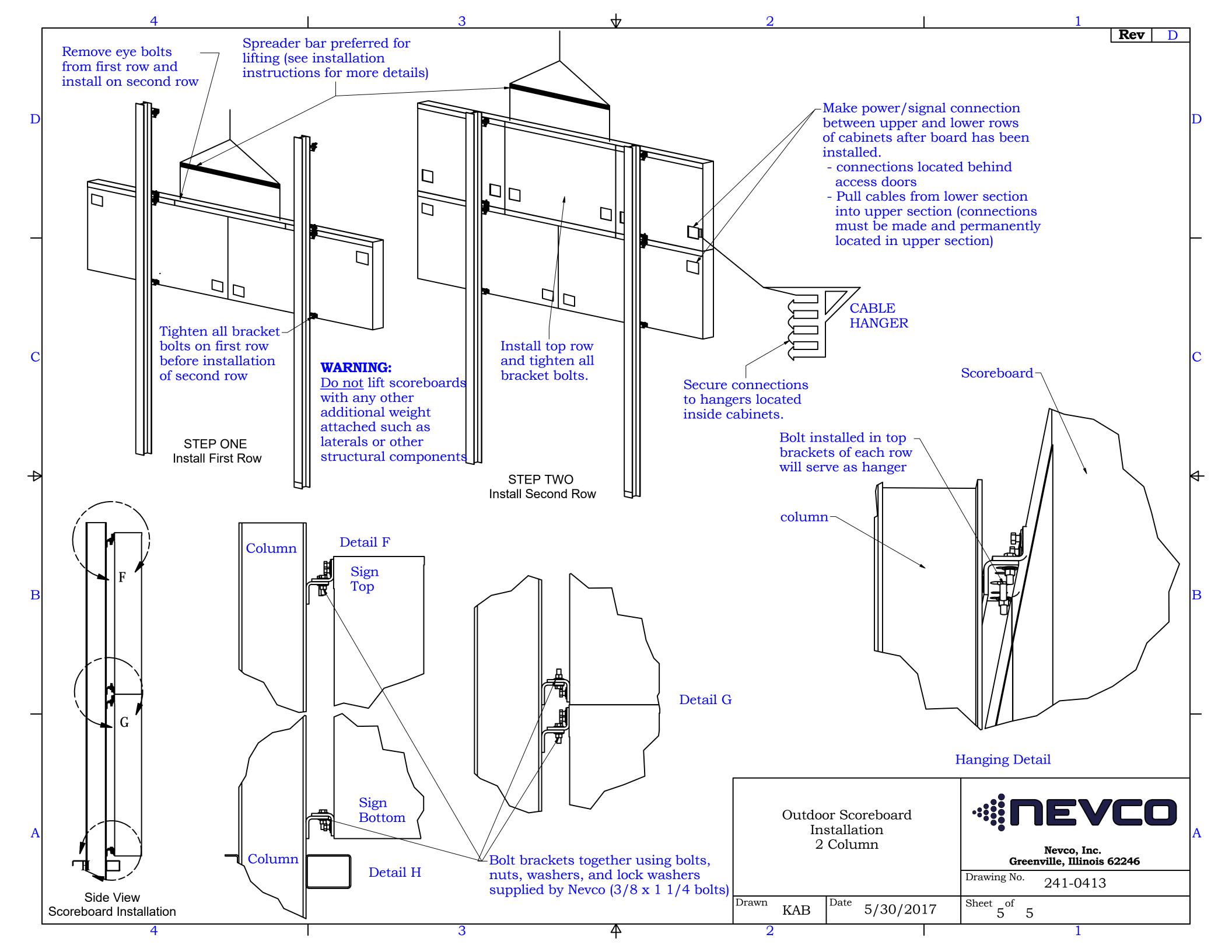
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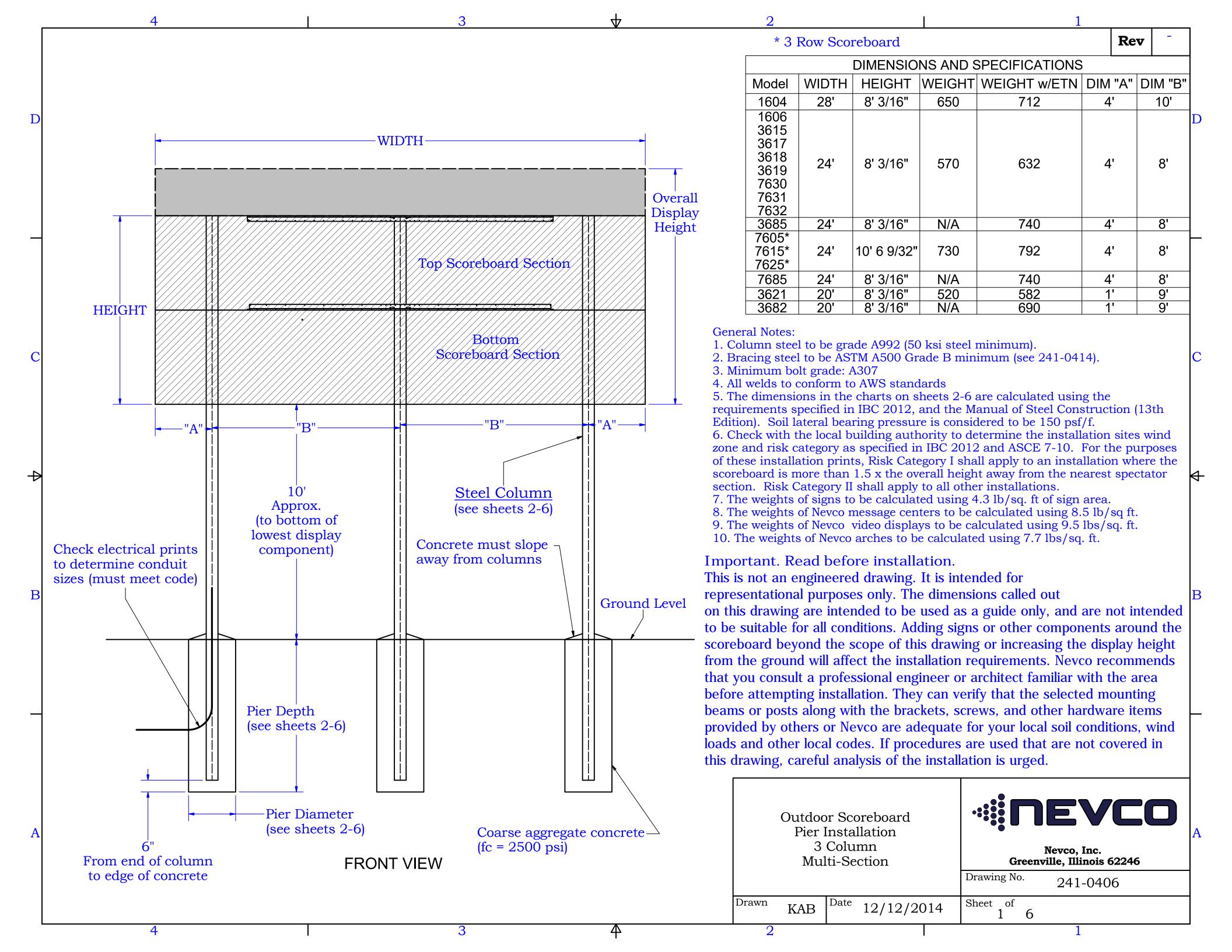












105 MPH WIND ZONES

EXPOSURE C (See Note 3)							
	Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W8x21	W10x17	2' (3')	8' (7')	25' (24')		
10"	W8x24	W8x18	2' (3')	86" (76")	27'6" (26'6")		
12'	W12x30	W8x21	2' (3')	9'6" (8')	30'6" (29')		
14'	W10x33	W10x22	2' (3')	10' (8'6")	33' (31'6")		
16'	W10x39	W10x26	2' (3')	10'6" (9')	35'6" (34')		
18'	W14x43	W12x26	2' (3')	11' (9'6")	38' (36'6")		
20'	W8x48	W12x30	2' (3')	12' (10')	41' (39')		
22	W12x53	W14x34	2' (3')	13' (11')	44' (42')		
25	W10x60	W18x35	3' (4')	11'6" (10'6")	456" (44'6")		
30'	W10x77	W14x43	3' (4')	13' (11'6")	52' (50'6")		
35	W12x96	W18x50	3' (4')	15' (12'6")	59' (56'6")		
40'	W14x109	W21x55	3' (4')	16'6" (14")	65'6" (63')		

20 FEET WIDE
INSTALLATIONS

EXPOSURE B (See Note 4)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8.	W8x18	W12x14	2' (3')	7 (6)	24' (23')	
10'	W8x21	W10x17	2' (3')	76" (6'6")	266" (256")	
12'	W8x24	W8x 18	2' (3')	8' (7')	29' (28')	
14'	W8x28	W8x 21	2' (3')	9' (7'6")	32' (30'6")	
16'	W10x33	W8x 21	2' (3')	96" (8')	34'6" (33')	
18'	W8x35	W10x22	2' (3')	10' (8'6")	37' (35'6")	
20'	W10x39	W10x26	2' (3')	10'6" (9')	396" (38")	
22'	W10x45	W12x26	2' (3')	11' (9'6")	42' (40'6")	
25'	W12x53	W12x30	3' (4')	10' (9')	44' (43')	
30'	W12x65	W14x34	3' (4')	11' (10')	50' (49')	
35'	W10x77	W16x40	3' (4')	12' (11')	56' (55')	
40'	W12x96	W16x50	3' (4')	136" (12')	62'6" (61')	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W8x24	W8x21	2' (3')	9' (7'6")	26' (24'6")		
10"	W8x28	W10x22	2' (3')	10' (8'6")	29' (27'6")		
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')		
14'	W10x39	W12x26	2' (3')	11'6" (10')	34'6" (33')		
16'	W10x45	W12x30	2' (3')	12' (10'6")	37" (35'6")		
18'	W10x49	W14x30	2' (3')	13' (11')	40' (38')		
20'	W12x53	W14x34	2' (3')	14' (11'6")	43' (40'6")		
22	W14x61	W16x36	2' (3')	15' (12')	46' (43')		
25	W12x72	W21x44	3' (4')	136" (12')	47'6" (46')		
30'	W12x96	W18x55	3' (4')	16' (13'6")	55' (52'6")		
35	W14x109	W21x62	3' (4')	18' (15'6")	62' (59'6")		
40'	W14x132	W24x68	3' (4')	20'6" (17')	69'6" (66')		

24 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8.	W8x21	W10x17	2' (3')	8' (6'6")	25' (23'6")	
10'	W8x24	W8x 18	2' (3')	8'6" (7'6")	276" (266")	
12'	W8x28	W8x 21	2' (3')	9' (8')	30' (29')	
14'	W10x33	W10x22	2' (3')	10' (8'6")	33' (31'6")	
16'	W10x39	W10x26	2' (3')	10'6" (9')	35'6" (34')	
18'	W14x43	W12x26	2' (3')	11' (9'6")	38' (36'6")	
20'	W8x48	W12x30	2' (3')	11'6" (10')	40'6" (39')	
22"	W10x49	W12x30	2' (3')	12' (10'6")	43' (41'6")	
25'	W10x60	W18x35	3' (4')	11'6" (10'6")	45'6" (44'6")	
30'	W10x77	W14x43	3' (4')	13' (11'6")	52' (50'6")	
35'	W12x96	W18x50	3' (4')	15' (12'6")	59' (56'6")	
40'	W14x109	W21x55	3' (4')	16'6" (14')	65'6" (63')	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W8x24	W8x21	2' (3')	96" (8')	26'6" (25')		
10"	W10x33	W10x22	2' (3')	10' (9')	29' (28')		
12'	W8x35	W10x26	2' (3')	11' (9'6")	32' (30'6")		
14'	W14x43	W12x26	2' (3')	12' (10')	35' (33')		
16'	W10x49	W14x30	2' (3')	13' (11')	38' (36')		
18'	W12x53	W14x34	2' (3')	14' (11'6")	41' (38'6")		
20'	W10x60	W16x36	2' (3')	15' (12')	44' (41')		
22'	W12x65	W16x40	2' (3')	166" (13')	47'6" (44')		
25	W12x72	W21x44	3' (4')	14' (12')	48' (46')		
30'	W12x96	W21x55	3' (4')	17' (14'6")	56' (53'6")		
35	W12x120	W21x68	3' (4')	19'6" (16'6")	63'6" (60'6")		
40'	W14x145	W24x76	3' (4')	22' (18'6")	71' (67'6")		

28 FEET WIDE INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8	W10x22	W8x 18	2' (3')	8' (7')	25' (24')	
10'	W8x24	W8x 21	2' (3')	9' (7'6")	28' (26'6")	
12'	W10x33	W10x22	2' (3')	96" (86")	306" (296")	
14'	W10x33	W14x22	2' (3')	10'6" (9')	336" (32")	
16'	W10x39	W12x26	2' (3')	11' (9'6")	36' (34'6")	
18'	W10x45	W12x26	2' (3')	11'6" (10')	38'6" (37')	
20'	W10x49	W12x30	2' (3')	12' (10'6")	41' (39'6")	
22"	W12x53	W14x34	2' (3')	13' (11')	44' (42')	
25'	W12x65	W16x36	3' (4')	12' (10'6")	46' (44'6")	
30'	W12x79	W14x48	3' (4')	14' (12')	53' (51')	
35'	W12x96	W18x55	3' (4')	16' (13'6")	60' (57'6")	
40'	W12x120	W21x62	3' (4')	18' (15')	67' (64')	

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.
- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

 4. Wind loading figured at **Exposure** "B" **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard
Installation
3 Column
Multi-Section

#INEVCO

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0406

Drawn KAB Date 12/12/2014 Sheet of 2 6

 Δ 2

EXPOSURE C (See Note 3)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8.	W8x24	W8x 18	2' (3')	9' (7'6")	26' (24'6")	
10'	W8x28	W10x22	2' (3')	96" (86")	28'6" (27'6")	
12'	W10x33	W14x22	2' (3')	10'6" (9')	31'6" (30')	
14'	W10x39	W12x26	2' (3')	11' (9'6")	34' (32'6")	
16'	W10x45	W12x26	2' (3')	12' (10')	37' (35')	
18'	W10x49	W12x30	2' (3')	12'6" (10'6")	396" (376")	
20'	W12x53	W14x34	2' (3')	13'6" (11')	42'6" (40')	
22'	W10x60	W16x36	2' (3')	15' (12')	46' (43')	
25'	W12x72	W14x43	3' (4')	13' (11'6")	47" (45'6")	
30'	W12x87	W18x50	3' (4')	15' (13')	54' (52')	
35'	W12x106	W21x55	3' (4')	176" (146")	61'6" (58'6")	

W21x68

20 FEET WIDE INSTALLATIONS

EXPOSURE B (See Note 4)						
	Column and Fo	oundation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8	W8x21	W10x17	2' (3')	7'6" (6'6")	24'6" (23'6")	
10'	W8x24	W8x 18	2 (3)	86" (7")	27'6" (26')	
12'	W8x28	W8x 21	2' (3')	9' (8')	30' (29')	
14'	W10x33	W10x22	2 (3)	96" (86")	32'6" (31'6")	
16'	W8x35	W14x22	2' (3')	10' (9')	35' (34')	
18'	W8x40	W10x26	2' (3')	11' (9'6")	38' (36'6")	
20'	W10x45	W12x26	2 (3)	11'6" (10')	40'6" (39')	
22"	W10x49	W12x30	2 (3)	12' (10'6")	43' (41'6")	
25'	W10x60	W14x34	3' (4')	11' (10')	45' (44')	
30'	W12x72	W16x40	3' (4')	12'6" (11')	51'6" (50')	
35'	W12x87	W16x50	3' (4')	14' (12')	58' (56')	
40'	W12x106	W18x55	3' (4')	16' (13'6")	65' (62'6")	
	<u> </u>		1		<u> </u>	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8,	W8x28	W10x22	2' (3')	10' (8'6")	27' (25'6")		
10'	W10x33	W10x26	2' (3')	11' (9'6")	30' (28'6")		
12'	W10x39	W12x26	2' (3')	11'6" (10')	32'6" (31')		
14'	W10x45	W12x30	3' (4')	11' (9'6")	34' (32'6")		
16'	W10x49	W14x34	3' (4')	11'6" (10'6")	36'6" (35'6")		
18'	W10x60	W16x36	3' (4')	12' (11')	39' (38')		
20'	W12x65	W16x40	3' (4')	13' (11'6")	42' (40'6")		
22'	W12x72	W21x44	3' (4')	14' (12')	45' (43')		
25'	W12x87	W18x50	3' (4')	16' (13'6")	50' (47'6")		
30'	W12x106	W21x62	3' (4')	18'6" (15'6")	576" (546")		
35'	W14x132	W24x68	3' (4')	21'6" (18')	65'6" (62')		
40'	W14x159	W24x84	3' (4')	24' (20')	73' (69')		

24 FEET W	IDE
INSTALLATION	ONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8.	W8x24	W8x 18	2' (3')	8'6" (7'6")	25'6" (24'6")	
10'	W8x28	W8x 21	2 (3)	96" (8")	28'6" (27')	
12'	W10x33	W10x22	2' (3')	10' (8'6")	31' (29'6")	
14'	W10x39	W10x26	3' (4')	96" (86")	32'6" (31'6")	
16'	W14x43	W12x26	3' (4')	10' (9')	35' (34')	
18'	W10x49	W12x30	3' (4')	106" (96")	37'6" (36'6")	
20'	W12x53	W14x34	3' (4')	11' (10')	40' (39')	
22'	W10x60	W18x55	3' (4')	11'6" (10'6")	42'6" (41'6")	
25'	W12x72	W16x40	3' (4')	13' (11'6")	47' (45'6")	
30'	W12x87	W18x50	3' (4')	15' (13')	54' (52')	
35'	W12x106	W21x55	3' (4')	176" (146")	61'6" (58'6")	
40'	W14x120	W21x68	3' (4')	196" (166")	68'6" (65'6")	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8,	W12x30	W10x22	2' (3')	10'6" (9')	276" (26')		
10'	W10x33	W12x26	2' (3')	11'6" (9'6")	306" (286")		
12'	W12x40	W12x30	2' (3')	12' (10'6")	33' (31'6")		
14'	W14x48	W14x34	3' (4')	11' (10')	34' (33')		
16'	W12x53	W16x36	3' (4')	12' (11')	37' (36')		
18'	W14x61	W16x40	3' (4')	13' (11'6")	40' (38'6")		
20'	W12x65	W21x44	3' (4')	14' (12')	43' (41')		
22'	W18x70	W16x50	3' (4')	15' (12'6")	46' (43'6")		
25'	W12x87	W18x55	3' (4')	16'6" (14')	50'6" (48')		
30'	W14x109	W21x68	3' (4')	20' (17')	59' (56')		
35'	W14x145	W24x76	3' (4')	23' (19'6")	67' (63'6")		
40'	W18x175	W24x94	3' (4')	26' (21'6")	75' (70'6")		

28 FEET WIDE INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W8x24	W8x 21	2' (3')	9' (7'6")	26' (24'6")	
10'	W8x28	W10x22	2' (3')	10' (8'6")	29' (27'6")	
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')	
14'	W10x39	W12x26	3' (4')	96" (9")	32'6" (32')	
16'	W10x45	W12x30	3' (4')	10'6" (9'6")	356" (346")	
18'	W10x49	W14x34	3' (4')	11' (10')	38' (37')	
20'	W10x60	W18x35	3' (4')	11'6" (10'6")	40'6" (39'6")	
22'	W12x65	W16x40	3' (4')	12' (11')	43' (42')	
25'	W12x72	W21x44	3' (4')	136" (116")	47'6" (45'6")	
30'	W12x96	W18x55	3' (4')	16'6" (13'6")	55'6" (52'6")	
35'	W14x109	W21x62	3' (4')	18'6" (16')	62'6" (60')	
40'	W14x132	W24x68	3' (4')	21' (18')	70' (67')	

Chart Notes:

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40'

W14x120

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.

196" (166")

3' (4')

68'6" (65'6")

- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

 4. Wind loading figured at **Exposure** "B". Urban and suburban areas, wooded areas, or other terrain with numerous
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Installation 3 Column Multi-Section

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Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0406

Drawn KAB Date 12/12/2014 Sheet 3 of 6

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706" (67')

EXPOSURE C (See Note 3)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8.	W8x24	W8x21	2'(3')	96" (8')	26'6" (25')	
10'	W10x33	W10x22	2 (3)	10' (9')	29' (28')	
12'	W8x35	W10x26	2 (3)	11' (9'6")	32' (306")	
14'	W14x43	W12x26	2 (3)	12' (10')	35' (33')	
16'	W14x48	W12x30	2'(3')	12'6" (10'6")	376" (35'6")	
18'	W12x53	W14x34	2'(3')	14' (11'6")	41' (38'6")	
20'	W10x60	W16x36	2'(3')	15' (12')	44' (41')	
22"	W12x65	W16x40	2 (3)	166" (13')	47'6" (44')	
25'	W12x79	W16x50	3' (4')	146" (12')	48'6" (46')	
30'	W12x96	W18x55	3' (4')	17' (14')	56' (53')	
35'	W14x109	W21x62	3' (4')	19' (16')	63' (60')	
40'	W14x145	W24x68	3' (4')	216" (18')	70'6" (67')	

20 FEET WIDE
INSTALLATIONS

	EXPOSURE B (See Note 4)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)			
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W10x22	W8x 18	2 (3)	8' (7')	25' (24')		
10'	W8x24	W8x 18	2 (3)	9' (7'6")	28' (26'6")		
12'	W10x33	W10x22	2 (3)	96" (86")	30'6" (29'6")		
14'	W10x33	W14x22	2 (3)	10' (9')	33' (32')		
16'	W10x39	W10x26	2 (3)	11' (9'6")	36' (34'6")		
18'	W10x45	W12x26	2 (3)	11'6" (10')	38'6" (37')		
20'	W10x49	W12x30	2 (3)	12' (10'6")	41' (39'6")		
22'	W10x54	W14x34	2 (3)	13'6" (11')	44'6" (42')		
25'	W12x65	W16x36	3' (4')	12' (10'6")	46' (44'6")		
30'	W12x79	W21x44	3' (4')	13'6" (12')	52'6" (51')		
35'	W12x96	W18x55	3' (4')	15'6" (13')	59'6" (57')		
40'	W14x109	W21x62	3' (4')	176" (15')	66'6" (64')		

Column and Foundation Requirements (Based on ASCE 7-10)

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8.	W12x30	W14x22	2 (3)	10'6" (9')	276" (26')		
10'	W14x38	W12x26	2 (3)	11'6" (10')	306" (29')		
12'	W12x40	W12x30	2 (3)	126" (106")	33'6" (31'6")		
14'	W10x49	W14x34	3' (4')	11'6" (10'6")	34'6" (33'6")		
16'	W12x53	W16x36	3' (4')	12'(11')	37' (36')		
18'	W14x61	W16x40	3' (4')	13' (116")	40' (38'6")		
20'	W12x65	W21x44	3' (4')	14' (12')	43' (41')		
22"	W12x79	W16x50	3' (4')	15'6" (13')	46'6" (44')		
25'	W12x96	W21x55	3' (4')	17'6" (15')	51'6" (49')		
30'	W14x109	W21x68	3' (4')	20'6" (17'6")	59'6" (56'6")		
35'	W14x145	W24x76	3' (4')	23'6" (19'6")	67'6" (63'6")		
40'	W14x176	W24x94	3' (4')	266" (22')	75'6" (71')		
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	Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
	8'	W8x24	W8x 21	2' (3')	9' (8')	26' (25')
	10"	W12x30	W10x22	2' (3')	10' (8'6")	29' (27'6")
	12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')
	14'	W10x39	W12x26	3' (4')	10' (9')	33' (32')
24 FEET WIDE	16'	W10x45	W12x30	3' (4')	10'6" (9'6")	35'6" (34'6")
INSTALLATIONS	18'	W10x49	W14x34	3' (4')	11' (10')	38' (37')
11.011.22.11101.0	20'	W10x60	W18x35	3' (4')	11'6" (10'6")	40'6" (39'6")
	22'	W12x65	W16x40	3' (4')	12'6" (11')	43'6" (42')
	25'	W12x79	W14x48	3' (4')	14'6" (12')	48'6" (46')
	30'	W12x96	W18x55	3' (4')	16'6" (14')	55'6" (53')
	35'	W14x109	W21x62	3' (4')	19' (16')	63' (60')

W24x68

3' (4')

21'6" (18')

W14x145

40'

Drawn

KAB

	Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8.	W10x33	W10x26	2' (3')	11' (9'6")	28' (26'6")		
10'	W10x39	W12x26	2 (3)	12' (10'6")	31' (29'6")		
12'	W14x43	W14x30	2 (3)	136" (11')	346" (32')		
14'	W12x53	W18x35	3' (4')	12' (10'6")	35' (33'6")		
16'	W10x60	W16x40	3' (4')	13' (116")	38' (36'6")		
18'	W12x65	W21x44	3' (4')	14' (12')	41' (39')		
20'	W12x72	W16x50	3' (4')	15'6" (13')	446" (42')		
22'	W18x86	W18x55	3' (4')	16'6" (14')	47'6" (45')		
25'	W12x96	W21x55	3' (4')	18'6" (15'6")	526" (496")		
30'	W14x120	W24x68	3' (4')	226" (186")	61'6" (57'6")		
35'	W14x159	W24x84	3' (4')	256" (216")	69'6" (65'6")		
40'	W18x 192	W21x 101	3' (4')	29' (24')	78' (73')		
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28 FEET WIDE
INSTALLATIONS

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	W8x 21	2' (3')	9'6" (8')	266" (25')
10'	W10x33	W10x22	2' (3')	10'6" (9')	296" (28')
12'	W10x39	W12x26	2'(3')	11' (9'6")	32' (30'6")
14'	W14x43	W12x30	3' (4')	10'6" (9'6")	33'6" (32'6")
16'	W10x49	W14x34	3' (4')	11' (10')	36' (35')
18'	W12x53	W18x35	3' (4')	11'6" (10'6")	38'6" (37'6")
20'	W14x61	W16x40	3' (4')	12'6" (11')	41'6" (40')
22"	W12x65	W14x43	3' (4')	136" (116")	44'6" (42'6")
25'	W12x79	W16x50	3' (4')	15' (12'6")	49' (46'6")
30'	W24x 104	W21x55	3' (4')	18' (15')	57' (54')
35'	W14x120	W21x68	3' (4')	20'6" (17'6")	64'6" (61'6")
40'	W14x145	W24x76	3' (4')	236" (196")	72'6" (68'6")

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.

direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.
- 3. Wind loading figured at **Exposure "C" Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas. 4. Wind loading figured at **Exposure "B" - Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind

Outdoor Scoreboard Pier Installation 3 Column Multi-Section

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0406

Sheet of 4

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Date 12/12/2014

150 MPH WIND ZONES

	EXPOSURE C (See Note 3)							
	Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W12x30	W10x22	2 (3)	10'6" (9')	27'6" (26')			
10"	W10x33	W12x26	2 (3)	11'6" (9'6")	30'6" (28'6")			
12"	W12x40	W12x30	2'(3')	126" (106")	33'6" (31'6")			
14'	W14x48	W14x34	2'(3')	136" (116")	36'6" (34'6")			
16'	W12x53	W18x35	2 (3)	15' (12')	40' (37')			
18'	W14x61	W16x40	2 (3)	16'6" (13')	436" (40')			
20'	W12x65	W21x44	2 (3)	18' (14')	47' (43')			
22	W12x79	W18x50	2 (3)	20' (15'6")	51' (46'6")			
25	W12x96	W18x55	3' (4')	17' (14'6")	51' (48'6")			
30'	W14x109	W21x68	3' (4')	20' (16'6")	59 (556")			
35	W14x132	W24x76	3' (4')	23' (19')	67 (63')			
40'	W14x159	W24x94	3' (4')	256" (216")	74'6" (70'6")			

20 FEET WIDE **INSTALLATIONS**

EXPOSURE B (See Note 4)					
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)	
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x24	W8x21	2' (3')	9' (7'6")	26' (24'6")
10'	W8x28	W10x22	2' (3')	10' (86")	29' (27'6")
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')
14'	W10x39	W12x26	2' (3')	116" (10')	346" (33')
16'	W10x45	W12x30	2' (3')	12' (10'6")	37' (35'6")
18'	W10x49	W14x34	2' (3')	13' (11')	40' (38')
20'	W10x54	W14x34	2' (3')	14' (11'6")	43' (40'6")
22'	W12x65	W16x40	2' (3')	16' (12'6")	47' (43'6")
25	W12x72	W21x44	3' (4')	14' (12')	48' (46')
30'	W12x96	W18x55	3' (4')	16' (13'6")	55' (52'6")
35	W14x109	W21x62	3' (4')	186" (156")	62'6" (59'6")
40'	W14x132	W24x68	3' (4')	21' (17'6")	70' (66'6")

	Column and Fo	undation Requireme	nts (Based	on ASCE 7-10)	
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x33	W12x26	2 (3)	11'6" (10')	286" (27')
10"	W12x40	W12x30	2' (3')	13' (11')	32' (30')
12'	W14x48	W14x34	2' (3')	15' (12')	36' (33')
14'	W10x60	W16x40	2' (3')	17' (13')	40' (36')
16'	W14x61	W21x44	2' (3')	186" (146")	43'6" (39'6")
18'	W12x72	W16x50	2 (3)	206" (156")	476" (426")
20"	W14x82	W18x55	2' (3')	22' (17')	51' (46')
22"	W12x96	W21x55	3' (4')	186" (156")	49'6" (46'6")
25	W14x109	W21x68	3' (4')	21' (17'6")	55' (51'6")
30'	W18x143	W24x76	3' (4')	25' (20'6")	64" (59'6")
35	W18x175	W24x94	3' (4')	286" (236")	72'6" (67'6")
40'	W14x211	W24x104	3' (4')	32' (26'6")	81' (756")

24	FEET	WIDE
INS	TALLA	TIONS

Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x28	W10x22	2' (3')	10' (8'6")	27' (25'6")
10"	W10x33	W10x26	2' (3')	11' (9'6")	30' (28'6")
12'	W10x39	W12x26	2' (3')	12 (106")	33' (31'6")
14'	W14x48	W14x30	2' (3')	13'6" (11')	36'6" (34')
16'	W12x53	W18x35	2' (3')	146" (12')	39'6" (37')
18'	W10x60	W16x40	2' (3')	16' (12'6")	43' (39'6")
20'	W12x65	W14x43	2' (3')	176" (136")	46'6" (42'6")
22"	W12x72	W16x50	3' (4')	14'6" (12'6")	456" (436")
25	W12x96	W18x55	3' (4')	17' (14')	51' (48')
30'	W14x109	W21x68	3' (4')	20' (16'6")	59' (59'6")
35	W14x132	W24x76	3' (4')	23' (19')	67' (63')
40'	W14x159	W24x94	3' (4')	26 (216)	75' (70'6")
				· ·	·

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W14x38	W12x26	2 (3)	12' (10'6")	29 (276")	
10'	W14x43	W14x34	2 (3)	14' (11'6")	33 (306")	
12'	W12x53	W16x36	2 (3)	16' (12'6")	37 (336")	
14'	W14x61	W14x43	2 (3)	18' (14')	41' (37')	
16'	W16x67	W16x50	2 (3)	206" (156")	45'6" (40'6")	
18'	W18x76	W18x55	2'(3')	22' (17')	49' (44')	
20'	W18x86	W21x55	2 (3)	24' (18'6")	53 (476")	
22'	W16x100	W21x62	3' (4')	20' (16'6")	51' (47'6")	
25	W14x109	W24x68	3' (4')	22' (18'6")	56 (526")	
30'	W14x145	W24x84	3' (4')	27" (22'6")	66' (61'6")	
35	W18x192	W24x104	3' (4')	31' (25'6")	75 (696")	
40'	W14x233	W24x131	3' (4')	35 (29')	84' (78')	

28 FEET WIDE
INSTALLATIONS

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x30	W14x22	2' (3')	10'6" (9')	27'6" (26')
10"	W14x38	W12x26	2' (3')	11'6" (10')	30'6" (29')
12'	W14x43	W12x30	2' (3')	126" (106")	336" (316")
14'	W10x49	W14x34	2' (3')	14' (11'6")	37' (34'6")
16'	W12x53	W16x36	2' (3')	16' (12'6")	41' (37'6")
18'	W14x61	W14x43	2' (3')	176" (136")	44'6" (40'6")
20'	W12x72	W14x48	2' (3')	19' (14'6")	48' (43'6")
22'	W12x79	W18x50	3' (4')	16' (13'6")	47' (44'6")
25	W12x96	W21x55	3' (4')	176" (15')	51'6" (49')
30'	W14x120	W24x68	3' (4')	216 (18)	60'6" (57")
35	W14x195	W24x84	3' (4')	25' (20'6")	69' (64'6")
40'	W14x176	W21x101	3' (4')	28' (23'6")	77' (72'6")

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller
- than 20' place braces on 10' spacing.

 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

 4. Wind loading figured at **Exposure** "B" **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 3 Column Multi-Section

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0406

Drawn KAB

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12/12/2014

180 MPH WIND ZONES

EXPOSURE C (See Note 3)								
	Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8"	W16x36	W12x26	2' (3')	12' (10')	29' (27')			
10'	W12x40	W14x30	2' (3')	13'6" (11')	32'6" (30')			
12'	W10x49	W18x35	2' (3')	156" (12')	36'6" (33')			
14'	W10x60	W16x40	2' (3')	17'6" (13'6")	40'6" (36'6")			
16'	W12x65	W21x44	2' (3')	19' (14'6")	44' (39'6")			
18'	W12x72	W18x50	2' (3')	21' (16')	48' (43')			
20'	W18x86	W18x55	2' (3')	22'6" (17'6")	51'6" (46'6")			
22'	W18x97	W21x62	2' (3')	25'6" (19'6")	56'6" (50'6")			
25'	W14x109	W21x68	3' (4')	21'6" (18')	55'6" (52')			
30'	W18x143	W24x84	3' (4')	25' (21')	64' (60')			
35'	W14x176	W21x101	3' (4')	29' (24')	73' (68')			
40'	W14x211	W24x117	3' (4')	32'6" (27")	81'6" (76')			

20 FEET WIDE **INSTALLATIONS**

	EX	POSURE B (S	See Note	e 4)			
Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W12x30	W10x22	2' (3')	10'6" (9')	27'6" (26')		
10'	W10x33	W10x26	2' (3')	11' (9'6")	30' (28'6")		
12'	W12x40	W12x30	2' (3')	12' (10'6")	33' (31'6")		
14'	W14x48	W14x34	2' (3')	13'6" (11')	36'6" (34')		
16'	W12x53	W18x35	2' (3')	15' (12')	40' (37')		
18'	W14x61	W16x40	2' (3')	166" (13')	43'6" (40')		
20'	W12x65	W21x44	2' (3')	18' (14')	47' (43')		
22'	W12x79	W18x50	2' (3')	20' (15'6")	51' (46'6")		
25'	W12x96	W21x55	3' (4')	176" (146")	51'6" (48'6")		
30'	W14x109	W21x68	3' (4')	20' (17')	59' (56')		
35'	W14x145	W24x76	3' (4')	23 (196")	67" (63'6")		
40'	W14x176	W24x94	3' (4')	26' (22')	75' (71')		

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8"	W12x40	W14x34	2' (3')	14'6" (11'6")	31'6" (28'6")	
10'	W14x48	W16x36	2' (3')	166" (13')	356" (32')	
12'	W14x61	W21x44	2' (3')	19' (14'6")	40' (356")	
14'	W16x67	W18x50	2' (3')	21'6" (16'6")	44'6" (39'6")	
16'	W18x76	W18x55	2' (3')	24' (18')	49' (43')	
18'	W18x86	W21x62	2' (3')	26' (20')	53' (47')	
20'	W21x101	W21x68	2' (3')	286" (216")	57'6" (50'6")	
22'	W24x104	W24x68	3' (4')	23' (19'6")	54' (50'6")	
25'	W24x131	W24x84	3' (4')	27" (22'6")	61' (56'6")	
30'	W18x175	W24x104	3' (4')	31'6" (26')	70'6" (65')	
35'	W14x233	W24x131	3' (4')	36' (30')	80' (74')	
40'	W18x258	W24x146	3' (4')	41' (33'6")	90' (82'6")	

24 FEET WIDE **INSTALLATIONS**

	Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W10x33	W12x26	2' (3')	11'6" (10')	28'6" (27')		
10'	W12x40	W12x30	2' (3')	13' (11')	32' (30')		
12'	W14x48	W14x34	2' (3')	15' (12')	36' (33')		
14'	W12x53	W16x40	2' (3')	17' (13')	40' (36')		
16'	W14x61	W21x44	2' (3')	18'6" (14'6")	436" (396")		
18'	W12x72	W16x50	2' (3')	20'6" (15'6")	476" (42'6")		
20'	W14x82	W18x55	2' (3')	22' (17')	51' (46')		
22'	W12x96	W21x55	3' (4')	18'6" (15'6")	49'6" (46'6")		
25'	W14x109	W21x68	3' (4')	21'6" (18')	55'6" (52')		
30'	W18x143	W24x84	3' (4')	25' (21')	64' (60')		
35'	W18x175	W21x101	3' (4')	29' (24')	73' (68')		
40'	W14x211	W24x117	3' (4')	326" (27")	81'6" (76')		

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8	W14x43	W14x34	2' (3')	156" (12')	32'6" (29')	
10'	W12x53	W16x40	2' (3')	18' (14')	37' (33')	
12'	W14x61	W14x48	2' (3')	20'6" (15'6")	41'6" (36'6")	
14'	W14x74	W18x55	2' (3')	23' (17'6")	46' (40'6")	
16'	W18x86	W21x55	2' (3')	26' (19'6")	51' (44'6")	
18'	W18x97	W21x68	2' (3')	28'6" (21'6")	55'6" (48'6")	
20'	W21x101	W24x68	2' (3')	31' (23'6")	60' (52'6")	
22'	W24x117	W24x76	3' (4')	256" (21')	566" (52')	
25'	W18x143	W24x94	3' (4')	28' (23')	62' (57')	
30'	W21x182	W24x117	3' (4')	34'6" (28'6")	73'6" (67'6")	
35'	W18x234	W24x146	3' (4')	39'6" (32'6")	83'6" (76'6")	
40'	W18x283	W24x176	3' (4')	44'6" (36'6")	93'6" (85'6")	

28 FEET WIDE **INSTALLATIONS**

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W16x36	W12x26	2' (3')	12' (10'6")	29' (27'6")
10'	W14x43	W14x34	2' (3')	14' (11'6")	33' (30'6")
12'	W12x53	W16x36	2' (3')	16 (126")	37" (33'6")
14'	W14x61	W16x40	2' (3')	18' (14')	41' (37')
16'	W16x67	W16x50	2' (3')	20' (15'6")	45' (40'6")
18'	W18x76	W18x55	2' (3')	22' (17')	49' (44')
20'	W18x86	W21x55	2' (3')	24' (18'6")	53' (47'6")
22'	W16x100	W21x62	3' (4')	20' (16'6")	51' (47'6")
25'	W14x109	W24x68	3' (4')	22'6" (18'6")	56'6" (52'6")
30'	W18x158	W24x94	3' (4')	27' (22'6")	66' (61'6")
35'	W18x192	W24x104	3' (4')	31'6" (26')	75'6" (70')
40'	W14x233	W24x131	3' (4')	356" (296")	84'6" (78'6")

Chart Notes:

4

1. If the display height is between chart values shown above, use the next highest value.

2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.

3. Wind loading figured at **Exposure "C" - Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

4. Wind loading figured at **Exposure "B" - Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

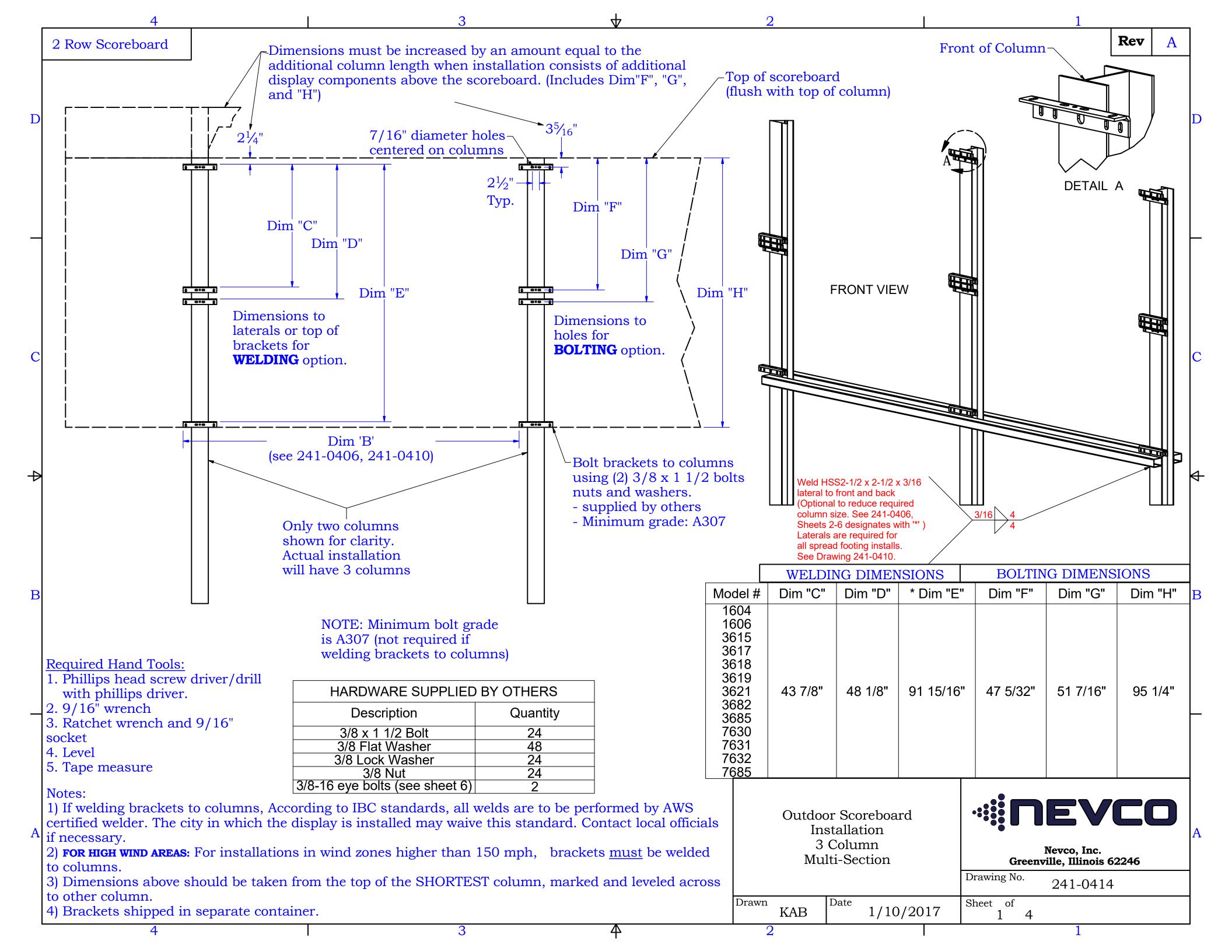
Outdoor Scoreboard Pier Installation 3 Column Multi-Section

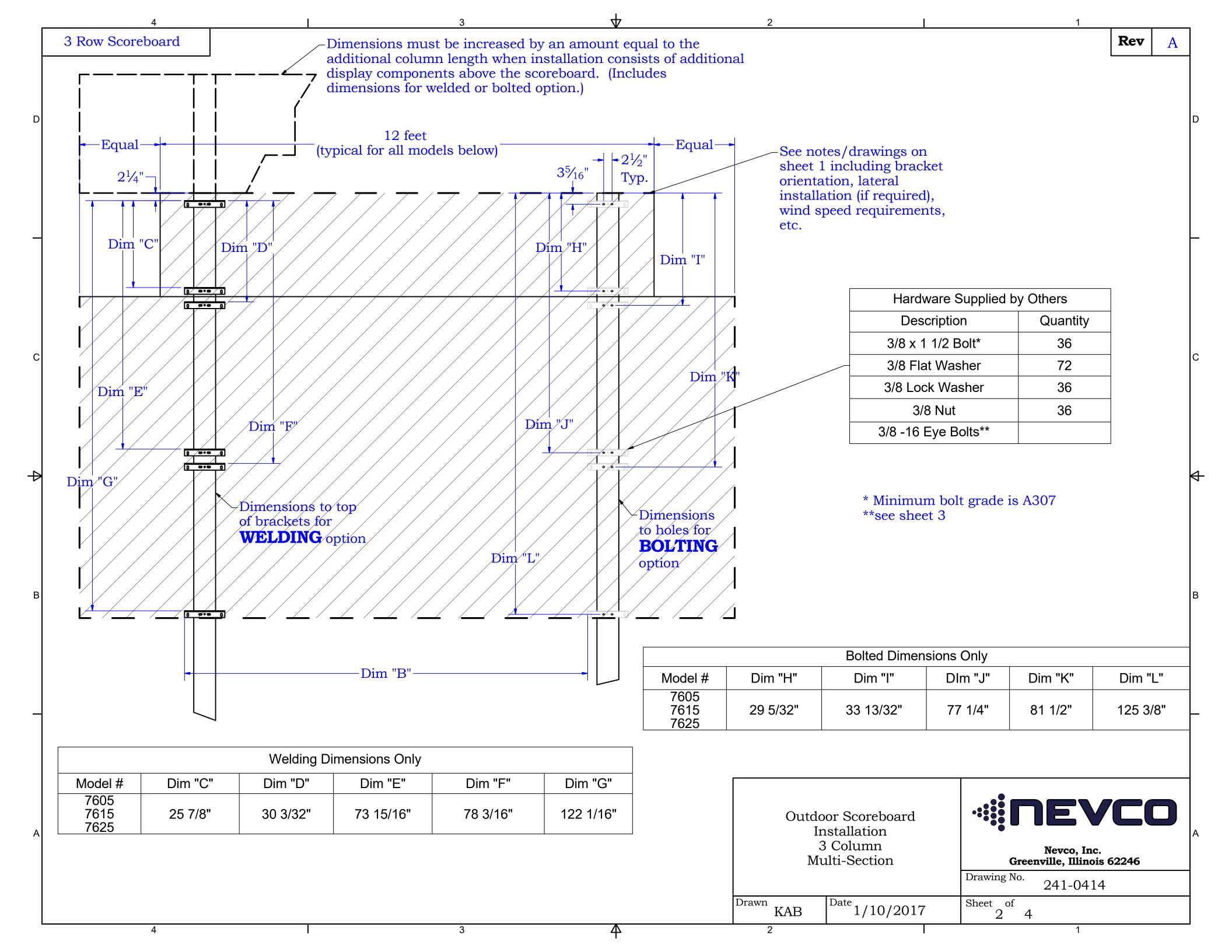
Nevco, Inc. Greenville, Illinois 62246

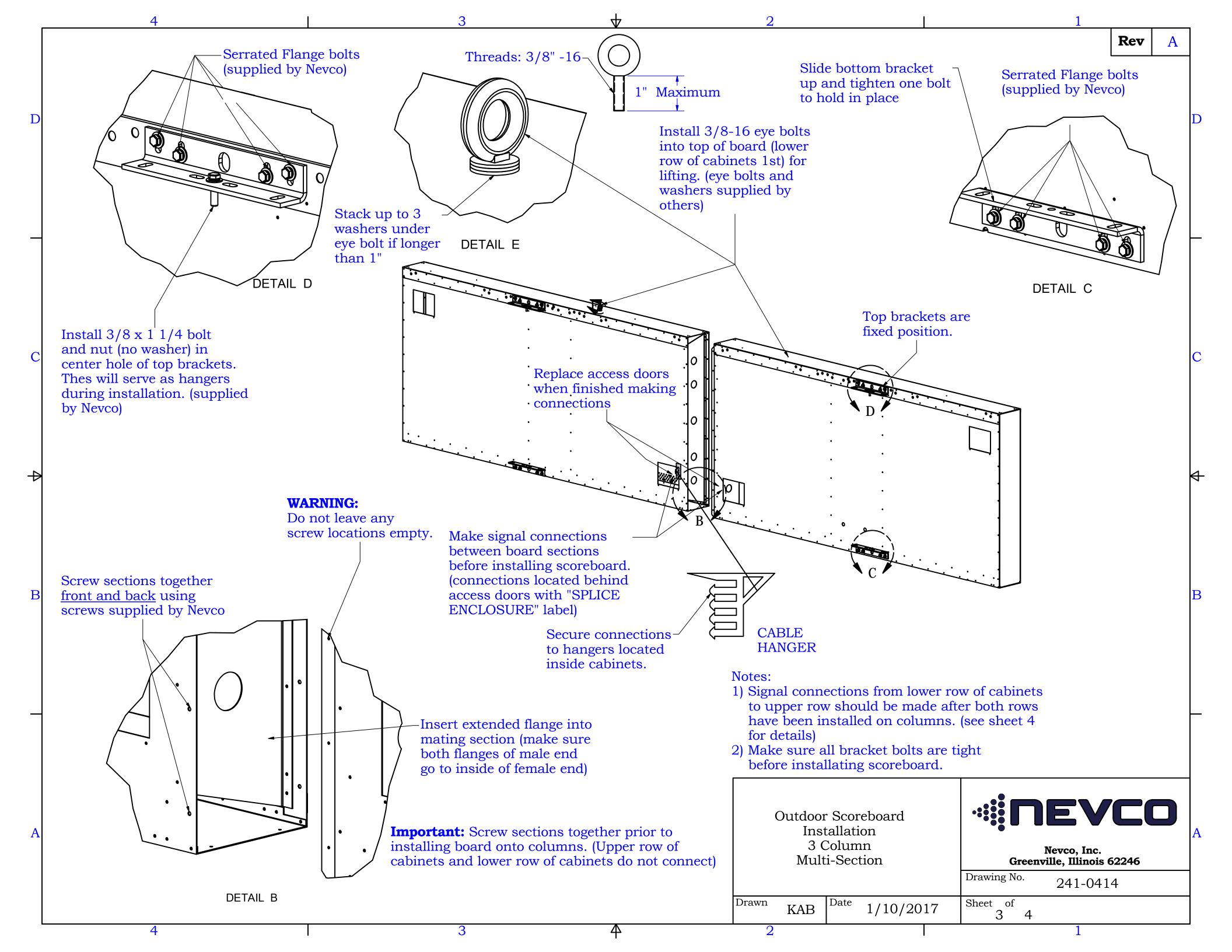
Drawing No. 241-0406

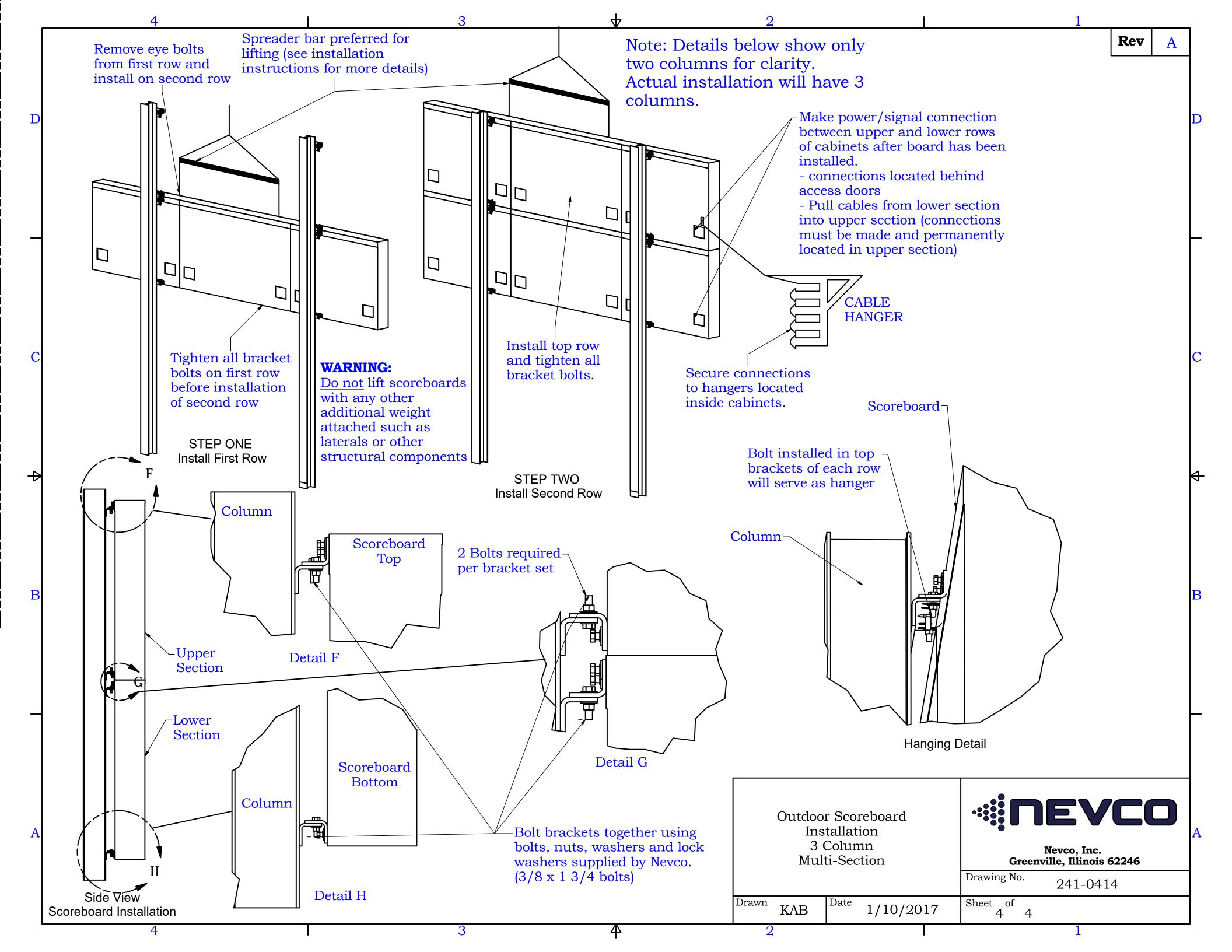
Drawn KAB Date 12/12/2014

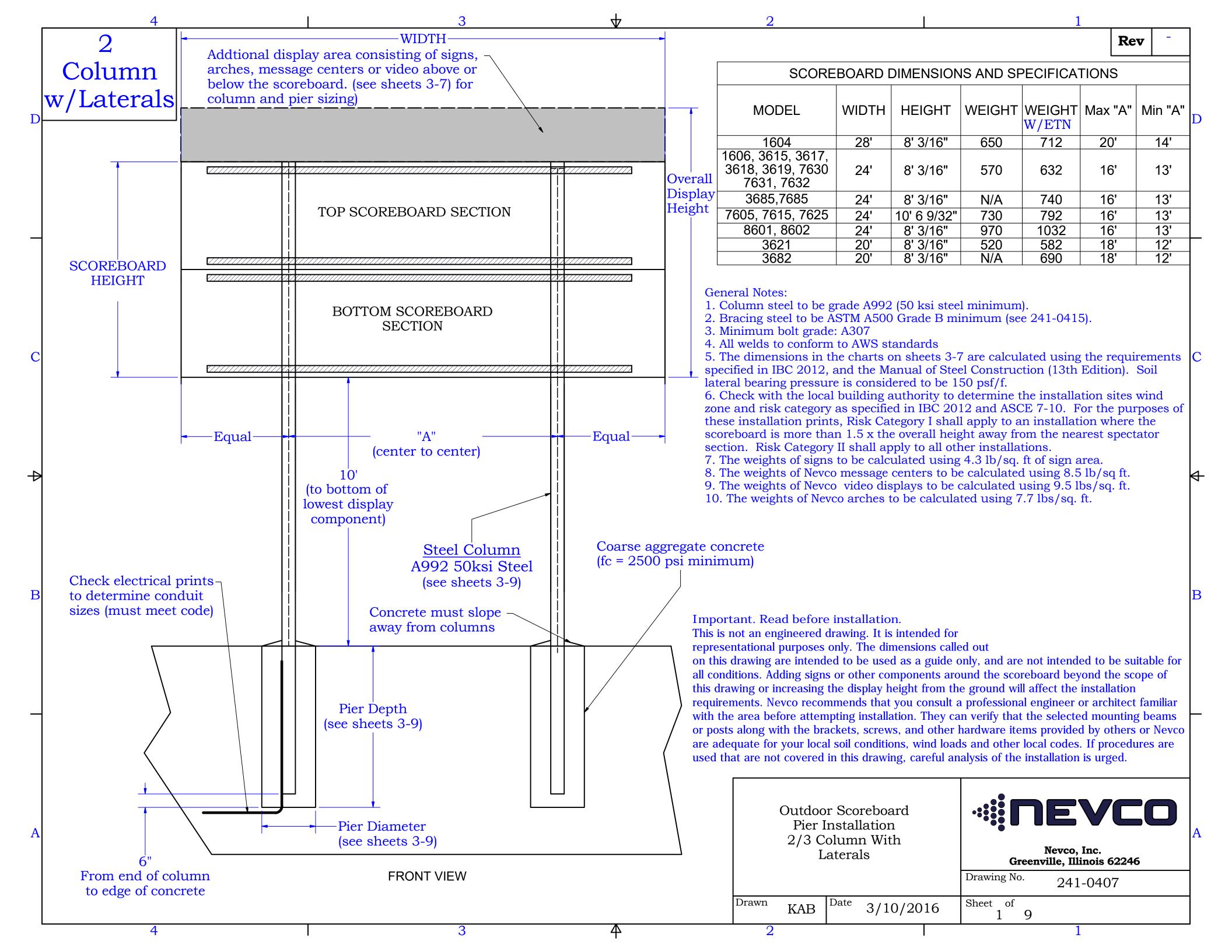
Sheet of 6

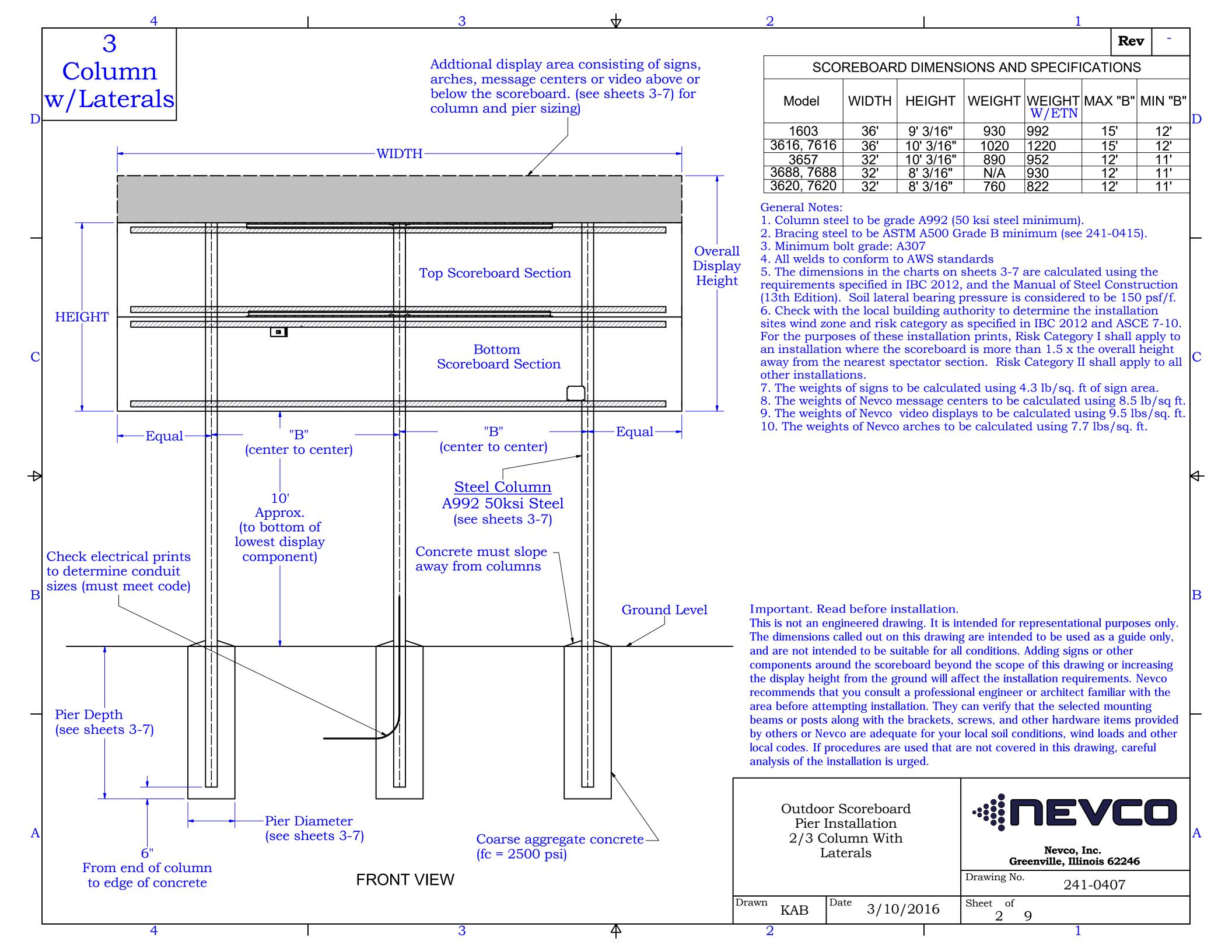












52'6" (51')

59'6" (57')

66'6" (64')

EXPOSURE C (See Note 3)

Column and Foundation Requirements (Based on ASCE 7-10)						
8'	W8x21	2' (3')	9' (8')	26' (25')		
10'	W10x22	2' (3')	10' (8'6")	29' (27'6")		
12'	W10x26	2' (3')	11' (9'6")	32' (30'6")		
14'	W12x26	2' (3')	11'6" (10')	34'6" (33')		
16'	W12x30	2' (3')	12'6" (10'6")	37'6" (35'6")		
18'	W14x34	2' (3')	13'6" (11'6")	40'6" (38'6")		
20'	W16x36	2' (3')	15' (12')	44' (41')		
22'	W16x40	2' (3')	16'6" (13')	47'6" (44')		
25'	W16x50	3' (4')	14'6" (12')	48'6" (46')		
30'	W18x55	3' (4')	17' (14')	56' (53')		
35'	W21x62	3' (4')	19' (16')	63' (60')		
40'	W24x68	3' (4')	21'6" (18')	70'6" (67')		

20 FEET WIDE **INSTALLATIONS** (2 COLUMNS)

EXPOSURE B (See Note 4)						
	Column and Founda	tion Requirement	ls (Based on ASCE 7-	-10)		
Display Height Braced Column* Pier Dia. Pier Depth Column Leng						
8'	W8x18	2' (3')	8' (7')	25' (24')		
10"	W8x18	2 (3)	9' (7'6")	28' (26'6")		
12'	W10x22	2 (3)	9'6" (8')	30'6" (29')		
14'	W14x22	2 (3)	10' (9')	33 (32)		
16'	W10x26	2 (3)	11' (9'6")	36' (34'6")		
18'	W12x26	2 (3)	11'6" (10')	38'6" (37')		
20'	W12x30	2 (3)	12' (10'6")	41' (396")		
22"	W14x34	2 (3)	13'6" (11')	44'6" (42')		
25	W16x36	3' (4')	12' (10'6")	46' (44'6")		

3' (4')

3' (4')

3' (4')

136" (12)

156" (13')

176" (15)

W21x44

W18x55

W21x62

120 MPH WIND ZONES

30

35

40"

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W10x22	2' (3')	10' (9')	27' (26')			
10'	W10x26	2' (3')	11' (9'6")	30' (28'6")			
12'	W12x30	2' (3')	12' (10'6")	33' (31'6")			
14'	W14x34	2' (3')	13'6" (11')	36'6" (34')			
16'	W18x35	2' (3')	15' (12')	40' (37')			
18'	W16x40	2' (3')	16' (12'6")	43' (39'6")			
20'	W14x43	2' (3')	17'6" (13'6")	46'6" (42'6")			
22'	W16x50	2' (3')	19'6" (15'6")	50'6" (46'6")			
25'	W18x55	3' (4')	17' (14')	51' (48')			
30'	W21x62	3' (4')	20' (16'6")	59' (55'6")			
35'	W24x76	3' (4')	22'6" (19')	66'6" (63')			
40'	W24x84	3' (4')	256" (21'6")	74'6" (70'6")			

20 FEET WIDE **INSTALLATIONS** (2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W8x18	2' (3')	9' (7'6")	26' (24'6")		
10"	W10x22	2' (3')	9'6" (8'6")	286" (276")		
12'	W10x26	2' (3')	10'6" (9')	31'6" (30')		
14'	W12x26	2' (3')	11'6" (9'6")	346" (326")		
16'	W12x30	2' (3')	12' (10'6")	37" (35'6")		
18'	W14x30	2' (3')	13' (11')	40' (38')		
20'	W14x34	2' (3')	14' (11'6")	43' (40'6")		
22'	W16x40	2' (3')	15'6" (12'6")	466" (436")		
25	W21x44	3' (4')	136" (12')	47'6" (46')		
30'	W18x55	3' (4')	16' (13'6")	55' (52'6")		
35	W21x62	3' (4')	18'6" (15'6")	626" (596")		
40'	W24x68	3' (4')	20'6" (17'6")	69'6" (66'6")		

130 MPH WIND ZONES

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W10x26	2' (3')	11' (9'6")	28' (26'6")		
10'	W12x26	2' (3')	12' (10')	31' (29')		
12'	W14x30	2' (3')	13'6" (11')	34'6" (32')		
14'	W14x34	2' (3')	15' (12')	38' (35')		
16'	W16x40	2' (3')	166" (126")	41'6" (37'6")		
18'	W21x44	2' (3')	18' (14')	45' (41')		
20'	W16x50	2' (3')	19'6" (15')	48'6" (44')		
22'	W18x55	2' (3')	22' (17')	53' (48')		
25'	W21x62	3' (4')	18'6" (15'6")	52'6" (49'6")		
30'	W24x68	3' (4')	22' (18'6")	61' (57'6")		
35'	W24x84	3' (4')	25' (21')	69' (65')		
40'	W21x101	3' (4')	28' (23'6")	77" (72'6")		

20 FEET WIDE **INSTALLATIONS** (2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W8x21	2' (3')	9'6" (8')	26'6" (25')	
10"	W10x22	2 (3)	10' (9')	29' (28')	
12'	W12x26	2' (3')	11' (9'6")	32' (30'6")	
14'	W12x30	2' (3')	12' (10'6")	35' (33'6")	
16'	W14x30	2' (3')	13' (11')	38' (36')	
18'	W14x34	2' (3')	14' (11'6")	41' (38'6")	
20'	W16x36	2' (3')	156" (12')	44'6" (41')	
22'	W14x43	2' (3')	17'6" (13'6")	48'6" (44'6")	
25	W16x50	3' (4')	15' (12'6")	49' (46'6")	
30'	W21x55	3' (4')	176" (15')	56'6" (54')	
35	W21x68	3' (4')	20' (17')	64' (61')	
40'	W24x76	3' (4')	23' (19')	72' (68')	

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.

2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).

- 3. Wind loading figured at **Exposure** "C" Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2/3 Column With Laterals

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0407

Drawn KAB 3/10/2016

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EXPOSURE C (See Note 3)					
	Column and Founda	rtion Requiremen	ts (Based on ASCE 7	-10)	
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W12x26	2' (3')	12' (10'6")	29' (27'6")	
10'	W14x30	2' (3')	14' (11'6")	33' (30'6")	
12'	W16x36	2' (3')	16' (12'6")	37' (33'6")	
14'	W16x40	2' (3')	18' (14')	41' (37')	
16'	W16x50	2' (3')	19'6" (15')	44'6" (40')	
18'	W18x50	2' (3')	21'6" (16'6")	48'6" (43'6")	
20'	W21x55	2' (3')	23'6" (18')	52'6" (47')	
22"	W21x62	2' (3')	26'6" (20')	57'6" (51")	
25	W24x68	3' (4')	22'6" (18'6")	56'6" (52'6")	
30'	W24x84	3' (4')	26'6" (22')	656" (61")	
35	W24x103	3' (4')	30' (25')	74' (69')	

3' (4')

W24x117

34' (28')

20 FEET WIDE INSTALLATIONS (2 COLUMNS)

EXPOSURE B (See Note 4)					
	Column and Founda	ntion Requiremen	ts (Based on ASCE 7	-10)	
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W10x22	2' (3')	10'6" (9')	27'6" (26')	
10'	W12x26	2' (3')	11'6" (10')	30'6" (29')	
12'	W12x30	2' (3')	12'6" (10'6")	33'6" (31'6")	
14'	W14x34	2' (3')	14' (11'6")	37' (34'6")	
16'	W16x36	2' (3')	156" (12')	40'6" (37')	
18'	W16x40	2' (3')	17' (13')	44' (40')	
20'	W21x44	2' (3')	18'6" (14'6")	476" (436")	
22"	W18x50	2' (3')	21' (16')	52' (47')	
25	W21x55	3' (4')	18' (15')	52' (49')	
30'	W21x68	3' (4')	21' (17'6")	60' (56'6")	
35	W24x84	3' (4')	24' (20')	68' (64')	
40'	W24x94	3' (4')	27'6" (23')	76'6" (72')	

180 MPH WIND ZONES

83' (77')

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W14x34	2' (3')	15' (12')	32' (29')		
10'	W16x40	2 (3)	176" (136")	366" (326")		
12'	W14x48	2 (3)	20'6" (156")	41'6" (36'6")		
14'	W18x55	2 (3)	23' (17'6")	46' (40'6'')		
16"	W21x55	2 (3)	25' (19')	50' (44')		
18'	W21x62	2 (3)	276" (21')	54'6" (48')		
20'	W24x68	2 (3)	30' (23')	59' (52')		
22"	W24x76	2' (3')	34' (25'6")	65' (56'6")		
25	W24x94	3' (4')	28'6" (23'6")	62'6" (57'6")		
30'	W24x104	3' (4')	336" (276")	72'6" (66'6")		
35	W24x131	3' (4')	38'6" (32')	826" (76')		
40'	W24x162	3' (4')	43'6" (36')	92'6" (85')		

20 FEET WIDE INSTALLATIONS (2 COLUMNS)

	Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W12x26	2' (3')	12' (10')	29' (27')		
10'	W14x30	2 (3)	13'6" (11')	32'6" (30')		
12'	W16x36	2' (3')	16' (12'6'')	37' (33'6")		
14'	W16x40	2 (3)	176" (136")	40'6" (36'6")		
16'	W14x48	2' (3')	19'6" (15')	44'6" (40')		
18'	W18x50	2 (3)	21'6" (16'6")	48'6" (43'6")		
20'	W21x55	2' (3')	23'6" (18')	52'6" (47')		
22"	W21x62	2 (3)	26'6" (20'6")	57'6" (51'6")		
25	W24x68	3' (4')	22'6" (19')	56'6" (53')		
30'	W24x84	3' (4')	26'6" (22')	65'6" (61')		
35	W24x104	3' (4')	30'6" (25'6")	74'6" (69'6")		
40'	W24x131	3' (4')	34'6" (29')	83'6" (78')		

Outdoor Scoreboard
Pier Installation
2/3 Column With
Laterals



Rev

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0407

Drawn KAB Date 3/10/2016 Sheet of 4 9

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EXPOSURE B (See Note 4)

Rev

686" (65'6")

Column and Foundation Requirements (Based on ASCE 7-10) Braced Column* Pier Dia. Display Height Pier Depth Column Length W8x 18 2'(3') 8'6" (7'6") 256" (24'6") 2'(3') 10 W8x21 96"(8) 286"(27) 12 W10x22 2'(3') 10' (8'6") 31' (296") 14 W10x26 2'(3') 11" (9"6") 34 (326") 16 W12x26 2'(3') 11'6" (10') 366" (35) 12'6" (10'6") 396" (37'6") 18 W12x30 2'(3') 20 W14x34 2'(3') 13'6" (11') 42'6" (40') 22 W18x35 2'(3') 14'6" (11'6") 456" (42'6") 25 W16x40 3'(4') 13' (11'6") 47 (456") 15' (13') 30 W18x50 3'(4') 54' (52') 35 W21x55 3'(4') 616" (58'6") 17'6" (14'6")

3'(4')

19'6" (16'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	2'(3')	9' (7'6")	26' (24'6")
10"	W10x22	2' (3')	10' (8'6")	29 (276")
12'	W10x26	2' (3')	10'6" (9')	31'6" (30')
14	W12x26	2'(3')	11'6" (10')	346" (33')
16'	W12x30	2'(3')	12'6" (10'6")	376" (35'6")
18'	W14x34	2' (3')	13'6" (11')	40'6" (38')
20"	W18x35	2' (3')	14'6" (12')	43'6" (41')
22'	W16x40	2'(3')	16' (12'6")	47' (43'6")
25	W21x44	3' (4')	14' (12')	48' (46')
30'	W18x55	3'(4')	16'6" (14')	556" (53')
35	W21x62	3'(4')	19' (16')	63' (60')
40'	W24x68	3' (4')	21'6" (18')	70'6" (67")

	Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8,	W10x17	2' (3')	8' (7')	25' (24')		
10"	W8x 18	2' (3')	8'6" (7'6")	276" (26'6")		
12'	W8x21	2' (3')	9'6"(8')	30'6" (29')		
14	W10x22	2' (3')	10' (8'6")	33' (31'6")		
16'	W10x26	2' (3')	10'6" (9'6")	356" (34'6")		
18'	W12x26	2' (3')	11'6" (10')	386" (37')		
20'	W12x30	2' (3')	12' (10'6")	41' (39'6")		
22'	W14x34	3' (4')	11' (10')	42' (41')		
25	W18x35	3' (4')	11'6" (10'6")	456" (44'6")		
30	W21x44	3' (4')	13' (11'6")	52' (50'6")		
35	W18x55	3' (4')	15'6" (13')	59'6" (57')		
40'	W21x62	3' (4')	17'6" (15')	66'6" (64')		

		- (-/	(/	
Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W8x21	2' (3')	9' (7'6")	27' (25'6")
10"	W8x21	2' (3')	9, (8,)	28' (27')
11"	W10x22	2' (3')	9'6" (8'6")	296" (28'6")
12'	W10x22	2' (3')	10' (8'6")	31' (29'6")
13'	W14x22	2' (3')	10'6" (9')	32'6" (31')
14	W10x26	2' (3')	10'6" (9'6")	336" (32'6")
15	W12x26	2' (3')	11' (9'6")	35' (33'6")
20"	W14x34	3' (4')	11' (10')	40' (39')
25	W16x40	3' (4')	12'6" (11')	46'6" (45')
30'	W16x50	3' (4')	14'6" (12'6")	536" (51'6")
35	W21x55	3' (4')	16'6" (14')	60'6" (58')
40'	W21x68	3' (4')	19'6" (16'6")	686" (65'6")

3/10/2016

24 FEET WIDE INSTALLATIONS (2 COLUMNS)

40

W21x68

28 FEET WIDE INSTALLATIONS

INSTALLATIONS (2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	2' (3')	9' (8')	26' (25')
10'	W 10x 22	2' (3')	10' (8'6")	29' (27'6")
12'	W 10x 26	2' (3')	11' (9'6")	32' (30'6")
14'	₩12x26	2' (3')	11'6" (10')	34'6" (33')
16'	W12x30	2' (3')	12'6" (10'6")	37'6" (35'6")
18'	W14x34	2' (3')	13'6" (11'6")	40'6" (38'6")
20'	W 16x 36	2' (3')	15' (12 ')	44' (41')
22'	W 16x 40	3' (4')	12'6" (11')	43'6" (42')
25'	W21x44	3' (4')	14' (12')	48' (46')
30'	₩18x55	3' (4')	16' (13'6")	55' (52 '6")
35'	W21x62	3' (4')	19' (16')	63' (60')
40'	W24x68	3' (4')	21'6" (18')	70'6" (67')

EXPOSURE C (See Note 3)

Column and Foundation Requirements (Based on ASCE 7-10)

Pier Depth

10" (8"6")

11' (9'6")

11'6" (10')

13' (11')

14" (11'6")

15'6" (12')

166" (13')

18' (14')

16' (13'6")

19' (16')

21'6" (18')

24' (20')

Pier Depth

10'6" (9')

11'6" (10')

126" (106")

14" (11'6")

156" (12')

17' (13')

186" (146")

20" (15'6")

17" (14'6")

20'6" (17'6")

23'6" (20')

266" (226")

Column Length

27" (25'6")

30" (28'6")

32'6" (31')

36' (34')

39" (36'6")

42'6" (39')

45'6" (42')

49' (45')

50" (47'6")

58' (55')

65'6" (62')

73' (69')

Column Length

276" (26")

30'6" (29')

336" (316")

37" (34'6")

40'6" (37')

44' (40')

476" (436")

51" (46"6")

51' (48'6")

596" (566")

67'6" (64')

75'6" (71'6")

Pier Dia.

2'(3')

2'(3')

2' (3')

2' (3')

2'(3')

2' (3')

2'(3')

2' (3')

3' (4')

3' (4')

3' (4')

3' (4')

Pier Dia.

2'(3')

2'(3')

2'(3')

2' (3')

2'(3')

2'(3')

2'(3')

2' (3')

3' (4')

3' (4')

3' (4')

3' (4')

Column and Foundation Requirements (Based on ASCE 7-10)

	Column and Founda	ation Requiremen	ts (Based on ASCE 7-	10)
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W 10x 22	2' (3')	10' (9')	28' (27')
10'	W 10x 26	2' (3')	10'6" (9')	29'6" (28')
11'	₩10x26	2' (3')	11' (9'6")	31' (29'6")
12'	W 12x 26	2' (3')	11'6" (10')	32'6" (31')
13'	W 12x 30	2' (3')	12' (10'6")	34" (32'6")
14'	W12x30	2' (3')	12'6" (10'6")	35'6" (33'6")
15'	W 14x 30	2' (3')	13' (11')	37' (35')
20'	₩ 16x 40	3' (4')	13' (11'6")	42' (40'6")
25'	W 18x 50	3' (4')	15'6" (13')	49'6" (47')
30'	₩21x55	3' (4')	18' (15')	57' (54 ')
35'	₩21x68	3' (4')	20'6" (17')	64'6" (61')
40'	W24x84	3' (4')	24' (20')	73' (69')

32 FEET WIDE INSTALLATIONS (3 COLUMNS)

36 FEET WIDE INSTALLATIONS (3 COLUMNS)

Chart Notes:

Display Height

10'

12"

14

16'

18'

20'

22

25'

30'

35'

40'

Display Height

10'

12

14

16'

18'

20'

22

25'

30'

35'

40'

Braced Column*

W 10x 22

W10x26

W12x26

W12x30

W14x34

W 16x 36

W 16x 40

W21x44

W 18x 55

W21x62

W24x68

W24x84

Braced Column*

W 10x 22

W12x26

W12x30

W14x34

W 16x 36

W 16x 40

W21x44

W 16x 50

W 18x 55

W21x68

W24x76

W24x94

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard
Pier Installation
2/3 Column With
Laterals

Drawn

KAB

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0407

Sheet of

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Rev

EXPOSURE C (See Note 3)

	Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W10x26	2'(3')	11' (9'6")	28 (266")	
10'	W12x26	2'(3')	12' (10')	31'(29')	
12'	W14x30	2'(3')	13'6" (11')	346"(32)	
14'	W18x35	3'(4')	12' (10'6")	35 (336")	
16'	W16x40	3'(4')	13' (11'6")	38 (366")	
18'	W21x44	3'(4')	14' (12')	41'(39')	
20'	W16x50	3'(4')	15'6" (13')	446" (42')	
22"	W18x55	3'(4')	16'6" (14')	476" (45')	
25'	W21x62	3'(4')	19' (16')	53'(50')	
30'	W24x68	3'(4')	22' (18'6")	61' (57'6 ")	
35'	W24x84	3'(4')	25'6" (21')	696" (65')	
40'	W21x101	3'(4')	28'6" (24')	776" (73')	

24 FEET WIDE **INSTALLATIONS** (2 COLUMNS)

	Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W8x21	2'(3')	9'6" (8')	266" (25')	
10"	W10x22	2'(3')	10'6" (9')	296" (28')	
12'	W12x26	2'(3')	11' (9'6")	32 (306")	
14'	W12x30	3'(4')	10'6" (9'6")	33'6" (32'6")	
16'	W14x30	3'(4')	11' (10')	36'(35')	
18'	W14x34	3'(4')	11'6" (10'6")	38'6" (37'6")	
20"	W16x40	3'(4')	12' (11')	41'(40')	
22"	W14x43	3'(4')	13' (11'6")	44 (426")	
25'	W18x50	3'(4')	15'6" (13')	496" (47')	
30	W21x55	3'(4')	18' (15')	57'(54')	
35'	W21x68	3'(4')	20'6" (17')	646" (61')	
40'	W24x76	3'(4')	23' (19'6")	72 (686")	

EXPOSURE B (See Note 4)

			1		
Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W12x26	2'(3')	11'6" (10')	286" (27")	
10'	W12x30	2'(3')	13' (11')	32'(30')	
12'	W14x34	2'(3')	14'6" (11'6")	35'6" (32'6")	
14'	W16x40	3'(4')	12'6" (11')	356" (34')	
16'	W21x44	3'(4')	14' (12')	39'(37')	
18'	W16x50	3'(4')	15'6" (13')	426" (40")	
20'	W18x55	3'(4')	17' (14')	46'(43')	
22'	W21x55	3'(4')	18 (15')	49'(46')	
25'	W21x62	3'(4')	20' (17')	54'(51')	
30'	W24x76	3'(4')	24'6" (20'6")	63'6" (59'6")	
35'	W24x94	3'(4')	28' (23'6")	72 (676")	
40'	W24x104	3'(4')	31'6" (26'6")	80'6" (75'6")	

28 FEET WIDE
INSTALLATIONS
(2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2'(3')	10' (8'6")	27 (2567)
10'	W10x26	2'(3')	11' (9'6")	30 (286")
12'	W12x26	2'(3')	12' (10')	33'(31')
14'	W14x30	3'(4')	11' (10')	34'(33')
16'	W14x34	3'(4')	11'6" (10'6")	36'6" (35'6")
18'	W16x40	3'(4')	12'6" (11')	396" (38')
20'	W14x43	3'(4')	13'6" (11'6")	42'6" (40'6")
22'	W14x48	3'(4')	14'6" (12')	456" (43')
25'	W18x55	3'(4')	16' (13'6")	50' (47'6")
30'	W21x62	3'(4')	19'6" (16'6")	58'6" (55'6")
35'	W24x76	3'(4')	22'6" (19')	666" (63")
40'	W24x94	3'(4')	25'6" (21'6")	74'6" (70'6")

0-1					
Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W10x22	2'(3')	10' (8'6")	27 (256")	
10'	W10x26	2'(3')	11' (9'6")	30 (286")	
12'	W10x30	2'(3')	12' (10'6")	33 (316")	
14'	W14x30	3'(4')	11' (10')	34'(33')	
16'	W14x34	3'(4')	11'6" (10'6")	36'6" (35'6")	
18'	W16x40	3'(4')	12'6" (11')	396" (38')	
20'	W14x43	3'(4')	13'6" (12')	42'6" (41')	
22'	W16x50	3'(4')	14'6" (12'6")	45'6" (43'6")	
25'	W18x55	3'(4')	16'6" (13'6")	50'6" (47'6")	
30'	W21x62	3'(4')	19' (16')	58'(55')	
35'	W24x76	3'(4')	22'6" (19')	666" (63')	
40'	W24x84	3'(4')	25'6" (21')	746"(70")	

32 FEET WIDE
INSTALLATIONS
(3 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x18	2'(3')	9' (7'6")	26 (246")
10"	W10x22	2'(3')	9'6" (8'6")	28'6" (27'6")
12'	W14x22	2'(3')	10'6" (9')	316" (30')
14'	W12x26	3'(4')	9'6" (8'6")	32'6" (31'6")
16'	W12x30	3'(4')	10' (9')	35'(34')
18'	W14x30	3'(4')	11' (10')	38'(37')
20'	W14x34	3'(4')	11'6" (10'6")	40'6" (39'6")
22'	W16x36	3'(4')	12' (11')	43'(42')
25'	W14x43	3'(4')	13' (11'6")	47 (456")
30'	W18x50	3'(4')	15'6" (13')	546" (52')
35'	W21x62	3'(4')	18'6" (15'6")	62'6" (59'6")
40'	W24x68	3'(4')	20'6" (17'6")	69'6" (66'6")

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W10x26	2'(3')	11'6" (9'6")	29'6" (27'6")
10'	W12x26	2'(3')	12' (10')	31'(29')
11'	W12x30	2'(3')	12'6" (10'6")	32'6" (30'6")
12'	W14x30	3'(4')	11' (10')	32'(31')
13'	W14x34	3'(4')	11'6" (10')	336" (32')
14'	W14x34	3'(4')	11'6" (10'6")	346" (33'6")
15'	W16x36	3'(4')	12' (11')	36'(35')
20'	W16x50	3'(4')	15' (13')	44'(42')
25'	W21x55	3'(4')	18' (15')	52'(49')
30'	W21x68	3'(4')	21' (17'6")	60' (56'6")
35'	W24x76	3'(4')	24' (20')	68'(64')
40'	W21x101	3'(4')	28'6" (23'6")	77'6" (72'6")

36 FEET WIDE
INSTALLATIONS
(3 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W10x22	2'(3')	10' (8'6")	28 (266")
10'	W10x22	2'(3')	10' (9')	29'(28')
11'	W10x26	2'(3')	10'6" (9')	306"(29')
12'	W10x26	3'(4')	96" (86")	30'6" (29'6")
13'	W12x26	3'(4')	10' (9')	32'(31')
14'	W12x26	3'(4')	10' (9')	33'(32')
15'	W12x30	3'(4')	10'6" (9'6")	34'6" (33'6")
20'	W16x36	3'(4')	12' (11')	41'(40')
25'	W16x50	3'(4')	14'6" (12'6")	48'6" (46'6")
30	W21x55	3'(4')	17' (14'6")	56 (536")
35'	W21x68	3'(4')	19'6" (16'6")	63'6" (60'6")
40'	W24x76	3'(4')	23' (19'6")	72 (686")

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on sheet 7)
 3. Wind loading figured at **Exposure "C" - Open terrain** with scattered obstructions having heights generally
- less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2/3 Column With Laterals



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0407

Drawn Sheet of 3/10/2016 KAB 9 6

		•	•	
Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2'(3')	11'6" (10')	286" (27')
10'	W12x30	2'(3')	13' (11')	32'(30')
12'	W14x34	2'(3')	14'6" (11'6")	35'6" (32'6")
14'	W16x40	3'(4')	13' (11'6")	36 (346")
16'	W21x44	3'(4')	14'6" (12')	396" (37')
18'	W16x50	3'(4')	15'6" (13')	426"(40")
20'	W18x55	3'(4')	17' (14')	46'(43')
22'	W21x55	3'(4')	18' (15')	49'(46')
25'	W21x68	3'(4')	21' (17'6")	55' (51'6 ")
30'	W24x76	3'(4')	24'6" (20'6")	63'6" (59'6")
35'	W24x94	3'(4')	28' (23'6")	72 (676")
40'	W24x104	3'(4')	32' (26'6")	81' (75'6")

EXPOSURE C (See Note 3)

24 FEET WIDE
INSTALLATIONS
(2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2'(3')	10' (8'6")	27 (256")
10"	W10x26	2'(3')	11' (9'6")	30' (28'6")
12"	W12x26	2'(3')	12' (10')	33'(31')
14'	W14x30	3'(4')	11' (10')	34'(33')
16'	W14x34	3'(4')	11'6" (10'6")	36'6" (35'6")
18'	W16x40	3'(4')	12'6" (11')	396" (38')
20"	W14x43	3'(4')	13'6" (11'6")	42'6" (40'6")
22	W14x48	3'(4')	14'6" (12'6")	45'6" (43'6")
25'	W18x55	3'(4')	17' (14')	51'(48')
30'	W21x62	3'(4')	19'6" (16'6")	58'6" (55'6")
35'	W24x76	3'(4')	22'6" (19')	666" (63')
40'	W24x94	3'(4')	25'6" (21'6")	74'6" (70'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2'(3')	12' (10'6")	29 (276")
10"	W14x34	2'(3')	14' (11'6")	33 (306")
12'	W16x36	2'(3')	16' (12'6")	37 (336")
14'	W14x43	3'(4')	14' (12')	37'(35')
16'	W16x50	3'(4')	15'6" (13')	406" (38')
18'	W18x55	3'(4')	17' (14'6")	44 (416")
20'	W21x55	3'(4')	18'6" (15'6")	47'6" (44'6")
22'	W21x62	3'(4')	20' (17')	51'(48')
25'	W24x64	3'(4')	22'6" (18'6")	56'6" (52'6")
30'	W24x94	3'(4')	27'6" (22'6")	66'6" (61'6")
35'	W24x104	3'(4')	31'6" (26')	756" (70')
40'	W24x131	3'(4')	35'6" (29')	846" (78')

28 FEET WIDE
INSTALLATIONS
(2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W14x22	2'(3')	10'6" (9')	276"(26')
10"	W12x26	2'(3')	11'6" (10')	306"(29')
12'	W12x30	2'(3')	12'6" (11')	336" (32')
14'	W14x34	3'(4')	11'6" (10'6")	34'6" (33'6")
16'	W16x36	3'(4')	12'6" (11')	376"(36')
18'	W14x43	3'(4')	13'6" (12')	406" (39')
20'	W16x50	3'(4')	15' (12'6")	44 (41'6")
22"	W18x50	3'(4')	16' (13'6")	47 (44'6")
25'	W21x55	3'(4')	18' (15')	52'(49')
30'	W24x68	3'(4')	22' (18')	61'(57')
35'	W24x84	3'(4')	25' (21')	69'(65')
40'	W21x101	3'(4')	28'6" (23'6")	77'6" (72'6")

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Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W10x26	2'(3')	11' (9'6")	28 (266")		
10"	W12x26	2'(3')	12' (10')	31'(29')		
12'	W12x30	2'(3')	13' (11')	34'(32')		
14'	W14x34	3'(4')	11'6" (10'6")	34'6" (33'6")		
16'	W16x40	3'(4')	12'6" (11')	376" (36')		
18'	W21x44	3'(4')	14' (12')	41'(39')		
20'	W16x50	3'(4')	15' (12'6")	44 (416")		
22"	W18x50	3'(4')	16' (13'6")	47' (44'6")		
25'	W21x55	3'(4')	18' (15')	52'(49')		
30'	W21x68	3'(4')	21' (17'6")	60' (56'6")		
35'	W24x84	3'(4')	25' (21')	69'(65')		
40'	W21x101	3'(4')	28' (23'6")	77" (72'6")		

32 FEET WIDE
INSTALLATIONS
(3 COLUMNS)

	Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W8x21	2'(3')	96" (8')	266" (25')	
10'	W10x22	2'(3')	10' (9')	29'(28')	
12'	W10x26	2'(3')	11' (9'6")	32 (306")	
14'	W12x26	3'(4')	10' (9')	33'(32')	
16'	W14x30	3'(4')	11' (9'6")	36 (346")	
18'	W14x34	3'(4')	11'6" (10'6")	38'6" (37'6")	
20'	W16x36	3'(4')	12' (11')	41'(40')	
22"	W16x40	3'(4')	13' (11'6")	44 (4267)	
25'	W16x50	3'(4')	14'6" (12')	486" (46')	
30'	W21x55	3'(4')	17' (14')	56'(53')	
35'	W21x68	3'(4')	20' (17')	64'(61')	
40'	W24x76	3'(4')	23' (19')	72'(68')	

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W12x26	2'(3')	12' (10'6")	30 (286")
10"	W12x30	2'(3')	12'6" (10'6")	31'6" (29'6")
11'	W14x30	2'(3')	13'6" (11')	336" (31')
12'	W14x34	3'(4')	11'6" (10'6")	32'6" (31'6")
13'	W18x35	3'(4')	12' (11')	34'(33')
14'	W16x36	3'(4')	12'6" (11')	356" (34')
15'	W16x40	3'(4')	13' (11'6")	37 (356")
20'	W18x55	3'(4')	17' (14')	46'(43')
25'	W21x62	3'(4')	20' (17')	54'(51')
30"	W24x76	3'(4')	23'6" (19'6")	62'6" (58'6")
35'	W24x94	3'(4')	26'6" (22')	706" (66')
40'	W24x104	3'(4')	31'6" (26')	806" (75')

36 FEET WIDE
INSTALLATIONS
(3 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W10x22	2'(3')	10'6" (9')	286" (27')
10"	W10x26	2'(3')	11' (9'6")	30 (286")
11'	W12x26	2'(3')	11'6" (9'6")	31'6" (29'6")
12'	W12x26	3'(4')	10' (9')	31'(30')
13'	W12x30	3'(4')	10'6" (9'6")	32'6" (31'6")
14'	W12x30	3'(4')	11' (9'6")	34 (326")
15'	W14x34	3'(4')	11' (10')	35'(34')
20"	W14x43	3'(4')	13'6" (11'6")	42'6" (40'6")
25'	W18x55	3'(4')	16' (13'6")	50' (47'6")
30'	W21x62	3'(4')	19' (16')	58'(55')
35'	W24x68	3'(4')	21'6" (18')	656" (62')
40'	W24x94	3'(4')	25'6" (21'6")	74'6" (70'6")

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
- 3. Wind loading figured at **Exposure** "C" Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2/3 Column With Laterals



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0407

Drawn Sheet of 3/10/2016 KAB 7 9

EXPOSURE C (See Note 3)

En ocone o total note of					
Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W12x30	2'(3')	13'6" (11')	306"(28')	
10"	W18x35	2'(3')	156" (12')	346" (31")	
12'	W16x40	2'(3')	17'6" (13'6")	386" (34'6")	
14'	W16x50	2'(3')	20' (15'6")	43' (38'6")	
16'	W18x55	2'(3')	22'6" (17')	476" (42)	
18'	W21x55	2'(3')	24'6" (18'6")	516" (45'6")	
20'	W21x62	2'(3')	26'6" (20'6")	556" (49'6")	
22'	W21x68	3'(4')	22' (18')	53' (49')	
25'	W24x76	3'(4')	256" (21')	596" (55')	
30'	W21x101	3'(4')	29'6" (246")	686" (63'6")	

3'(4')

3'(4')

34' (28')

386" (32")

78' (72')

876" (81)

W24x117

W24x146

24 FEET WIDE	
INSTALLATIONS	
(2 COLUMNS)	

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x26	2'(3')	11' (9'6")	28 (266")
10'	W12x30	2'(3')	12' (10'6")	31' (29'6")
12'	W1 4x34	2'(3')	14 (11'6")	35 (326")
14'	W16x36	2'(3')	16' (12')	39' (35')
16'	W16x40	2'(3')	17'6" (13'6")	426" (38'6")
18'	W1 4x48	2'(3')	19' (15')	46' (42')
20'	W18x50	2'(3')	21' (16')	50' (45')
22'	W18x55	3'(4')	17'6" (14'6")	486" (45'6")
25'	W21x62	3'(4')	20' (17')	54' (51')
30'	W24x76	3'(4')	23'6" (19'6")	626" (58'6")
35'	W24x94	3'(4')	27'6" (22'6")	716" (66'6")
40'	W24x104	3'(4')	31' (25'6")	80' (74'6")

EXPOSURE B (See Note 4)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W14x34	2'(3')	14'6" (11'6")	316" (28'6")
10'	W16x40	2'(3')	17' (13')	36' (32')
12'	W21x44	2'(3')	19'6" (15')	40'6" (36')
14'	W18x50	2'(3')	22' (17')	45' (40')
16'	W21x55	2'(3')	25' (19')	50' (44')
18'	W21x62	2'(3')	27' (20'6")	54 (476")
20'	W21x68	2'(3')	29'6" (22'6")	586" (51'6")
22'	W18x76	3'(4')	246" (20')	556" (51')
25'	W24x84	3'(4')	27 (22'6")	61' (56'6")
30'	W24x104	3'(4')	33' (27')	72' (66')
35'	W24x131	3'(4')	38 (31'6")	82 (756")
40'	W24x162	3'(4')	43 (35'6")	92' (84'6")

28 FEET WIDE
INSTALLATIONS
(2 COLUMNS)

		- 1 - 7		,
	Column and Founda	ation Requiremen	its (Based on ASCE 7-	10)
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2'(3')	11'6" (10')	286"(27)
10'	W14x30	2'(3')	13'6" (11')	326"(30')
12'	W18x35	2'(3')	15' (12')	36' (33')
14'	W16x40	2'(3')	17' (13')	40' (36')
16'	W21x44	2'(3')	196" (15')	446" (40')
18'	W18x50	2'(3')	21' (16'6")	48 (436")
20'	W18x55	2'(3')	23' (17'6")	52 (466")
22'	W21x62	3'(4')	19' (16')	50' (47')
25'	W21x68	3'(4')	21'6" (18')	556" (52')
30'	W24x84	3'(4')	26' (22')	65' (61')
35'	W24x103	3'(4')	30' (25')	74' (69')
40'	W24x117	3'(4')	34 (28'6")	83 (776")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8.	W12x26	2'(3')	12' (10'6")	29 (276")
10"	W1 4x30	2'(3')	13'6" (11')	326" (30')
12'	W18x35	2'(3')	156" (12')	366" (33')
14'	W16x40	2'(3')	17'6" (13'6")	406" (36'6")
16'	W21x44	3'(4')	15 (12'6")	40' (37'6")
18'	W18x50	3'(4')	16'6" (14')	436" (41')
20"	W21x55	3'(4')	18' (15')	47' (44')
22'	W21x62	3'(4')	19'6" (16')	506" (47')
25'	W21x68	3'(4')	21'6" (18')	556" (52)
30'	W24x84	3'(4')	25' (21')	64' (60')
35'	W21x101	3'(4')	30' (25')	74' (69')
40'	W24x117	3'(4')	34' (28')	83' (77')

32 FEET WIDE
INSTALLATIONS
(3 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W10x22	2'(3')	10'6" (9')	276" (26')	
10'	W12x26	2'(3')	11'6" (9'6")	306" (28'6")	
12'	W12x30	2'(3')	12'6" (10'6")	336" (31'6")	
14'	W1 4x34	2'(3')	14 (11'6")	37" (34'6")	
16'	W16x36	3'(4')	12' (11')	37' (36')	
18'	W16x40	3'(4')	13' (11'6")	40' (38'6")	
20'	W21x44	3'(4')	146" (12')	43'6" (41')	
22'	W18x50	3'(4')	156" (13')	46'6" (44')	
25'	W21x55	3'(4')	17'6" (14'6")	516" (48'6")	
30'	W21x68	3'(4')	20' (17')	59' (56')	
35'	W24x84	3'(4')	24' (20')	68' (64')	
40'	W24x94	3'(4')	276" (23')	766" (72)	

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W1 4x34	2'(3')	14 (11'6")	32 (296")
10"	W1 4x34	2'(3')	15' (12')	34' (31')
11'	W16x36	2'(3')	16'6" (12'6")	366" (32'6")
12"	W1 6x40	2'(3')	17'6" (13'6")	386" (34'6")
13'	W1 4x43	3'(4')	14' (12')	36' (34')
14'	W21x44	3'(4')	15 (12'6")	38 (356")
15'	W16x50	3'(4')	16' (13')	40' (37')
20'	W21x62	3'(4')	20' (17')	49' (46')
25'	W24x76	3'(4')	24' (20')	58' (54')
30'	W24x94	3'(4')	28 (23'6")	67' (62'6")
35'	W24x104	3'(4')	32'6" (26'6")	766" (70'6")
40'	W24x146	3'(4')	38 (31'6")	87" (80'6")

36 FEET WIDE INSTALLATIONS (3 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length		
9'	W12x26	2'(3')	11'6" (10')	296" (28)		
10'	W12x26	2'(3')	12' (10'6")	31' (29'6")		
11'	W12x30	2'(3')	13' (11')	33' (31')		
12'	W1 4x30	2'(3')	13'6" (11')	346" (32)		
13'	W1 4x34	3'(4')	11'6" (10'6")	33'6" (32'6")		
14'	W18x35	3'(4')	12' (11')	35' (34')		
15'	W16x36	3'(4')	126"(11')	366" (35)		
20'	W18x50	3'(4')	16' (13'6")	45 (426")		
25'	W21x62	3'(4')	19'6" (16')	536" (50')		
30'	W24x68	3'(4')	226" (19')	61'6" (58')		
35'	W24x84	3'(4')	26' (21'6")	70' (65'6")		
40'	W24x104	3'(4')	30'6" (25'6")	796" (74'6")		

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard
Pier Installation
2/3 Column With
Laterals



Rev

Nevco, Inc. Greenville, Illinois 62246

241-0407

Drawing No.

Drawn KAB Date 3/10/2016 Sheet of 8 9

3 \triangle 2

EXPOSURE C (See Note 3) Column and Foundation Requirements (Based on ASCE 7-10) Braced Column* Pier Dia. Pier Depth Column Length DisplayHeight 17' (13') W16x36 2'(3') 34'(30') 10 W21x44 2'(3') 19'6" (15') 386" (34) 12 W18x50 2'(3') 226" (17') 436" (38) 14 W21x55 2'(3') 26' (19'6") 49 (426") 16 2'(3') W21x62 286" (216") 536" (466") 18 W24x68 586" (506") 2'(3') 316" (236") 2'(3') 20 W24x76 63'(55') 34' (26') 22 W24x84 59' (54') 3'(4') 28' (23') 666" (606") 25 32'6" (26'6") W24x103 3'(4') 30 W24x131 3'(4') 38 (316") 77 (706) 35 W24x162 3'(4') 44' (36') 88' (80')

EXPOSURE B (See Note 4)

24 FEET WIDE **INSTALLATIONS** (2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)								
DisplayHeight Braced Column* Pier Dia. Pier Depth Column								
8'	W12x30	2'(3')	13' (11')	30' (28')				
10"	W1 4x34	2'(3')	15'6" (12')	346" (31')				
12'	W16x40	2'(3')	17'6" (13'6")	38'6" (34'6")				
14	W1 4x48	2'(3')	20' (15'6")	43' (386")				
16	W18x50	2'(3')	22' (17')	47' (42')				
18'	W21x55	2'(3')	24'6" (18'6")	51'6" (45'6")				
20	W21x62	2' (3')	26'6" (20')	55'6" (49')				
22	W21x68	3'(4')	22' (18'6")	53' (49'6")				
25	W24x76	3'(4')	25'6" (21')	59'6" (55')				
30	W21x101	3'(4')	30' (25')	69' (64')				
35	W24x117	3'(4')	34'6" (28'6")	78'6" (72'6")				
40'	W24x146	3' (4')	39'6" (32'6")	88'6" (81'6")				

40'	W24x192	3' (4')	49'6" (40'6")	98'6" (89'6")					
Column and Foundation Requirements (Based on ASCE 7-10)									
DisplayHeight	Braced Column*	Pier Dia.	Pier Depth	Column Length					
8,	W16x40	2'(3')	18'6" (14')	35'6" (31')					
10'	W16x50	2'(3')	22' (16'6")	41' (356")					
12'	W18x55	2'(3')	25' (19')	46' (40')					
14	W21x62	2'(3')	28'6" (21'6")	516" (44'6")					
16'	W24x68	2'(3')	32' (24')	57' (49')					
18'	W24x76	2'(3')	35' (26'6")	62 (536")					
20	W24x84	2'(3')	38'6" (28'6")	676" (576")					
22'	W24x94	3' (4')	31' (25'6")	62 (566")					
25	W24x104	3'(4')	34'6" (28'6")	686" (626")					
30	W24x146	3' (4')	42'6" (35')	81'6" (74')					
35	W24x192	3' (4')	49' (40')	93' (84')					
40'	W18x283	3' (4')	55'6" (45'6")	1046" (946")					

28 FEET WIDE
INSTALLATIONS
(2 COLUMNS)

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	Column and Foundation Requirements (Based on ASCE 7-10)							
DisplayHeight	Braced Column*	Pier Dia.	Pier Depth	Column Length				
8'	W1 4x34	2' (3')	14'6" (11'6")	31'6" (28'6")				
10	W16x36	2' (3')	17' (13')	36' (32')				
12'	W21x44	2' (3')	19'6" (15')	40'6" (36')				
14	W18x50	2'(3')	22' (16'6")	45' (396")				
16'	W21x55	2'(3')	24'6" (19')	49'6" (44')				
18	W21x62	2'(3')	27' (20'6")	54' (47'6")				
20	W21x68	2'(3')	29'6" (22'6")	58'6" (51'6")				
22	W18x76	3'(4')	24'6" (20')	55'6" (51')				
25	W24x84	3' (4')	27 (22'6")	61' (56'6")				
30'	W24x104	3'(4')	33'6" (27'6")	72'6" (66'6")				
35	W24x131	3' (4')	38'6" (32')	82'6" (76')				
40'	W24x162	3'(4')	44' (36')	93' (85')				
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Column and Foundation Requirements (Based on ASCE 7-10)								
DisplayHeight	Braced Column*	Pier Dia.	Pier Depth	Column Length				
8,	W1 4x34	2'(3')	15' (12')	32' (29')				
10	W16x40	2'(3')	17'6" (13'6")	36'6" (32'6")				
12'	W21x44	2'(3')	20' (15')	41' (36')				
14	W18x50	2'(3')	22'6" (17')	45'6" (40')				
16	W21x55	3'(4')	19' (15'6")	44' (40'6")				
18'	W21x62	3'(4')	21' (17'6")	48' (44'6")				
20	W24x68	3' (4')	23' (19')	52' (48')				
22	W24x76	3'(4')	24'6" (20'6")	55'6" (51'6")				
25	W24x84	3'(4')	27'6" (22'6")	61'6" (56'6")				
30	W24x104	3' (4')	32 (2667)	71' (656")				
35	W24x131	3' (4')	38'6" (31'6")	826" (75'6")				
40	W24x162	3'(4')	43'6" (35'6")	92'6" (84'6")				

32 FEET WIDE
INSTALLATIONS
(3 COLUMNS)

	Column and Foundation Requirements (Based on ASCE 7-10)						
DisplayHeight	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W12x26	2'(3')	12' (10')	29' (27')			
10"	W1 4x30	2'(3')	13'6" (11')	326" (30')			
12'	W18x35	2'(3')	15'6" (12')	366" (33')			
14	W16x40	2'(3')	17'6" (13'6")	40'6" (36'6")			
16'	W21x44	3'(4')	15' (12'6 ")	40' (37'6")			
18'	W18x50	3'(4')	16'6" (14')	43'6" (41')			
20	W21x55	3'(4')	18' (15')	47' (44')			
22'	W21x62	3'(4')	19'6" (16'6")	50'6" (47'6")			
25	W21x68	3'(4')	21'6" (18')	55'6" (52)			
30	W24x84	3'(4')	25'6" (21')	64'6" (60')			
35	W24x104	3'(4')	30'6" (25'6")	74'6" (69'6")			
40'	W24x117	3'(4')	34'6" (28'6")	83'6" (77'6")			

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Column and Foundation Requirements (Based on ASCE 7-10)						
DisplayHeight	Braced Column*	Pier Dia.	Pier Depth	Column Length		
9'	W16x40	2' (3')	18' (14')	36' (32')		
10"	W21x44	2'(3')	19'6" (15')	386" (34)		
11"	W16x50	2'(3')	21' (16')	41' (36')		
12'	W18x50	2'(3')	22' (17')	43' (38')		
13'	W18x55	3'(4')	18' (15')	40' (37')		
14	W21x55	3'(4')	19' (16')	42' (39')		
15	W21x62	3'(4')	20' (16'6")	44' (40'6")		
20"	W24x76	3'(4')	25'6" (21')	54'6" (50')		
25	W21x101	3'(4')	31' (25'6")	65' (596")		
30'	W24x117	3'(4')	36' (29'6")	75' (68'6")		
35	W24x146	3' (4')	41'6" (34')	856" (78)		
40'	W24x192	3' (4')	49' (40'6")	98' (896")		

36 FEET WIDE **INSTALLATIONS**

Column and Foundation Requirements (Based on ASCE 7-10)						
DisplayHeight	Braced Column*	Pier Dia.	Pier Depth	Column Length		
9'	W1 4x30	2' (3')	14' (11'6")	32 (296")		
10"	W1 4x34	2'(3')	15' (12')	34'(31')		
11"	W16x36	2'(3')	16' (12'6")	36 (326")		
12'	W1 6x40	2'(3')	17' (13'6")	38 (346")		
13'	W1 4x43	3' (4')	14' (12')	36' (34')		
14	W21x44	3'(4')	15' (12'6")	38 (356")		
15	W16x50	3'(4')	15'6" (13')	396" (37')		
20	W21x62	3'(4')	20' (17')	49' (46')		
25	W24x76	3'(4')	24'6" (20')	586" (54)		
30	W24x94	3'(4')	28'6" (23'6")	67'6" (62'6")		
35	W24x104	3'(4')	33' (27')	77' (71')		
40	W24x146	3'(4')	39' (32')	88' (81')		

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 2/3 Column With Laterals

Rev

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0407

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Drawn Sheet of 9 3/10/2016 KAB

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Rev

	LATERAL REQUIREMENTS							
Model	105 mph Lateral	120 mph Lateral	130 mph Lateral	150 mph Lateral	180 mph Lateral	# Laterals Req.	Lateral Length	Bracing Laterals
1603, 3616, 7616	TS 3 x 3 x 1/8	TS 3 x 3 x 3/16	TS 3 x 3 x 3/16	TS 3 x 3 x 1/4	TS 3 x 3 x 5/16	4	31' 6"	TS 4 x 3 x 3/16
3657, 3688, 7688	TS 2.25 x 2.25 x 3/16	TS 2.25 x 2.25 x 3/16	TS 2.5 x 2.5 x 3/16	TS 2.5 x 2.5 x 1/4	TS 3 x 3 x 1/4	4	25' 6"	TS 4 x 3 x 3/16
3620, 7620	TS 2.5 x 2.5 x 1/8	TS 2.25 x 2.25 x 3/16	TS 2.25 x 2.25 x 3/16	TS 2.5 x 2.5 x 3/16	TS 3 x 3 x 3/16	4	25' 6"	TS 4 x 3 x 3/16
1604	TS 3 x 3 x 1/4	TS 4 x 2.5 x 3/16	TS 4 x 2.5 x 3/16	TS 5 x 3 x 3/16	TS 5 x 3 x 1/4	4	21' 6"	TS 4 x 3 x 3/16
7605, 7615, 7625	TS 3 x 3 x 1/8	TS 3 x 3 x 3/16	TS 3 x 3 x 3/16	TS 3 x 3 x 3/16	TS 3 x 3 x 1/4	6	17' 6"	TS 4 x 3 x 3/16
1606, 3615, 3617 3618, 3619, 3685, 7630, 7631, 7632, 7685, 8601, 8602	TS 3 x 3 x 1/8	TS 3 x 3 x 3/16	TS 3 x 3 x 3/16	TS 3 x 3 x 1/4	TS 3 x 3 x 1/4	4	17' 6"	TS 4 x 3 x 3/16
3621, 3682	TS 3 x 3 x 1/8	TS 3 x 3 x 3/16	TS 3 x 3 x 1/4	TS 3 x 3 x 5/16	TS 5 x 3 x 1/4	4	19' 6"	TS 4 x 3 x 3/16

Notes:

- 1) Lateral material to be ASTM A500 Grade B minimum.
 2) Quantity of laterals in the chart above includes the quantity required to mount the scoreboard only and does not include bracing laterals. (See detail on sheet 2 to determine required amount of bracing laterals).
 3) Additional display components such as signs, message centers or video displays will require additional laterals. See separate installation print for details.

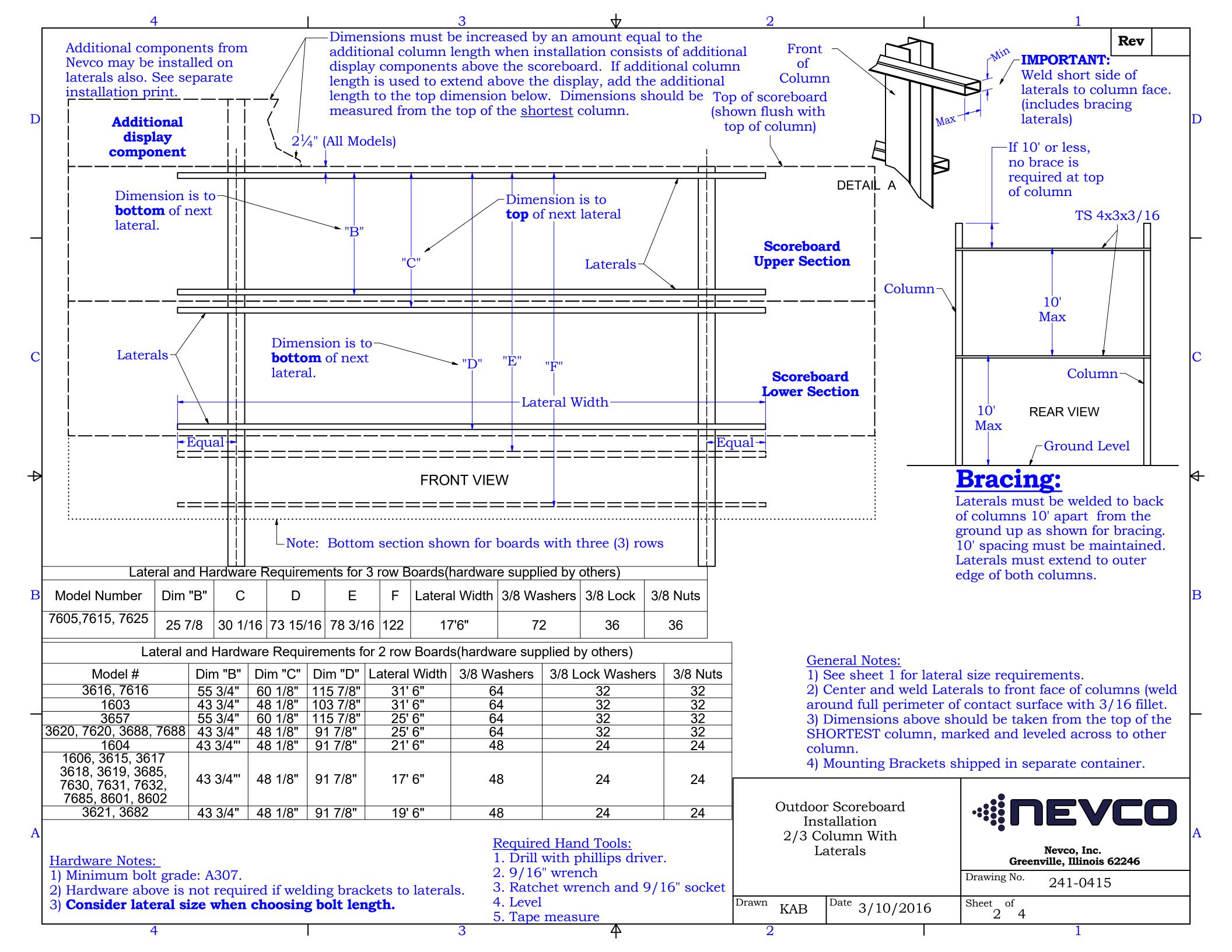
Outdoor Scoreboard Installation 2/3 Column With Laterals

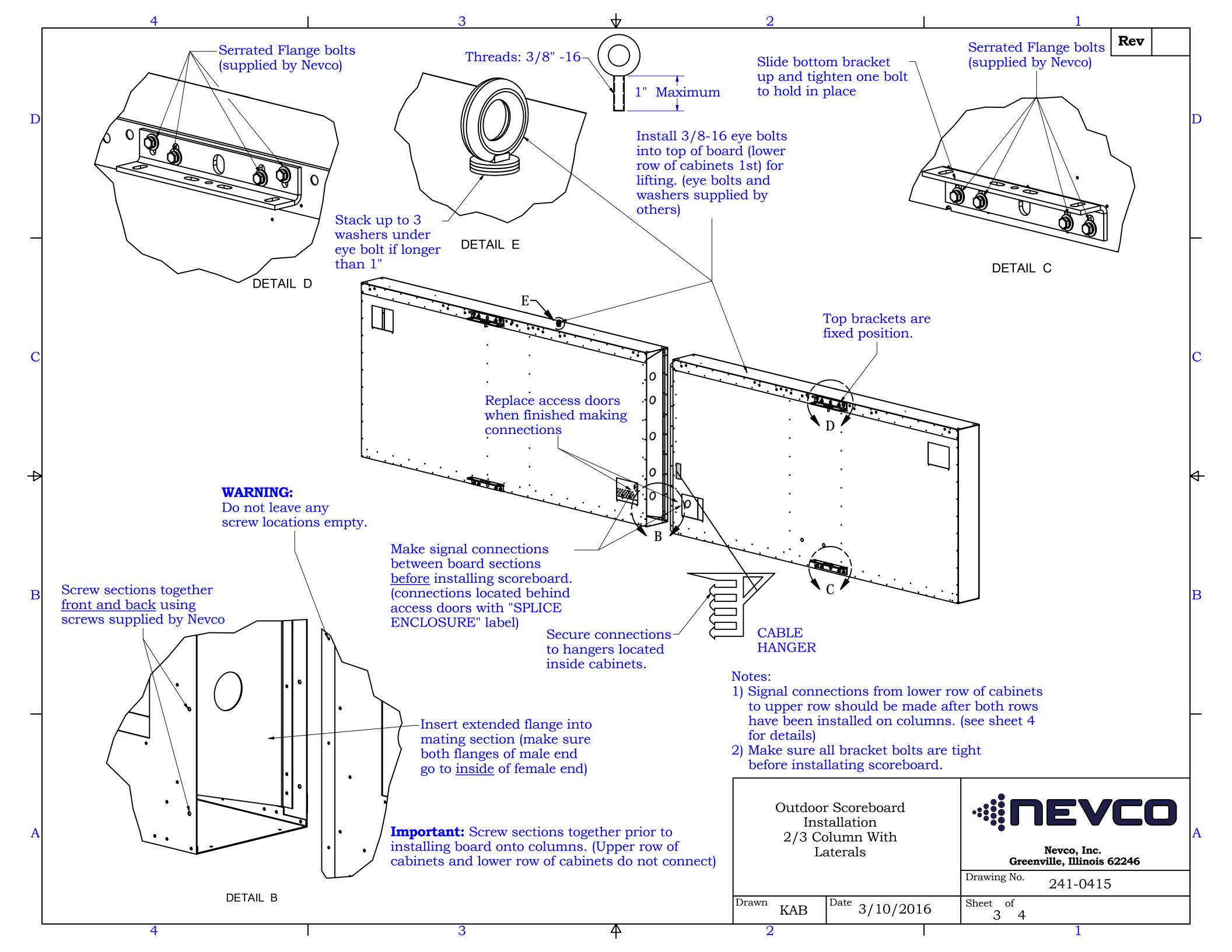


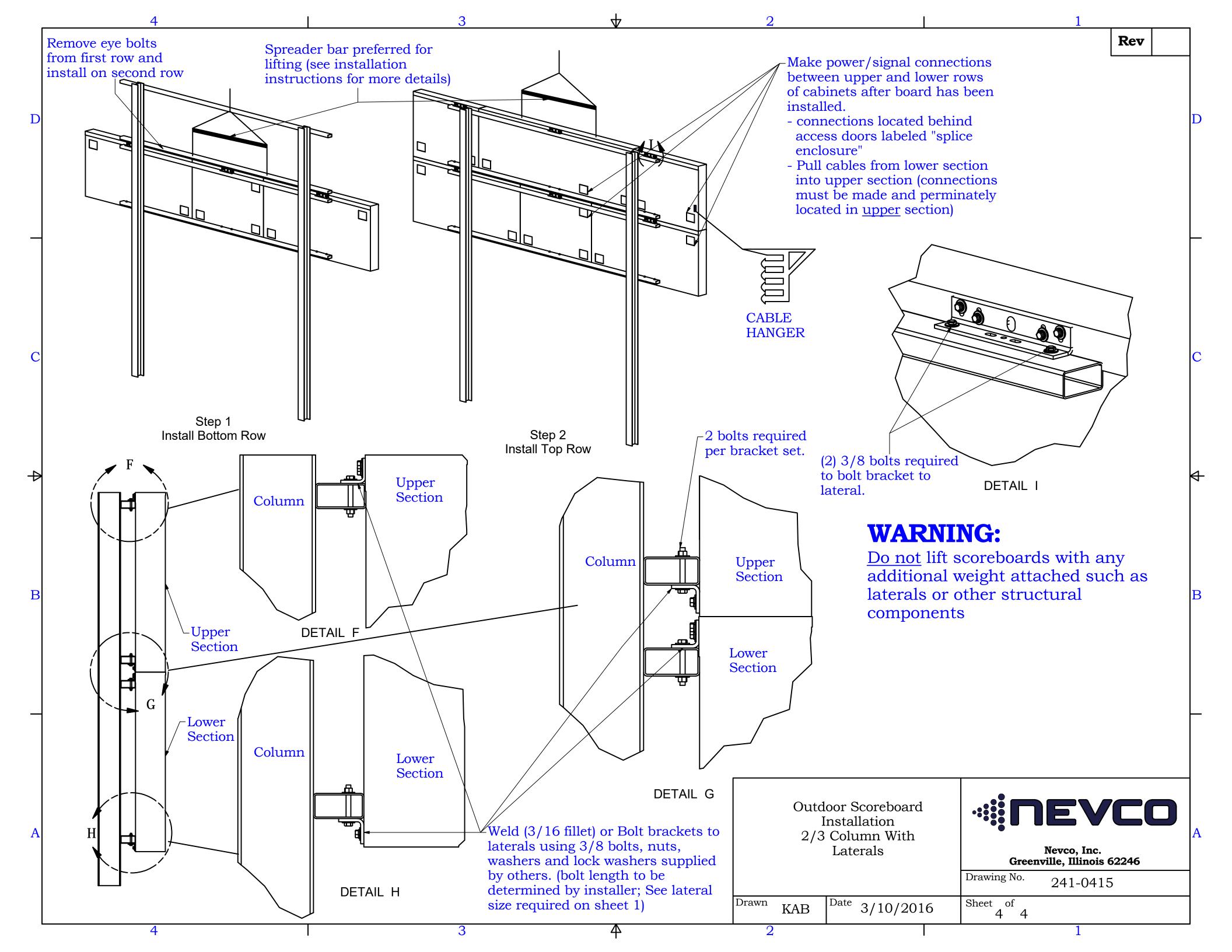
Nevco, Inc. Greenville, Illinois 62246

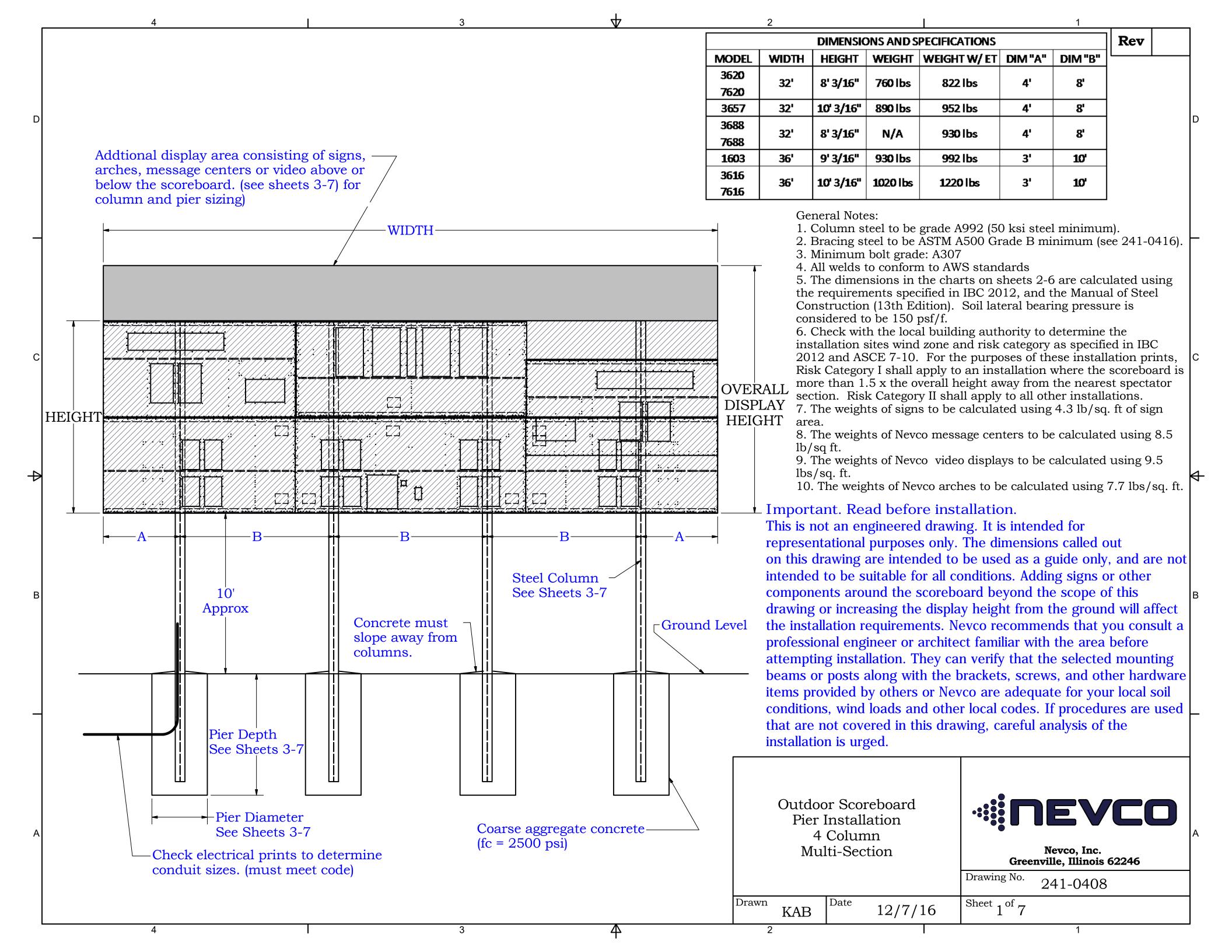
Drawing No. 241-0415 Sheet of

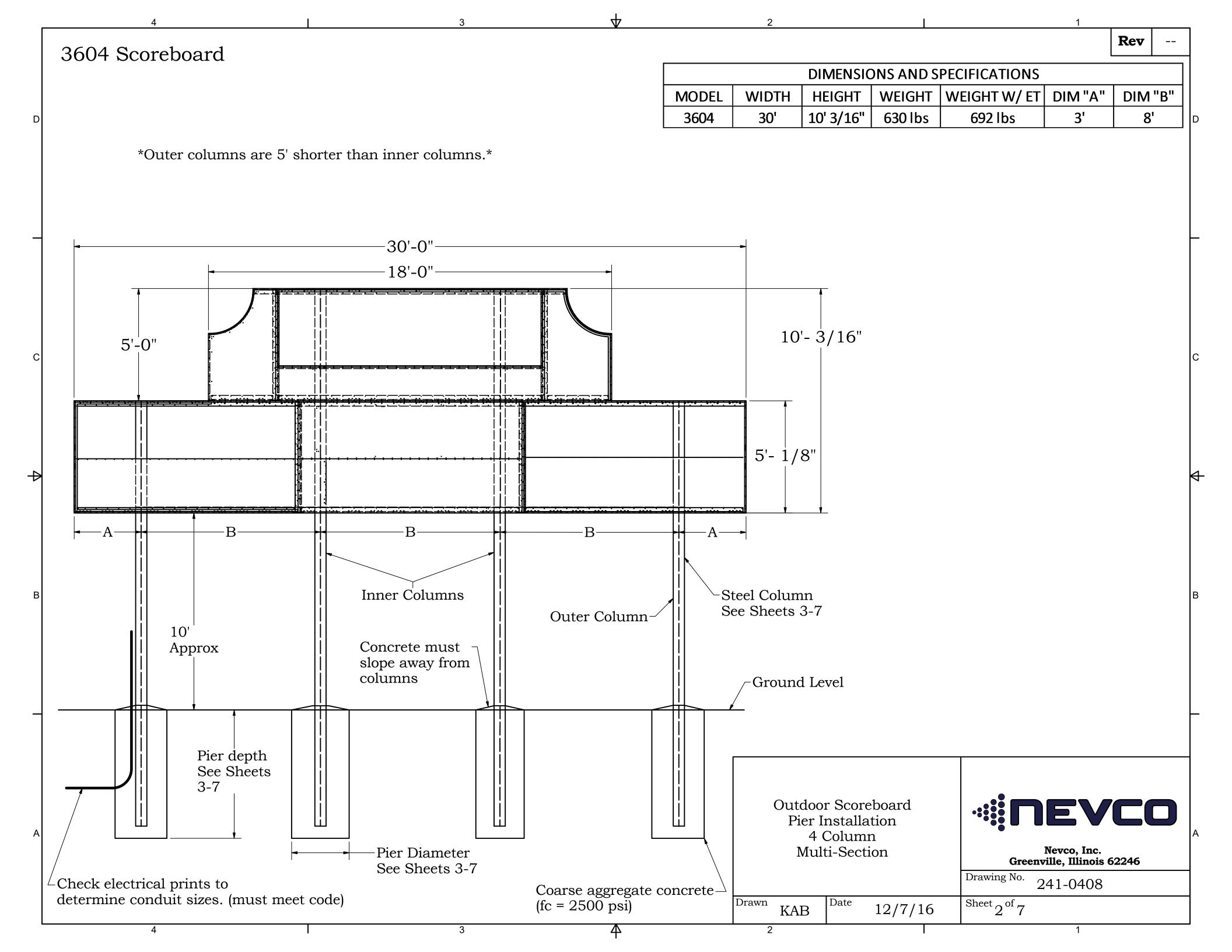
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	EX	POSURE C (See Note	e 3)				
Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Pier Depth	Column Length						
10"	W8x28	W8x21	2' (3')	9'6" (8')	28'6" (27')			
12'	W10x33	W14x22	2 (3)	10'6" (9')	31'6" (30')			
14'	W10x39	W10x26	2 (3)	11' (9'6")	34' (32'6")			
16'	W10x45	W12x30	2 (3)	12' (10')	37' (35')			
18'	W10x49	W14x30	2 (3)	12'6" (10'6")	396" (376")			
20'	W12x53	W14x34	2 (3)	13'6" (11')	42'6" (40')			
22"	W10x60	W16x36	2 (3)	14'6" (12')	45'6" (43')			
25	W12x65	W16x40	2 (3)	16' (12'6")	50' (46'6")			
30'	W12x87	W16x50	2 (3)	19' (14'6")	58' (53'6")			
35	W12x106	W21x55	3' (4')	17'6" (14'6")	61'6" (58'6")			
40'	W14x120	W21x68	3' (4')	19'6" (16'6")	68'6" (65'6")			

30 FEET WIDE INSTALLATIONS (see note 5)

EXPOSURE B (See Note 4)									
	Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Pier Dia.	Pier Depth	Column Length					
10'	W8x24	W8x18	2' (3')	8'6" (7')	27'6" (26')				
12'	W12x26	W8x21	2' (3')	9' (7'6")	30' (28'6")				
14'	W10x33	W10x22	2' (3')	96" (86")	32'6" (31'6")				
16'	W8x35	W14x22	2' (3')	10'6" (9')	356" (34')				
18'	W8x40	W10x26	2' (3')	11' (9'6")	38' (36'6")				
20'	W10x45	W12x26	2' (3')	11'6" (10')	40'6" (39')				
22'	W10x49	W12x30	2' (3')	12' (10'6")	43' (41'6")				
25'	W10x60	W14x34	2' (3')	13' (11')	47' (45')				
30'	W12x72	W16x40	2' (3')	15' (12')	54' (51')				
35'	W12x96	W16x50	3' (4')	146 (12)	58' (56')				
40'	W12x106	W18x55	3' (4')	16' (13'6")	65' (62'6")				

	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)	
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x24	W8x21	2' (3')	9' (8')	26 (25)
10"	W12x30	W10x22	2' (3')	10' (8'6")	29' (27'6")
12'	W10x33	W10x26	2' (3')	11' (9'6")	32' (30'6")
14'	W10x39	W12x26	2' (3')	11'6" (10')	34'6" (33')
16'	W10x45	W12x30	2' (3')	12' (10'6")	37' (35'6")
18'	W10x49	W14x34	2' (3')	13'6" (11')	40'6" (38')
20"	W10x60	W18x35	2' (3')	14'6" (12')	43'6" (41')
22'	W12x65	W16x40	2' (3')	16' (12'6")	47' (43'6")
25	W12x72	W21x44	2' (3')	17'6" (13'6")	516" (476")
30'	W12x96	W18x55	3' (4')	16' (13'6")	55' (52'6")
35	W14x109	W21x62	3' (4')	19' (16')	63' (60')
40'	W14x132	W24x68	3' (4')	21' (18')	70' (67')

32 FEET WIDE INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	W10x17	2' (3')	8' (7')	25' (24')
10'	W8x24	W8x18	2' (3')	86" (76")	27'6" (26'6")
12'	W12x30	W8x21	2' (3')	9'6" (8')	30'6" (29')
14'	W10x33	W10x22	2' (3')	10' (8'6")	33 (316")
16'	W14x39	W10x26	2' (3')	10'6" (9')	356" (34')
18'	W10x45	W12x26	2' (3')	11'6" (10')	386" (37')
20'	W8x48	W12x30	2' (3')	12' (10'6")	41' (39'6")
22'	W12x53	W14x30	2' (3')	12'6" (11')	436" (42')
25'	W10x60	W18x35	2' (3')	14' (11'6")	48' (45'6")
30'	W10x77	W14x43	3' (4')	13' (11'6")	52' (50'6")
35'	W12x96	W18x50	3' (4')	15'6" (13')	59'6" (57')
40'	W14x109	W21x55	3' (4')	176" (146")	66'6" (63'6")

Column and Foundation Requirements (Based on ASCE 7-10)										
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length					
8'	W8 x 24	W8 x 21*	2' (3')	9' (8')	26 (25)					
10'	W10 x 33	W10 x 22*	2' (3')	8'6" (8')	27'6" (27')					
12'	W10 x 33	W10 x 26+	2' (3')	96" (86")	306" (296")					
14'	W10 x 39	W12 x 26+	2' (3')	10' (9')	33' (32')					
16'	W10 x 45	W12 x 30+	2' (3')	10'6" (9'6")	35'6" (34'6")					
18'	W10 x 49	W14 x 34+	2' (3')	11' (10')	38' (37')					
20'	W10 x 60	W16 x 36+	2' (3')	12" (10'6")	41' (39'6")					
22"	W12 x 65	W16 x 40+	3' (4')	12'6" (11')	43'6" (42')					
25	W12 x 72	W21 x 44+	3' (4')	14' (12')	48' (46')					
30'	W12 x 96	W18 x 55+	3' (4')	16' (13'6")	55' (52'6")					
35	W14 x 109	W21 x 62+	3' (4')	18' (15'6")	62' (59'6")					
40'	W14 x 132	W24 x 68+	3' (4')	21'6" (18')	70'6" (67')					

36 FEET WIDE INSTALLATIONS

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8"	W8 x 21	W10 x 17*	2' (3')	8' (7')	25' (24')
10'	W8 x 24	W8 x 18*	2' (3')	76" (7')	26'6" (26')
12'	W12 x 30	W8 x 21+	2' (3')	8' (7'6")	29' (286")
14'	W10 x 33	W10 x 22+	2' (3')	8'6" (8')	31'6" (31')
16'	W10 x 39	W10 x 26+	2' (3')	9' (8'6")	34' (33'6")
18'	W10 x 45	W12 x 26+	2' (3')	10' (9')	37' (36')
20'	W10 x 49	W12 x 30+	2' (3')	10'6" (9'6")	39'6" (38'6")
22'	W12 x 53	W14 x 34+	3' (4')	11' (10')	42' (41')
25'	W10 x 60	W18 x 35+	3' (4')	11'6" (10'6")	45'6" (44'6")
30'	W10 x 77	W14 x 43+	3' (4')	13' (11'6")	52' (50'6")
35'	W12 x 96	W18 x 50+	3' (4')	15' (12'6")	59' (56'6")
40'	W14 x 109	W21 x 62+	3' (4')	17'6" (15')	66'6" (64')

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.
- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure** "B" **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.
- 5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard
Pier Installation
4 Column
Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0408

Drawn KAB Date 12/7/16 Sheet of 3 7

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	EXPOSURE C (See Note 3) Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
10'	W10x33	W14x22	2' (3')	10'6" (9')	296" (28')				
12'	W10x39	W12x26	2' (3')	11'6" (10')	32'6" (31')				
14'	W14x43	W12x30	2' (3')	12' (10'6")	35' (33'6")				
16'	W10x49	W14x34	2' (3')	13'6" (11')	38'6" (36')				
18'	W12x53	W18x35	2' (3')	15' (12')	42' (39')				
20'	W14x61	W16x40	2' (3')	16' (12'6")	45' (41'6")				
22'	W12x65	W14x43	3' (4')	136" (11'6")	44'6" (42'6")				
25	W12x79	W16x50	3' (4')	15' (12'6")	49' (46'6")				
30'	W21x101	W21x55	3' (4')	176" (14'6")	56'6" (53'6")				
35	W14x120	W21x68	3' (4')	20'6" (17'6")	64'6" (61'6")				
40'	W14x145	W24x76	3' (4')	23' (19'6")	72' (68'6")				

30 FEET WIDE INSTALLATIONS (see note 5)

EXPOSURE B (See Note 4)									
	Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
10'	W12x26	W8x21	2 (3)	9' (8')	28' (27')				
12'	W10x33	W10x22	2 (3)	10' (8'6")	31' (29'6")				
14'	W8x35	W10x26	2' (3')	10'6" (9')	336" (32')				
16'	W14x43	W12x26	2 (3)	11'6" (10')	36'6" (35')				
18'	W14x48	W12x30	2' (3')	12 (106")	39' (37'6")				
20'	W10x49	W14x30	2' (3')	13' (11')	42' (40')				
22'	W10x60	W14x34	3' (4')	11'6" (10')	426" (41')				
25'	W12x65	W16x40	3' (4')	12' (11')	46' (45')				
30'	W12x79	W14x48	3' (4')	14' (12')	53' (51')				
35'	W12x106	W21x55	3' (4')	16'6" (14')	60'6" (58')				
40'	W14x120	W21x62	3' (4')	19' (16')	68' (65')				

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W8x28	W10x22	2' (3')	10' (8'6")	27' (25'6")		
10"	W10x33	W10x26	2' (3')	11' (9'6")	30' (28'6")		
12'	W10x39	W12x26	2' (3')	12' (10')	33' (31')		
14'	W10x45	W14x30	2' (3')	13' (11')	36' (34')		
16'	W12x53	W14x34	2' (3')	146" (116")	39'6" (36'6")		
18'	W10x60	W16x40	2' (3')	16' (12'6")	43' (39'6")		
20'	W12x65	W14x43	2' (3')	176" (136")	46'6" (42'6")		
22	W12x72	W14x48	3' (4')	14'6" (12')	456 (43)		
25	W12x87	W18x50	3' (4')	16' (13'6")	50' (47'6")		
30'	W12x106	W21x62	3' (4')	186" (156")	57'6" (54'6")		
35	W14x132	W18x76	3' (4')	22 (186")	66' (62'6")		
40'	W14x159	W24x84	3' (4')	25' (21')	74' (70')		

32 FEET WIDE INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W8x24	W8x18	2' (3')	9' (7'6")	26' (24'6")			
10'	W8x28	W8x21	2' (3')	96" (8')	28'6" (27')			
12'	W10x33	W14x22	2' (3')	10'6" (9')	31'6" (30')			
14'	W10x39	W12x26	2' (3')	11' (9'6")	34' (32'6")			
16'	W10x45	W12x26	2' (3')	12' (10')	37' (35')			
18'	W10x49	W14x30	2' (3')	126" (11')	39'6" (38')			
20'	W12x53	W14x34	2' (3')	14' (11'6")	43' (40'6")			
22"	W10x60	W16x36	3' (4')	12' (10'6")	43' (41'6")			
25'	W12x72	W16x40	3' (4')	13' (11 '6")	47" (45'6")			
30'	W12x87	W18x50	3' (4')	15' (12'6")	54' (51'6")			
35'	W14x109	W21x62	3' (4')	18' (15')	62' (59')			
40'	W14x132	W21x68	3' (4')	20'6" (17')	69'6" (66')			

	Column and Foundation Requirements (Based on ASCE 7-10)										
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length						
8'	W8 x 28	W10 x 22*	2' (3')	10' (8'6")	27' (25'6")						
10"	W10 x 33	W10 x 26*	3' (4')	96" (86")	28'6" (27'6")						
12'	W10 x 39	W12 x 26+	3' (4')	10'6" (9')	31'6" (30')						
14'	W14 x 48	W14 x 30+	3' (4')	11' (10')	34' (33')						
16'	W12 x 53	W14 x 34+	3' (4')	11'6" (10'6")	36'6" (35'6")						
18'	W10 x 60	W16 x 40+	3' (4')	126" (11')	39'6" (38')						
20'	W12 x 65	W14 x 43+	3' (4')	13'6" (12')	42'6" (41')						
22"	W12 x 72	W16 x 50+	3' (4')	146" (126")	45'6" (43'6")						
25	W12 x 87	W18 x 55+	3' (4')	166" (136")	50'6" (47'6")						
30'	W14 x 109	W21 x 62+	3' (4')	19' (16')	58' (55')						
35	W14 x 132	W24 x 68+	3' (4')	21'6" (18')	65'6" (62')						
40'	W14 x 159	W24 x 84+	3' (4')	25'6" (21')	74'6" (70')						

36 FEET WIDE INSTALLATIONS

	Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W8 x 24	W8 x 18*	2' (3')	9' (7'6")	26' (24'6")			
10'	W8 x 28	W10 x 22*	3' (4')	86" (76")	276" (266")			
12'	W10 x 33	W14 x 22+	3' (4')	9' (8')	30' (29')			
14'	W10 x 39	W12 x 26+	3' (4')	96" (86")	32'6" (31'6")			
16'	W10 x 45	W12 x 30+	3' (4')	10' (9')	35' (34')			
18'	W10 x 49	W14 x 30+	3' (4')	11' (9'6")	38' (36'6")			
20'	W12 x 53	W14 x 34+	3' (4')	11'6" (10'6")	40'6" (39'6")			
22'	W14 x 61	W16 x 36+	3' (4')	12' (11')	43' (42')			
25'	W12 x 72	W14 x 43+	3' (4')	13' (11'6")	47' (45'6")			
30'	W12 x 87	W18 x 50+	3' (4')	15'6" (13')	54'6" (52')			
35'	W12 x 106	W21 x 55+	3' (4')	176" (14'6")	61'6" (58'6")			
40'	W14 x 132	W24 x 68+	3' (4')	20'6" (17'6")	69'6" (66'6")			

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.

2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.

3. Wind loading figured at **Exposure** "C" - **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

4. Wind loading figured at **Exposure** "B" - **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard
Pier Installation
4 Column
Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0408

Drawn KAB Date 12/7/16 Sheet of 4 7

3 **4**

	EXPOSURE C (See Note 3)										
	Column and Foundation Requirements (Based on ASCE 7-10)										
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length						
10"	W10x33	W10x26	2' (3')	11' (9'6')	30' (28'6")						
12'	W10x39	W12x30	2' (3')	12' (10'6")	33 (31'6")						
14'	W14x48	W14x30	2' (3')	136" (11")	36'6" (34')						
16'	W12x53	W18x35	2' (3')	15' (12')	40' (37')						
18'	W14x61	W16x40	2' (3')	166" (126")	43'6" (39'6")						
20'	W12x65	W21x44	2' (3')	176" (14')	46'6" (43')						
22"	W12x72	W16x50	3' (4')	15' (12'6")	46' (43'6")						
25	W12x87	W18x55	3' (4')	16'6" (14')	50'6" (48')						
30'	W14x109	W21x62	3' (4')	19' (16')	58' (55')						
35	W14x132	W24x76	3' (4')	226" (19")	666" (63')						
40'	W14x159	W24x94	3' (4')	256" (216")	74'6" (70'6")						

30 FEET WIDE **INSTALLATIONS** (see note 5)

EXPOSURE B (See Note 4)									
Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
10'	W8x28	W10x22	2' (3')	9'6" (8'6")	28'6" (27'6")				
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')				
14'	W10x39	W12x26	2' (3')	11' (96")	34' (32'6")				
16'	W10x45	W12x30	2' (3')	12 (106")	37' (35'6")				
18'	W10x49	W14x30	2' (3')	13' (11')	40' (38')				
20'	W12x53	W14x34	2' (3')	14' (11'6")	43' (40'6")				
22'	W14x61	W16x36	3' (4')	12' (11')	43' (42')				
25'	W12x72	W14x43	3' (4')	13'6" (11'6")	47'6" (45'6")				
30'	W12x87	W18x50	3' (4')	156" (13')	54'6" (52')				
35'	W14x109	W21x62	3' (4')	18'6" (15'6")	62'6" (59'6")				
40'	W14x132	W24x68	3' (4')	21' (17'6")	70' (66'6")				

Column and Foundation Requirements (Based on ASCE 7-10)										
CARDINI MINI I CUINMINI NEQUIANEID (DASEI OI ASCL 1-10)										
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length					
8'	W10x33	W10x26	2' (3')	10'6" (9')	276" (26')					
10'	W10x39	W12x26	2' (3')	11'6" (10')	30'6" (29')					
12'	W14x43	W12x30	2' (3')	13' (11')	34' (32')					
14'	W10x49	W14x34	2' (3')	146" (116")	376" (34'6")					
16'	W12x53	W16x36	2' (3')	16' (12'6")	41' (37'6")					
18'	W12x65	W14x43	2' (3')	176" (136")	44'6" (40'6")					
20'	W12x72	W16x50	2' (3')	19' (15')	48' (44')					
22'	W12x79	W18x50	3' (4')	16' (13'6")	47' (44'6")					
25	W12x96	W21x55	3' (4')	17'6" (15')	51'6" (49')					
30'	W14x109	W21x68	3' (4')	206" (17')	59'6" (56')					
35'	W14x145	W24x84	3' (4')	246" (206")	68'6" (64'6")					
40'	W14x176	W24x94	3' (4')	27'6" (23')	766" (72')					

32 FEET WIDE **INSTALLATIONS**

CONUMN and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W8x24	W8x21	2' (3')	96" (8')	26'6" (25')			
10'	W10x33	W10x22	2' (3')	10' (8'6")	29' (27'6")			
12'	W8x35	W10x26	2' (3')	11' (9'6")	32" (30'6")			
14'	W12x40	W12x26	2' (3')	11'6" (10')	34'6" (33')			
16'	W14x48	W12x30	2' (3')	12'6" (10'6")	376" (356")			
18'	W12x53	W14x34	2' (3')	14' (11'6")	41' (38'6")			
20'	W10x60	W16x36	2' (3')	15' (12')	44' (41')			
22"	W12x65	W16x40	3' (4')	13' (11'6")	44' (42'6")			
25'	W12x79	W14x48	3' (4')	146" (12')	48'6" (46')			
30,	W12x96	W18x55	3' (4')	166" (14')	55'6" (53')			
35'	W14x120	W21x68	3' (4')	20' (16'6")	64' (60'6")			
40'	W14x145	W24x76	3' (4')	22'6" (19')	71'6" (68')			
			1					

Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Le									
8'	W10 x 33	W10 x 26*	2' (3')	11' (9')	28' (26')				
10"	W10 x 39	W12 x 26*	3' (4')	10' (9')	29' (28')				
12'	W14 x 43	W12 x 30+	3' (4')	11' (10')	32' (31')				
14'	W10 x 49	W14 x 34+	3' (4')	11'6" (10'6")	34'6" (33'6")				
16'	W10 x 60	W16 x 36+	3' (4')	126" (11")	376" (36')				
18'	W12 x 65	W14 x 43+	3' (4')	136" (12')	40'6" (39')				
20"	W12 x 72	W16 x 50+	3' (4')	15' (12'6")	44' (41'6")				
22	W12 x 79	W18 x 50+	3' (4')	16' (13'6")	47' (44'6")				
25	W12 x 96	W21 x 55+	3' (4')	18' (15')	52' (49')				
30'	W12 x 120	W21 x 68+	3' (4')	21' (17'6")	60' (56'6")				
35	W14 x 145	W24 x 76+	3' (4')	24' (20')	68' (64')				
40'	W14 x 176	W21 x 101+	3' (4')	28 (236")	77' (72'6")				

36 FEET WIDE **INSTALLATIONS**

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8"	W8 x 24	W8 x 21*	2' (3')	96" (8')	26'6" (25')
10'	W10 x 33	W10 x 22*	3' (4')	86" (8')	27'6" (27')
12'	W8 x 35	W10 x 26+	3' (4')	96" (86")	30'6" (29'6")
14'	W14 x 43	W12 x 26+	3' (4')	10' (9')	33' (32')
16'	W14 x 48	W14 x 30+	3' (4')	11' (96")	36' (34'6")
18'	W12 x 53	W14 x 34+	3' (4')	11'6" (10'6")	38'6" (37'6")
20'	W10 x 60	W16 x 36+	3' (4')	12' (11')	41' (40')
22'	W12 x 65	W16 x 40+	3' (4')	13' (11'6")	44' (42'6")
25'	W12 x 79	W16 x 50+	3' (4')	146" (12')	48'6" (46')
30'	W12 x 96	W21 x 55+	3' (4')	17' (14')	56' (53')
35'	W14 x 109	W21 x 62+	3' (4')	19' (16')	63' (60')
40'	W14 x 145	W24 x 76+	3' (4')	22'6" (19')	71'6" (68')

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.

2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.

- 3. Wind loading figured at **Exposure** "C" Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas. 4. Wind loading figured at **Exposure "B" - Urban and suburban areas**, wooded areas, or other terrain with numerous
- closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard Pier Installation 4 Column Multi-Section

TEVCO

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0408

Drawn Sheet 5 of 7 12/7/16 KAB

EXPOSURE C (See Note 3)											
	Column and Foundation Requirements (Based on ASCE 7-10)										
Display Height	Unbraced Column	Pier Depth	Column Length								
10'	W10x39	W12x30	2' (3')	12'6" (10'6")	31'6" (29'6")						
12'	W14x48	W14x34	3' (4')	11'6" (10'6")	32'6" (31'6")						
14'	W12x53	W16x36	3' (4')	12'6" (11')	356" (34')						
16'	W14x61	W14x43	3' (4')	14' (12')	39' (37')						
18'	W12x72	W16x50	3' (4')	15' (12'6")	42' (39'6")						
20'	W12x79	W18x50	3' (4')	16'6" (14')	45'6" (43')						
22'	W12x96	W21x55	3' (4')	17'6" (15')	48'6" (46')						
25'	W21x101	W21x62	3' (4')	196" (166")	53'6" (50'6")						
30'	W24x131	W24x68	3' (4')	23' (19')	62' (58')						
35'	W14x159	W24x94	3' (4')	276" (226")	71'6" (66'6")						
40'	W14x193	W24x104	3' (4')	30'6" (25'6")	79'6" (74'6")						

30 FEET WIDE **INSTALLATIONS** (see note 5)

EXPOSURE B (See Note 4)										
	Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height	Column Length									
10'	W10x33	W10x26	2' (3')	11' (7'6")	31' (29'6")					
12'	W10x39	W12x26	2' (3')	11'6" (8'6")	33'6" (32')					
14'	W10x45	W12x30	2' (3')	12'6" (9')	36'6" (34'6")					
16'	W10x49	W14x34	2' (3')	14' (9'6")	40' (37'6")					
18'	W10x60	W16x36	2' (3')	15'6" (10')	43'6" (40')					
20'	W12x65	W16x40	2' (3')	17' (10'6")	47' (43')					
22'	W12x72	W21x44	2' (3')	18' (11')	50' (46')					
25'	W18x86	W18x50	2' (3')	20'6" (12')	55'6" (51')					
30'	W12x106	W21x62	2' (3')	23'6" (12')	63'6" (58'6")					
35'	W14x132	W24x68	3' (4')	22' (13'6")	67" (63"6")					
40'	W14x159	W24x84	3' (4')	25' (13'6")	75 (71')					

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W16x36	W12x26	2' (3')	12' (10'6")	29' (27'6")			
10'	W12x40	W14x30	2' (3')	13'6" (11')	32'6" (30')			
12'	W10x49	W18x35	2' (3')	15'6" (12')	36'6" (33')			
14'	W10x60	W16x40	2' (3')	176" (136")	40'6" (36'6")			
16'	W12x65	W21x44	2' (3')	19' (15')	44' (40')			
18'	W14x74	W18x50	3' (4')	166" (136")	43'6" (40'6")			
20'	W18x86	W18x55	3' (4')	18' (15')	47' (44')			
22'	W12x96	W21x62	3' (4')	19' (16')	50' (47')			
25'	W14x109	W21x68	3' (4')	21' (17'6")	55' (51'6")			
30'	W18x143	W24x76	3' (4')	24'6" (20'6")	63'6" (59'6")			
35'	W14x176	W21x101	3' (4')	296" (246")	73'6" (68'6")			
40'	W14x211	W24x117	3' (4')	336" (276")	82'6" (76'6")			

32 FEET WIDE **INSTALLATIONS**

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W12x30	W10x22	2' (3')	10'6" (9')	28'6" (27')			
10'	W10x33	W12x26	2' (3')	11'6" (9'6")	31'6" (29'6")			
12'	W12x40	W12x30	2' (3')	12' (10'6")	34' (32'6")			
14'	W14x48	W14\x34	2' (3')	13'6" (11')	376" (35')			
16'	W12x53	W18x35	2' (3')	15' (12')	41' (38')			
18'	W14x61	W16x40	2' (3')	17' (13')	45' (41')			
20'	W12x65	W21x44	2' (3')	18' (14')	48' (44')			
22'	W12x79	W16x50	2' (3')	196" (156")	51'6" (47'6")			
25'	W12x96	W18x55	2' (3')	22' (17')	57' (52')			
30'	W14x109	W21x62	3' (4')	20" (16'6")	60' (56'6")			
35'	W14x145	W24x76	3' (4')	24' (20')	69' (65')			
40'	W14x176	W24x94	3' (4')	27' (22'6")	77' (72'6")			

Column and Foundation Requirements (Based on ASCE 7-10) Display Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column Length 29 (276") W16 x 36 W12 x 26* 12" (106") 2' (3') W14 x 43 10' W14 x 30* 3' (4') 11' (10') 30' (29') W10 x 49 W18 x 35+ 12 3' (4') 12' (11') 33' (32') W16 x 40+ 14' W10 x 60 136" (116") 36'6" (34'6") 3' (4') 16' W12 x 65 W21 x 44+ 3' (4') 15' (126") 40' (37'6") 18' W14 x 74 W18 x 50+ 3' (4') 166" (136") 43'6" (40'6") 20' W18 x 86 W21 x 55+ 3' (4') 18' (15') 47' (44') 22 W21 x 62+ W18 x 97 3' (4') 19'6" (16') 50'6" (47') 25' W14 x 109 W21 x 68+ 3' (4') 21'6" (18') 556" (52') 30' W18 x 143 W24 x 84+ 3' (4') 25' (21') 64' (60') 286" (236") 72'6" (67'6") 35' W18 x 175 W21 x 101+ 3' (4') W14 x 233 34' (28') 40' W24 x 117+ 3' (4') 83' (77')

36 FEET WIDE **INSTALLATIONS**

	Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
8'	W12x30	W10x22	2' (3')	10'6" (9')	28'6" (27')				
10'	W10x33	W12x26	2' (3')	11'6" (9'6")	31'6" (29'6")				
12'	W12x40	W12x30	2' (3')	12'6" (10'6")	34'6" (32'6")				
14'	W14x48	W14x34	2' (3')	13'6" (11'6")	376" (356")				
16'	W12x53	W16x36	2' (3')	15' (12')	41' (38')				
18'	W14x61	W16x40	2' (3')	16'6" (13')	44'6" (41')				
20'	W12x72	W21x44	2' (3')	186" (146")	48'6" (44'6")				
22'	W12x79	W18x50	3' (4')	15'6" (13')	47'6" (45')				
25'	W12x96	W18x55	3' (4')	17' (14'6")	52' (49'6")				
30'	W14x109	W21x68	3' (4')	20' (17')	60' (57')				
35'	W14x145	W24x76	3' (4')	23' (19')	68' (64')				
40'	W14x176	W24x94	3' (4')	27' (22')	77' (72'6")				

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.

2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.

3. Wind loading figured at **Exposure "C" - Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

4. Wind loading figured at **Exposure "B" - Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard Pier Installation 4 Column Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0408

Sheet 6 of 7

Drawn 12/7/16 KAB

4

	EXPOSURE C (See Note 3)									
Column and Foundation Requirements (Based on ASCE 7-10)										
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length					
10"	W14x48	W18x35	2 (3)	16' (12'6")	35' (31'6")					
12'	W10x60	W16x40	3' (4')	14' (12')	35' (33')					
14'	W12x65	W16x50	3' (4')	15'6" (13')	38'6" (36')					
16'	W18x76	W18x55	3' (4')	176" (146")	42'6" (39'6")					
18'	W18x86	W21x55	3' (4')	19' (16')	46' (43')					
20'	W18x97	W21x62	3' (4')	20'6" (17')	49'6" (46')					
22"	W24x104	W21x68	3' (4')	22'6" (18'6")	53'6" (49'6")					
25	W18x130	W24x76	3' (4')	25' (20'6")	59' (54'6")					
30'	W14x159	W24x94	3' (4')	29' (24')	68' (63')					
35	W21x201	W24x117	3' (4')	35' (286")	79' (72'6")					
40'	W14x257	W24x146	3' (4')	39' (32'6")	88' (81'6")					

30 FEET WIDE
INSTALLATIONS
(see note 5)

	EX	POSURE B (See Note	2 4)	
	Column and Fo	oundation Requireme	ents (Based	on ASCE 7-10)	
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
10'	W10x39	W12x30	2' (3')	12'6" (10'6")	31'6" (29'6")
12'	W14x48	W14x34	3' (4')	11'6" (10'6")	32'6" (31'6")
14'	W12x53	W16x36	3' (4')	126" (11')	356" (34')
16'	W14x61	W14x43	3' (4')	14' (12')	39' (37')
18'	W14x68	W16x50	3' (4')	15' (12'6")	42 (396")
20'	W12x79	W18x50	3' (4')	166" (14")	456" (43')
22'	W12x96	W21x55	3' (4')	18' (15')	49' (46')
25'	W21x101	W21x62	3' (4')	20' (16'6")	54' (50'6")
30'	W24x131	W18x76	3' (4')	23' (19')	62' (58')
35'	W18x175	W24x94	3' (4')	28' (23')	72' (67')
40'	W21x201	W24x104	3' (4')	31'6" (26')	80'6" (75')

	Column and Fo	undation Requireme	ents (Based (on ASCE 7-10)	
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W14x43	W14x34	2' (3')	15' (12')	32' (29')
10"	W12x53	W16x40	2' (3')	17' (13')	36' (32')
12'	W14x61	W21x44	2' (3')	19'6" (15')	40'6" (36')
14'	W16x67	W18x50	2' (3')	22' (17')	45' (40')
16'	W18x76	W21x55	2' (3')	24'6" (18'6")	49'6" (43'6")
18'	W18x97	W21x62	3' (4')	21' (17')	48' (44')
20'	W21x101	W21x68	3' (4')	22'6" (18'6")	51'6" (47'6")
22"	W21x111	W18x76	3' (4')	24'6" (20')	55 '6" (51')
25	W24x131	W24x84	3' (4')	27" (22'6")	61' (56'6")
30'	W18x175	W24x103	3' (4')	31'6" (26')	70'6" (65')
35	W14x233	W24x131	3' (4')	38' (31')	82' (75')
40'	W14x283	W24x162	3' (4')	42'6" (35')	91'6" (84')

32 FEET WIDE
INSTALLATIONS

			ll .		H. Control of the Con
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)	
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x33	W12x26	2' (3')	12' (10')	29' (27')
10'	W12x40	W14x30	2' (3')	13'6" (11')	32'6" (30')
12'	W10x49	W18x35	2' (3')	156" (12')	36'6" (33')
14'	W10x60	W16x40	2' (3')	17' (13'6")	40' (36'6")
16'	W12x65	W21x44	2' (3')	19' (14'6")	44' (39'6")
18'	W14x74	W18x50	3' (4')	16'6" (13'6")	43'6" (40'6")
20'	W18x86	W18x55	3' (4')	17'6" (15')	46'6" (44')
22'	W12x96	W21x62	3' (4')	19' (16')	50' (47')
25'	W14x109	W21x68	3' (4')	21'6" (18')	55'6" (52')
30'	W18x143	W24x84	3' (4')	25' (21')	64' (60')
35'	W21x182	W21x101	3' (4')	30' (25')	74' (69')
40'	W14x233	W24x117	3' (4')	34' (28')	83' (77')
					-

	Column and Foundation Requirements (Based on ASCE 7-10)												
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length								
8'	W14 x 43	W14 x 34*	2' (3')	15' (12')	32' (29')								
10"	W12 x 53	W16 x 40*	3' (4')	136" (116")	32'6" (30'6")								
12'	W14 x 61	W21 x 44+	3' (4')	15' (12'6")	36' (33'6")								
14'	W16 x 67	W18 x 50+	3' (4')	17' (14')	40' (37')								
16'	W18 x 76	W21 x 55+	3' (4')	19' (15'6")	44' (40'6")								
18'	W12 x 96	W21 x 62+	3' (4')	20'6" (17')	47'6" (44')								
20"	W21 x 101	W21 x 68+	3' (4')	23' (19')	52' (48')								
22"	W24 x 117	W24 x 76+	3' (4')	24'6" (20'6")	55'6" (51'6")								
25	W18 x 143	W24 x 84+	3' (4')	276" (226")	61'6" (56'6")								
30'	W14 x 176	W24 x 104+	3' (4')	32' (26'6")	71' (65'6")								
35	W14 x 233	W24 x 131+	3' (4')	36'6" (30')	80'6" (74')								
40'	W14 x 283	W24 x 162+	3' (4')	43'6" (35'6")	92'6" (84'6")								

36 FEET WIDE INSTALLATIONS

4

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W16 x 36	W12 x 26*	2' (3')	12' (10')	29' (27')
10'	W12 x 40	W14 x 30*	3' (4')	11' (10')	30' (29')
12'	W10 x 49	W18 x 35+	3' (4')	12' (11')	33' (32')
14'	W10 x 60	W16 x 40+	3' (4')	13'6" (11'6")	36'6" (34'6")
16'	W12 x 65	W21 x 44+	3' (4')	15' (12'6")	40' (37'6")
18'	W14 x 74	W18 x 50+	3' (4')	16'6" (13'6")	43'6" (40'6")
20'	W18 x 86	W21 x 55+	3' (4')	18' (15')	47' (44')
22'	W18 x 97	W21 x 62+	3' (4')	196" (16')	50'6" (47')
25'	W14 x 109	W21 x 68+	3' (4')	21'6" (18')	556" (52')
30'	W18 x 143	W24 x 84+	3' (4')	256" (21')	64'6" (60')
35'	W14 x 176	W21 x 101+	3' (4')	29' (24')	73' (68')
40'	W14 x 233	W24 x 117+	3' (4')	34'6" (28'6")	83'6" (77'6")

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.
 Wind loading figured at Exposure "C" Open terrain with scattered obstructions having heights generally less
- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

 4. Wind loading figured at **Exposure** "B" **Urban and suburban areas**, wooded areas, or other terrain with numerous
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard
Pier Installation
4 Column
Multi-Section



Nevco, Inc. Greenville, Illinois 62246

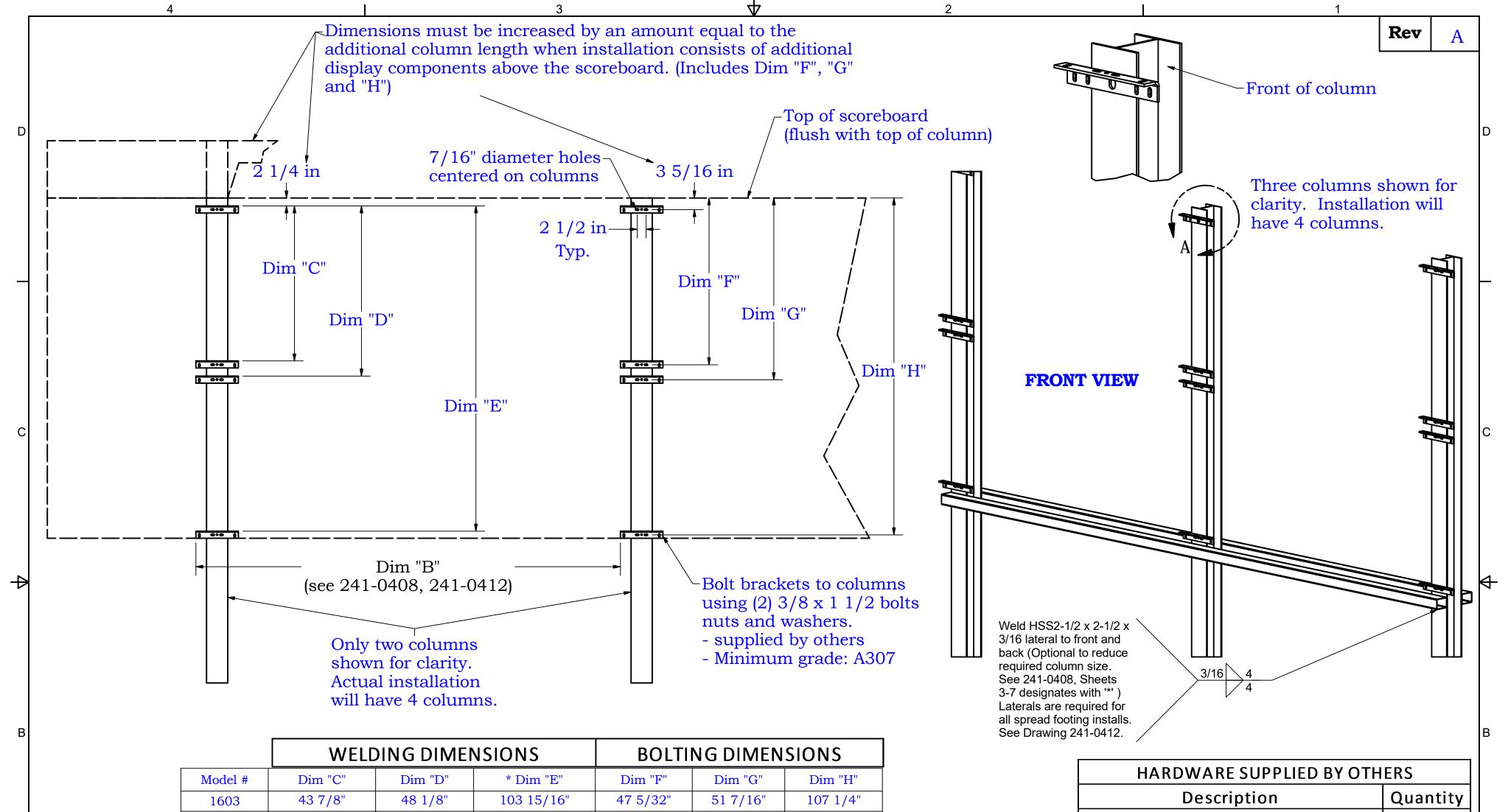
Drawing No. 241-0408

Drawn KAB

12/7/16

Sheet 7 of 7

3



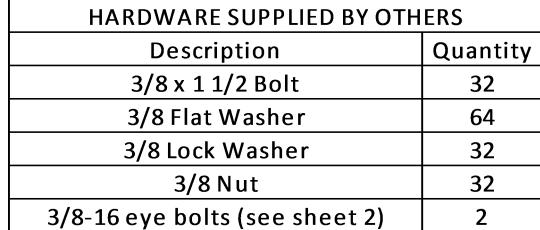
	WELD	DING DIMEI	NSIONS	BOLTI	NG DIMEN	SIONS
Model #	Dim "C"	Dim "D"	* Dim "E"	Dim "F"	Dim "G"	Dim "H"
1603	43 7/8"	48 1/8"	103 15/16"	47 5/32"	51 7/16"	107 1/4"
3620, 7620 3688, 7688	43 7/8"	48 1/8"	91 15/16"	47 5/32"	51 7/16"	95 1/4"
3604, 3616 3657, 7616	55 7/8"	60 1/8"	115 15/16"	59 5/32"	63 7/16"	119 1/4"

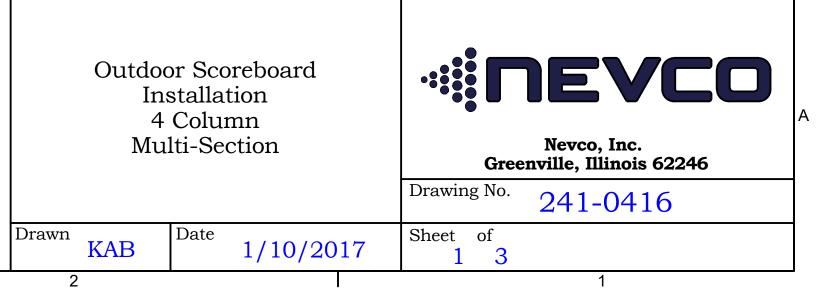
Required Hand Tools:

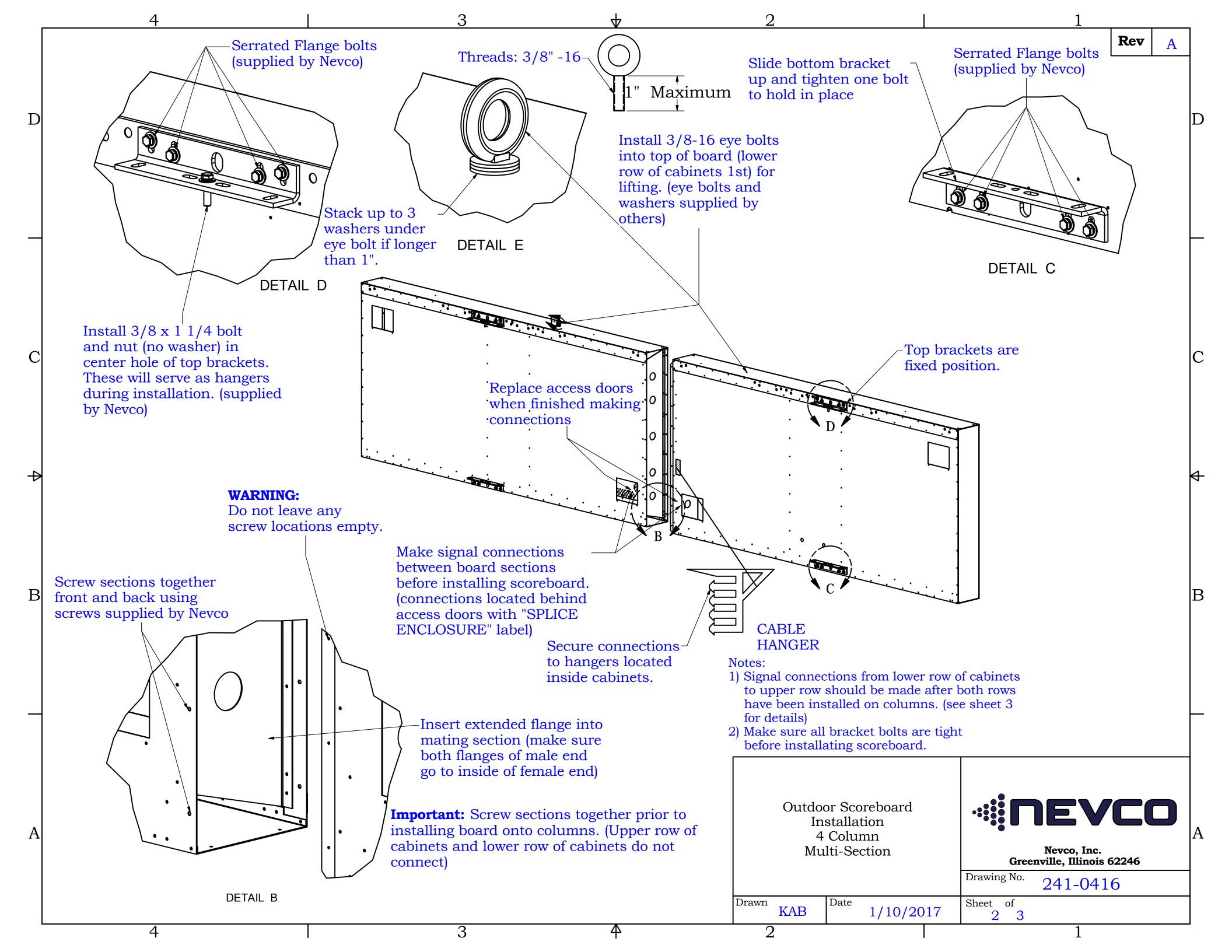
- 1. Phillips head screw driver/drill with phillips driver.
- 2. 9/16" wrench
- 3. Ratchet wrench and 9/16" socket
- 4. Level
- 5. Tape measure

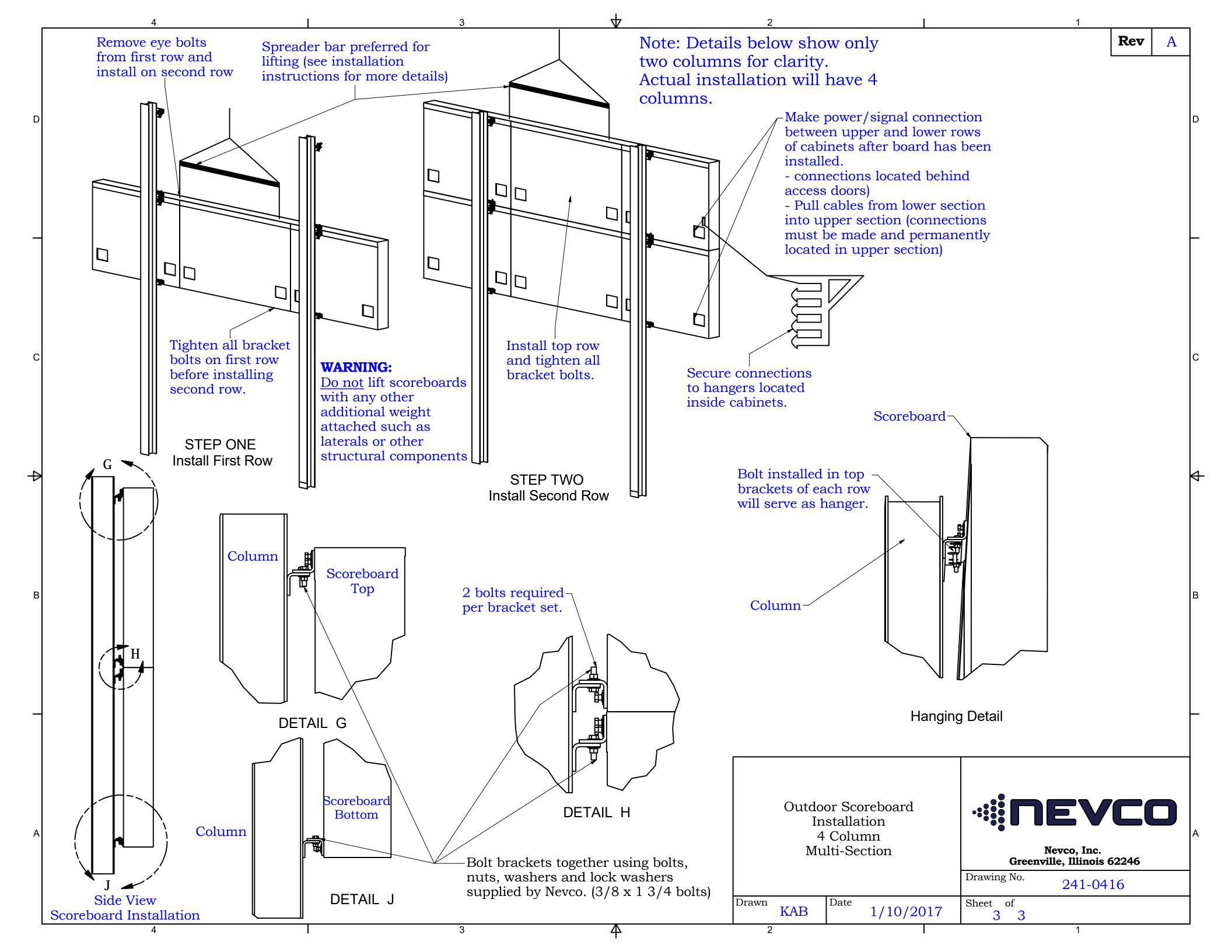
Notes:

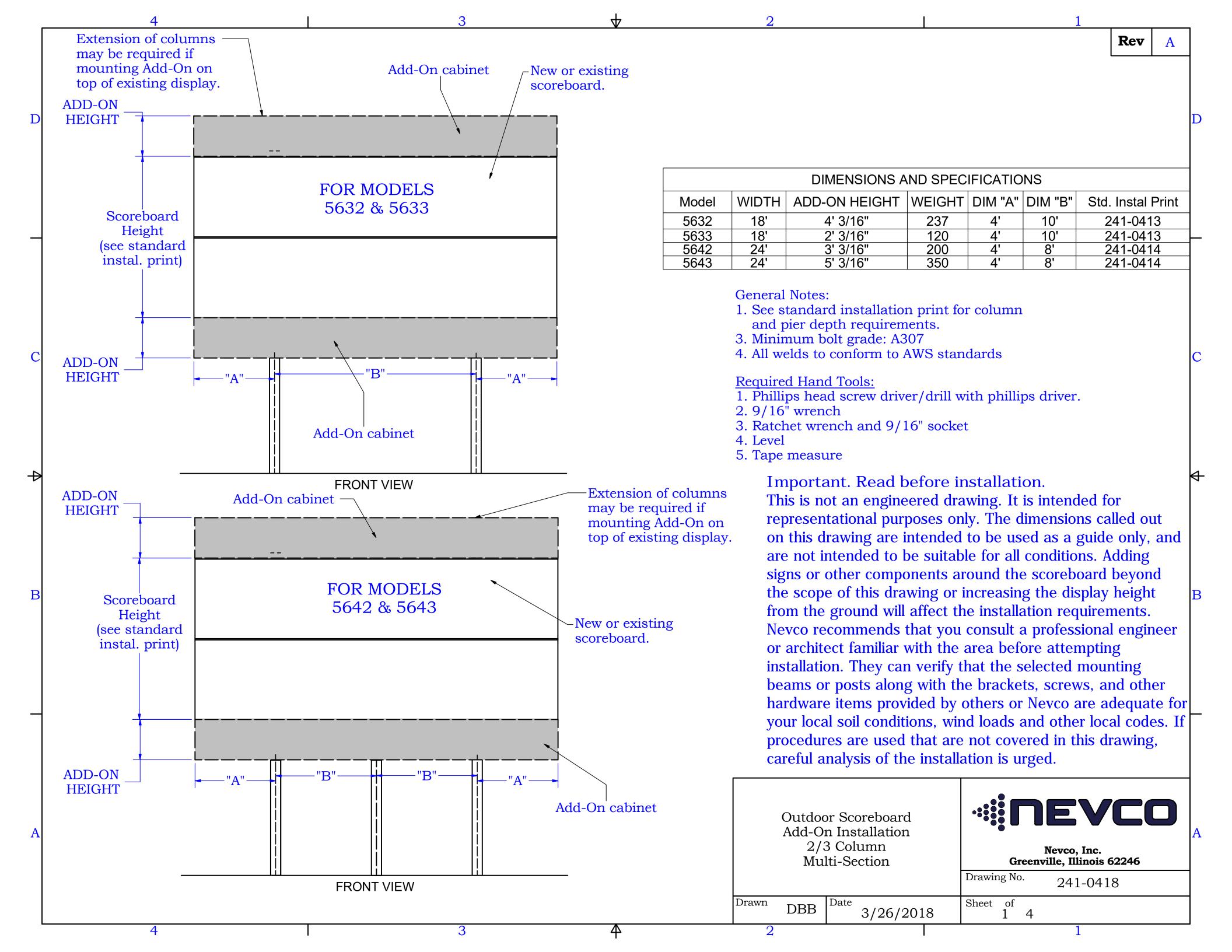
- 1) If welding brackets to columns, weld around full contact surface of brackets.
- 2) **FOR HIGH WIND AREAS**: For installations in wind zones higher than 150 mph, brackets <u>must</u> be welded
- 3) Dimensions above should be taken from the top of the SHORTEST column, marked and leveled across to other column.
- 4) Brackets shipped in separate container.

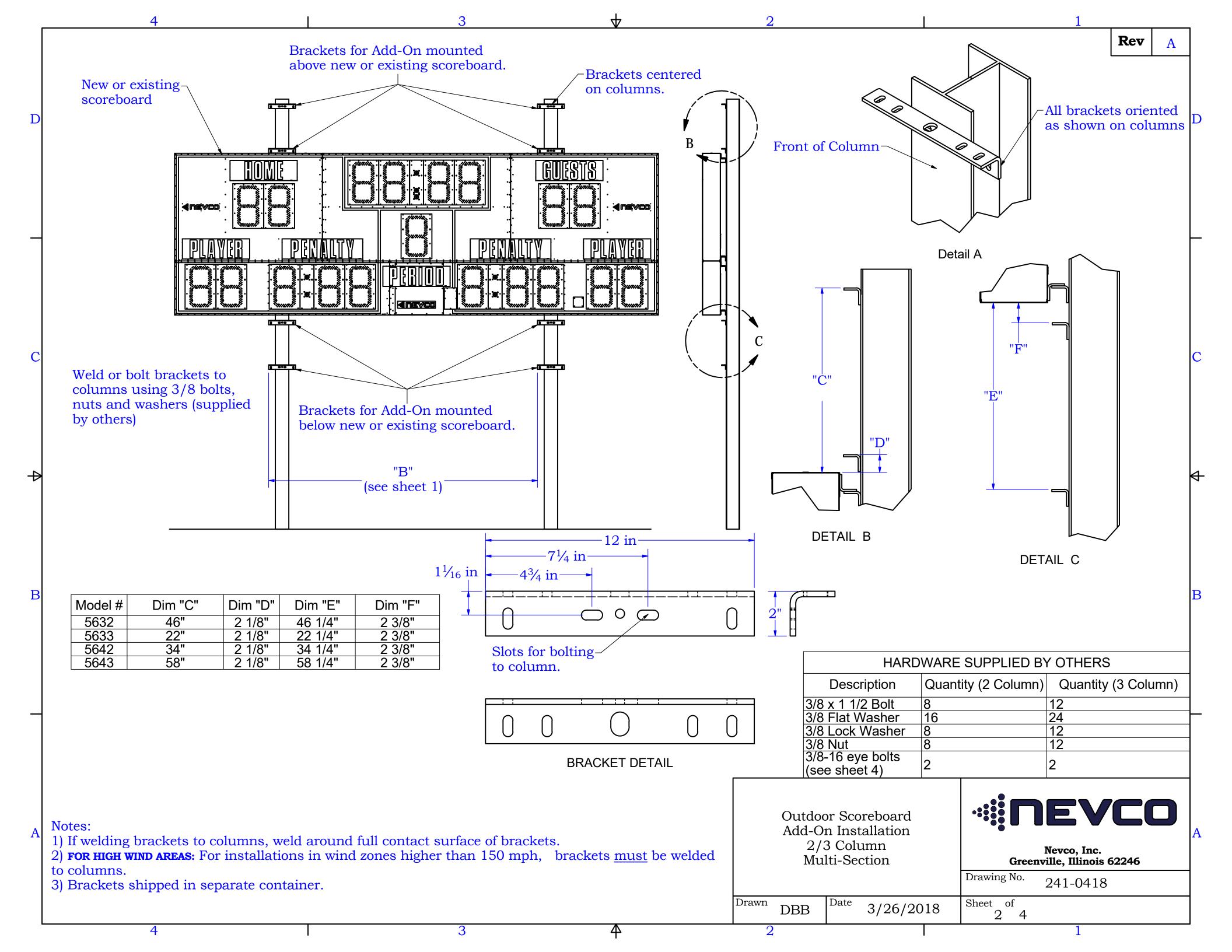


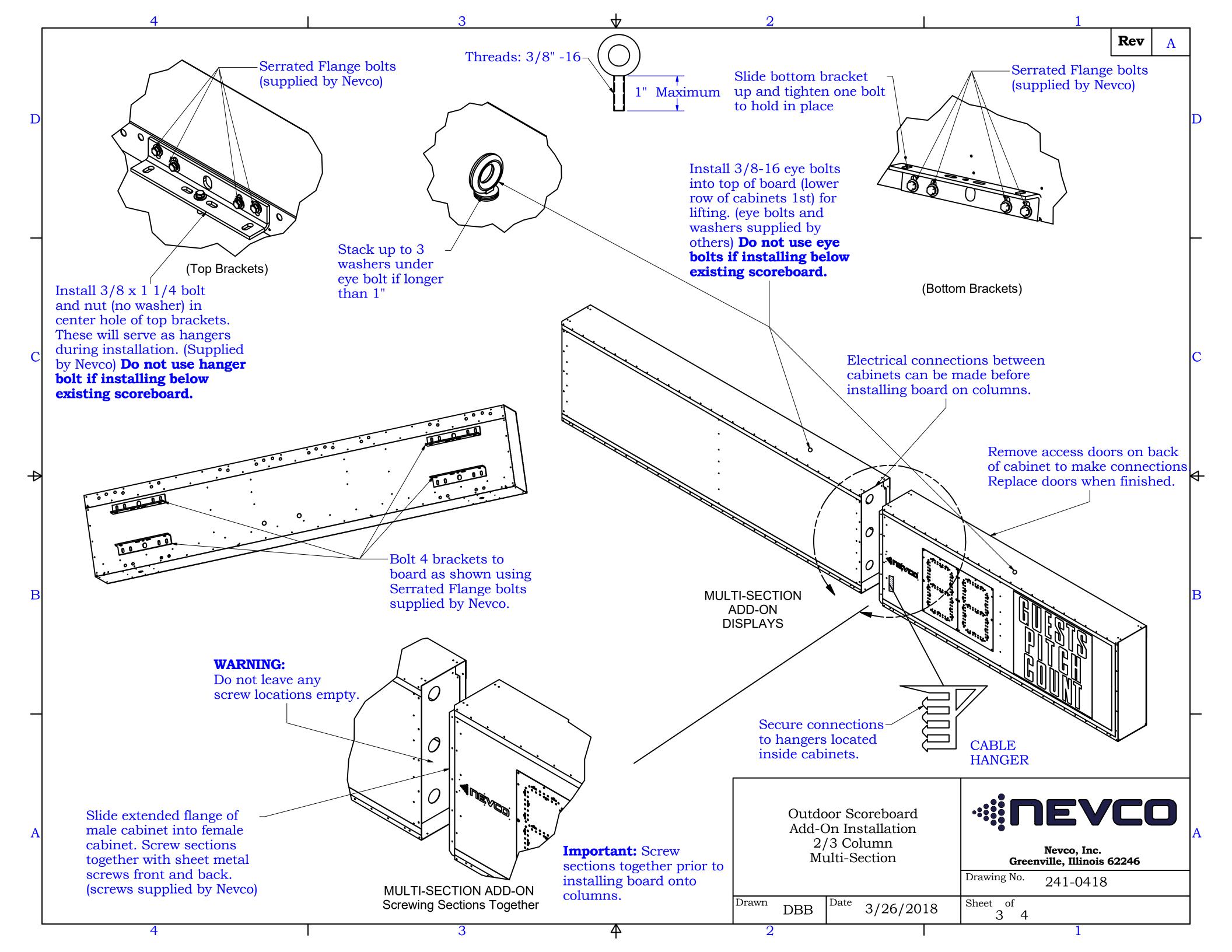


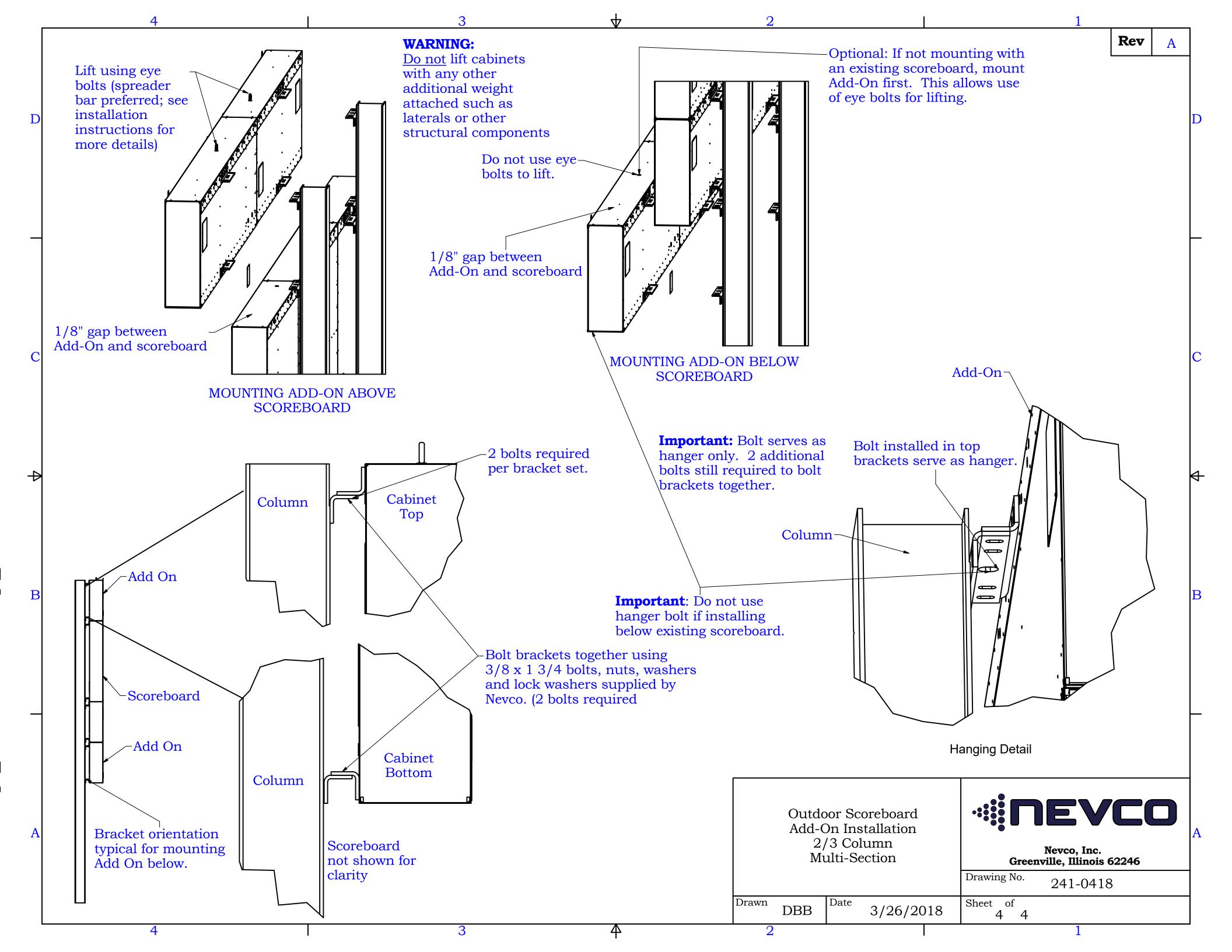


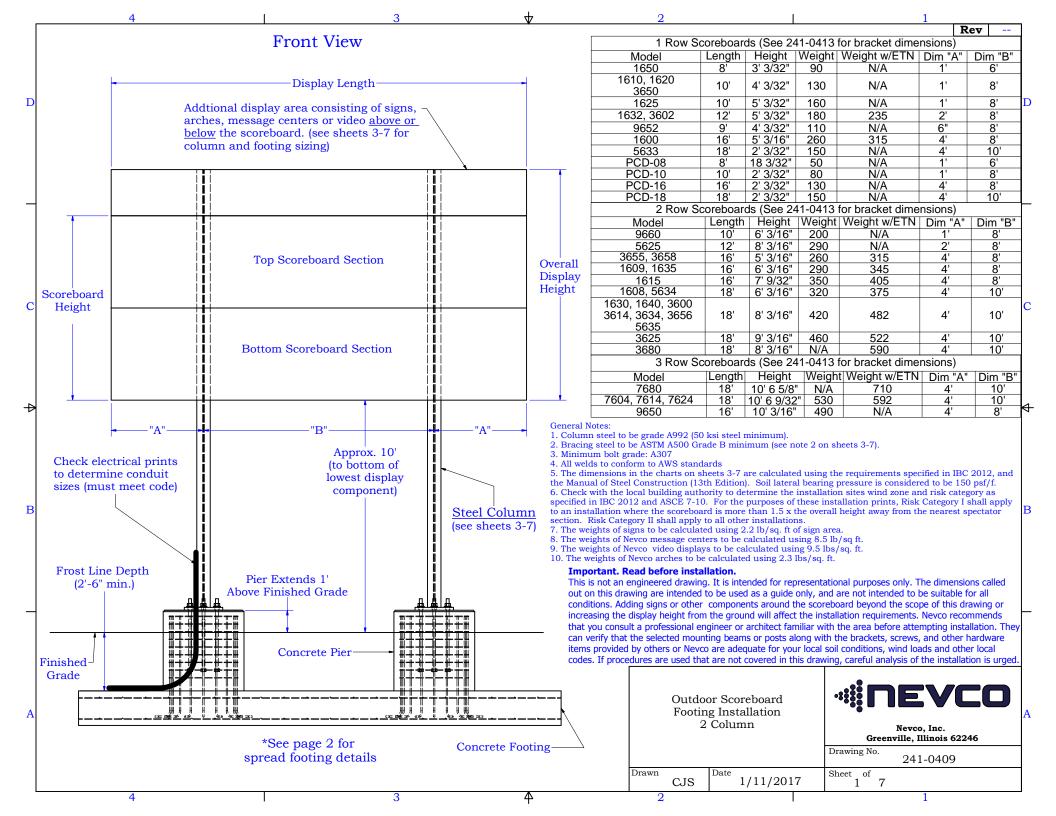


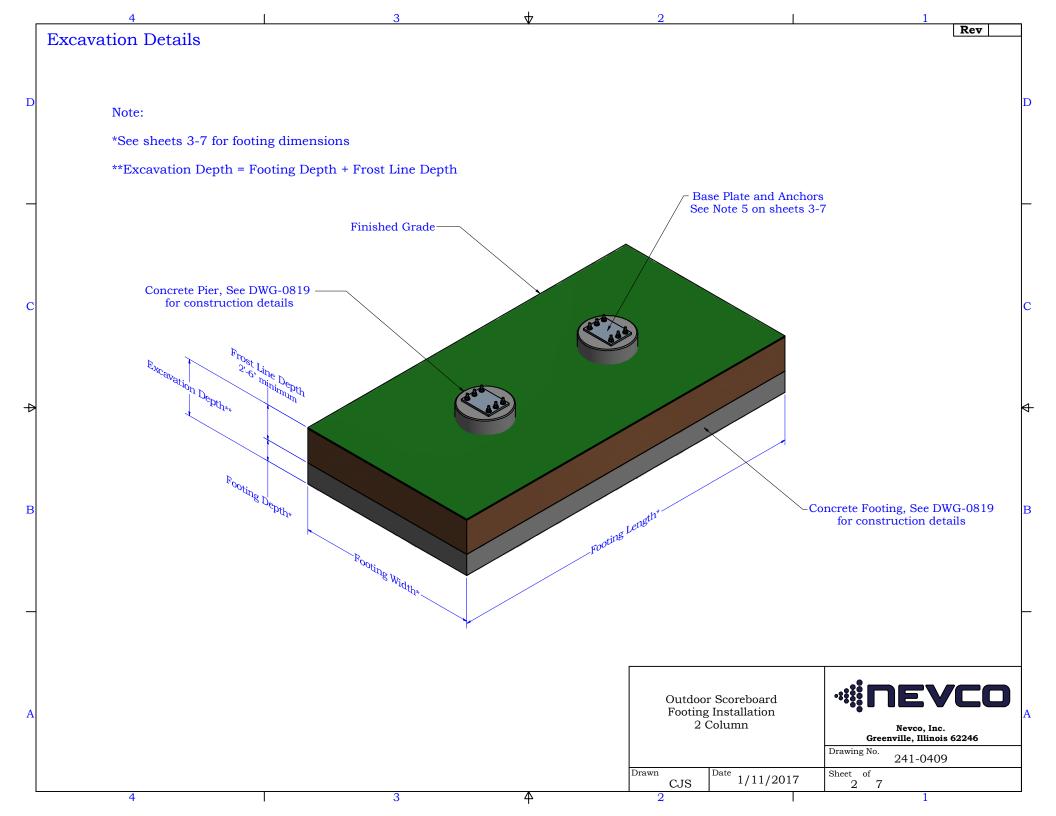










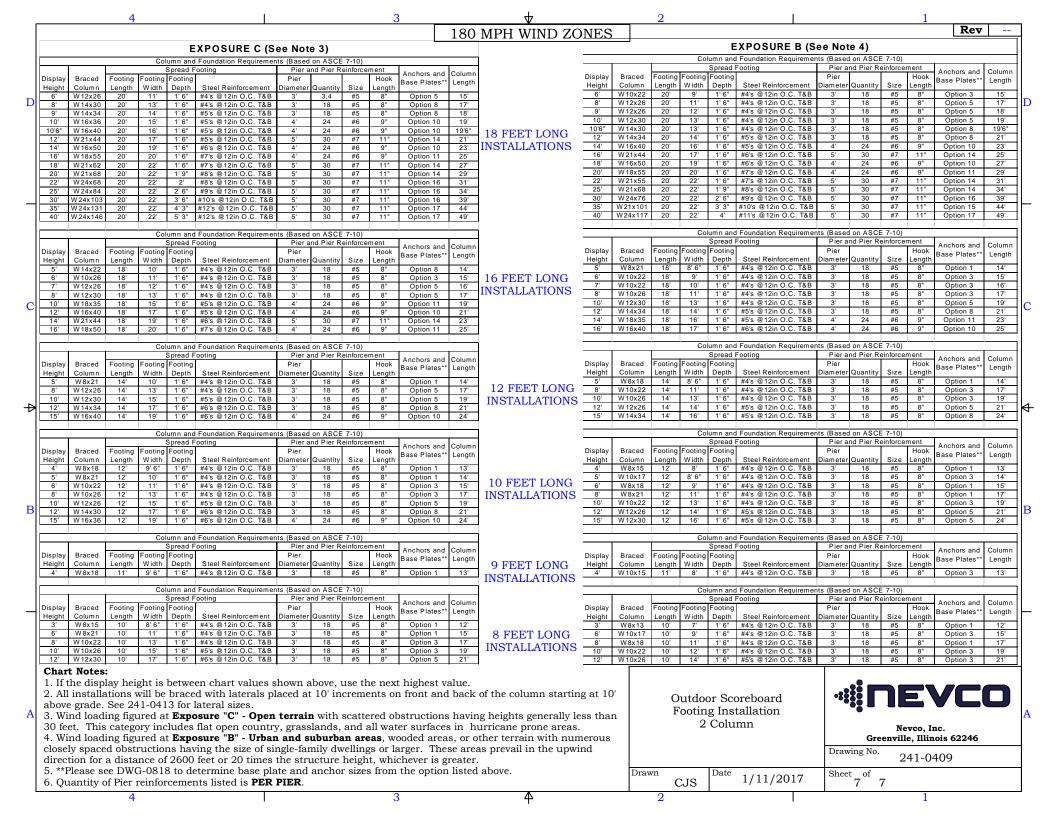


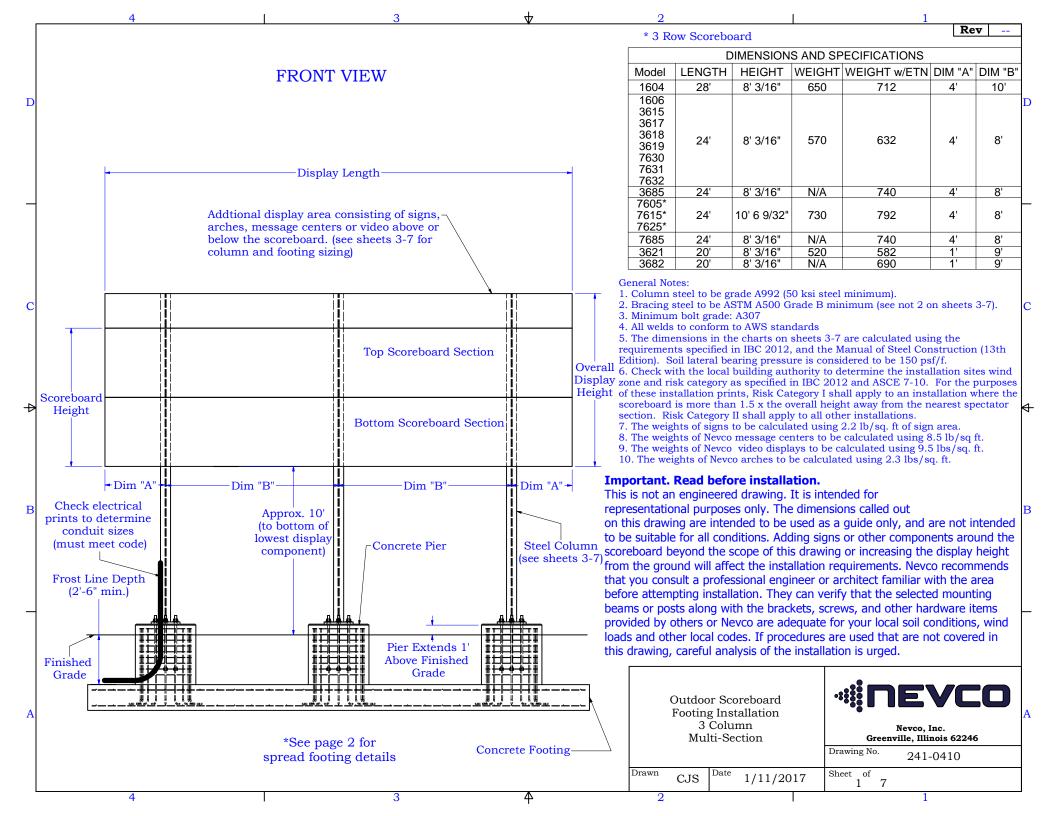
	4 3	Φ	2 1
		5 MPH WIND ZC	NES Rev
	EXPOSURE C (See Note 3)		EXPOSURE B (See Note 4)
	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement Anchors and Colum Base Plates** Length Height Column Length Width Depth Steel Reinforcement Diameter Quantity Size Length		Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement Height Column Length Width Depth Steel Reinforcement Diameter Quantity Size length Column Length Pier Reinforcement Diameter Quantity Size length
D	6° W10x17 20° 6′ 6° 1′ 1′ 6° #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 3 15′ 8° W8x21 20′ 8° 1′ 6° #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 1 17′ 9′ W8x21 20′ 8′ 6′ 1′ 6° #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 1 17′ 9′ W8x21 20′ 8′ 6′ 1′ 6° #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 1 18′ 10′ W10x22 20′ 9′ 1′ 6° #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 3 19′ 106′ W10x22 20′ 9′ 1′ 6° #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 3 19′ 12′ W10x26 20′ 10′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 3 19′ 12′ W10x26 20′ 10′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 3 21′ 14′ W12x26 20′ 11′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 3 21′ 14′ W12x30 20′ 12′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 5 23′ 16′ W12x30 20′ 12′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 5 25′ 18′ W14x30 20′ 12′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 5 25′ 18′ W14x30 20′ 13′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 8 27′ 18′ W14x30 20′ 13′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 8 27′ 18′ W14x30 20′ 13′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 8 27′ 18′ W14x30 20′ 13′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 8 27′ 18′ W14x30 20′ 13′ 1′ 6′ #4′s @ 12in O.C. T&B 3′ 18 #5 8° Option 8 27′ 18′ W14x30 20′ 13′ 16′ W14×8 @ 12in O.C. T&B 3′ 18 #5 8° Option 8 27′ 18′ W14x30 20′ 13′ 16′ W14×8 @ 12in O.C. T&B 3′ 18 #5 8° Option 8 27′ 18′ W14x30 20′ 13′ 16′ W14×8 @ 12in O.C. T&B 3′ 18′ W15′ W14x30 20′ 13′ 16′ W14×8 @ 12in O.C. T&B 3′ 18′ W15′ W14x30 20′ 13′ 16′ W14×8 @ 12in O.C. T&B 3′ 18′ W15′ W14x30 20′ 13′ 16′ W14×8 @ 12in O.C. T&B 3′ 18′ W15′ W14x30 20′ 13′ 16′ W14×8 @ 12in O.C. T&B 3′ 18′ W15′ W15′ W15′ W15′ W15′ W15′ W15′ W15	18 FEET LONG INSTALLATIONS	6' W12x14 20' 5'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 5 15' 19' W10x17 20' 6'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 17' 19' W8x18 20' 7' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 18' 10' W8x18 20' 7'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 18' 10' W8x18 20' 7'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 19' 10'6" W8x18 20' 7'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 19' 12' W8x12 20' 8'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 21' 12' W8x21 20' 8'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 21' 14' W10x22 20' 9' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 23' 16' W10x26 20' 10' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 23' 18' W10x26 20' 11' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 25' 18' W10x26 20' 11' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 25' 18' W10x26 20' 11' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 5 27'
	20'		20' W12x30 20' 12' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 5 29'
C	Spread Footing	16 FEET LONG INSTALLATIONS	Spread Footing Footing Height Foot
A	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing	12 FEET LONG INSTALLATIONS	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement Hook Hook Hook Hook Base Plates** Length
В	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing	10 FEET LONG INSTALLATIONS	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement Column Base Plates** Length
	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement	INSTALLATIONS	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement Display Height Column Length Width Depth Steel Reinforcement Diameter Quantity Size length 4' W8x13 11' 4'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 13'
	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement Anchors and Columble Pooting Footing Pier P	8 FEET LONG INSTALLATIONS	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement Column
A	Chart Notes: 1. If the display height is between chart values shown above, use the next highest value. 2. All installations will be braced with laterals placed at 10' increments on front and back above grade. See 241-0413 for lateral sizes. 3. Wind loading figured at Exposure "C" - Open terrain with scattered obstructions have 30 feet. This category includes flat open country, grasslands, and all water surfaces in 4. Wind loading figured at Exposure "B" - Urban and suburban areas, wooded areas, or closely spaced obstructions having the size of single-family dwellings or larger. These are	k of the column starting ing heights generally led hurricane prone areas. other terrain with num eas prevail in the upwir	Footing Installation 2 Column Nevco, Inc. Greenville, Illinois 62246
	direction for a distance of 2600 feet or 20 times the structure height, whichever is greate 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option liste 6. Quantity of Pier reinforcements listed is PER PIER .		Drawn CJS Date 1/11/2017 Sheet 3 of 7
	4 3	4	2 1

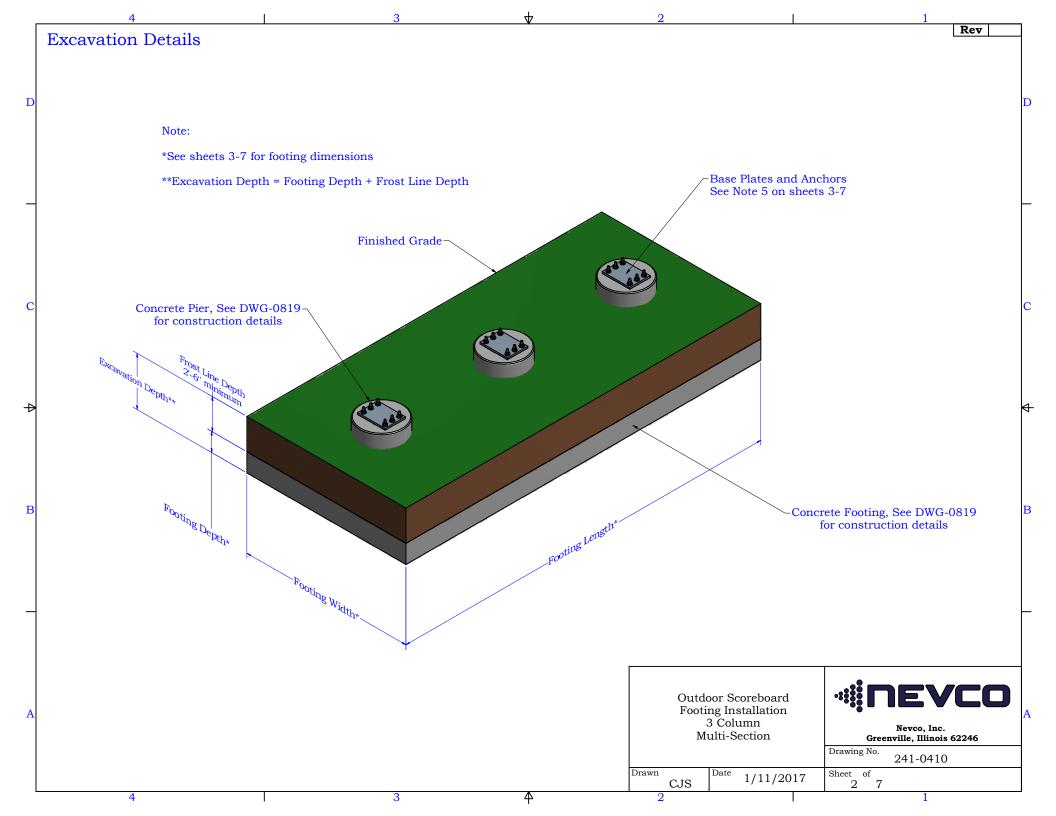
Γ				4							3		4			2							1		
												120	MPH WIND ZO	ONES	`									Rev	
						EXPOSURE	C (See No	ote 3)			_							E.	XPOSURE B (S	ee Not	e 4)				
IF.					olumn ar Spread F	d Foundation Requ		ed on ASC and Pier Re			1							mn and	Foundation Requiremen	ts (Based	on ASCE				
		Braced		Footing	Footing		Pier			Hook	Anchors and Base Plates**	Column Length		Display	Braced	Footing		pread F Footing	ooting	Pier ar Pier	nd Pier Re	einforce	Hook	Anchors and Base Plates**	
_		Column W 8x18	Length 20'	W idth 7' 6"	Depth 1'6"	Steel Reinforcen #4's @ 12in O.C.		er Quantity 18	y Size #5	Length 8"	Option 1	15'		Height 6'	Column W 10x17	Length 20'	Width 6'	Depth 1'6"	Steel Reinforcement #4's @ 12in O.C. T&B	Diameter 3'	Quantit	y Size	length	Option 3	Length 15'
D		W 10x22 W 10x22	20' 20'	9' 10'	1'6" 1'6"	#4's @ 12in O.C. #4's @ 12in O.C.		18 18	#5 #5	8" 8"	Option 3 Option 3	17' 18'		8'	W 8x18	20'	7' 6"	1'6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 1	17'
	10'	W10x26	20'	10'	1'6"	#4's @ 12in O.C.	T&B 3'	18	#5	8"	Option 3	19'	18 FEET LONG	10'	W 8x21 W 8x21	20' 20'	8' 8' 6"	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5		Option 1 Option 1	18' 19'
⊢		W10x26 W12x26	20'	11' 12'	1'6"	#4's @ 12in O.C. #4's @ 12in O.C.		18 18	#5 #5	8" 8"	Option 3 Option 5	19'6" 21'	INSTALLATIONS	10'6"	W 10x22 W 10x22	20' 20'	8' 6" 10'	1' 6" 1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5	8"	Option 3	19'6" 21'
E	14'	W12x30 W14x34	20' 20'	13' 14'		#4's @ 12in O.C.	T&B 3'	18 18	#5 #5	8" 8"	Option 5 Option 8	23' 25'	INGTHEERITIONS	12'	W 10x26	20'	11'	1' 6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 3 Option 3	23'
		W 14x34 W 16x36	20'	15'	1'6"	#5's @12in O.C. #5's @12in O.C.	T&B 4'	24	#6	9"	Option 8 Option 10	27'		16'	W 12x26 W 12x30	20'	12' 13'	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5		Option 5 Option 5	25' 27'
−⊪		W 16x40 W 21x44	20'	16' 17'	1'6"	#5's @ 12in O.C. #6's @ 12in O.C.		24 30	#6	9" 11"	Option 10 Option 14	29' 31'		20'	W 14x34	20'	14'	1' 6"	#5's @ 12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8	29' 31'
	25'	W18x50	20'	19'	1'6"	#6's @ 12in O.C.	T&B 4'	24	#6	9"	Option 11	34'		22'	W 16x36 W 16x40	20' 20'	15' 16'	1' 6"	#5's @ 12in O.C. T&B #5's @ 12in O.C. T&B	4'	24	#6	9"	Option 10 Option 10	34'
\dashv		W 21x62 W 24x68	20' 20'	22'	1' 6" 2'	#7's @ 12in O.C. #8's @ 12in O.C.		30 30	#7 #7	11"	Option 14 Option 16	39' 44'		30'	W 18x50 W 21x55	20'	19' 21'	1' 6"	#6's @ 12in O.C. T&B #7's @ 12in O.C. T&B	4' 5'	24 30	#6 #7		Option 11 Option 14	39' 44'
L	40'	W24x84	20'	22'	2' 3"	#9's @ 12in O.C.	T&B 5'	30	#7	11"	Option 16	49'		40'	W 21x68		21'	2'	#8's @ 12in O.C. T&B	5'	30	#7		Option 14	49'
IF						d Foundation Requ						-							 Foundation Requiremen						
r	Display	Braced	Footing		Spread F Footing		Pier a	and Pier Re	iniorcer	Hook	Anchors and Base Plates**	Column Length		Display	Braced	Footing	Footing	pread F Footing	ooting	Pier ar Pier	nd Pier Re	einforce	Hook	Anchors and	
		Column W10x17	Length 18'	Width 7'	Depth 1'6"	Steel Reinforcen #4's @ 12in O.C.		r Quantity	y Size #5	Length 8"	Option 3	14'	16 DDDD 1010	Height	Column	Length	Width	Depth	Steel Reinforcement #4's @ 12in O.C. T&B	Diameter	Quantit	y Size	length	Base Plates**	Length 14'
止	6'	W 8x18	18'	7' 6"	1'6"	#4's @ 12in O.C.	T&B 3'	18	#5	8"	Option 1	15'	16 FEET LONG INSTALLATIONS	6'	W 8x13 W 10x15	18' 18'	5' 6" 6'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1 Option 3	15'
┈		W 8x21 W 8x21	18' 18'	9'	1'6" 1'6"	#4's @ 12in O.C. #4's @ 12in O.C.		18 18	#5 #5	8" 8"	Option 1 Option 1	16' 17'	INSTALLATIONS	7' 8'	W 10x17 W 8x18	18' 18'	7'	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5		Option 3 Option 1	16' 17'
C		W14x22 W12x26	18' 18'	10' 12'	1'6" 1'6"	#4's @ 12in O.C. #4's @ 12in O.C.		18 18	#5 #5	8" 8"	Option 8 Option 5	19' 21'		10'	W 8x21	18'	8' 6"	1'6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18	#5	8"	Option 1	19'
l	14'	W12x30	18'	13'	1'6"	#4's @ 12in O.C.	T&B 3'	18	#5	8"	Option 5	23'		12'	W 10x22 W 10x26	18' 18'	10' 10' 6"	1' 6"	#4's @12in O.C. T&B	3'	18 18	#5 #5	8"	Option 3 Option 3	21' 23'
╟	16'	W14x30	18'	14'	1'6"	#5's @12in O.C.	T&B 3'	18	#5	8"	Option 8	25'		16'	W 12x26	18'	12'	1' 6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 5	25'
- IF					olumn ar Spread F	d Foundation Requ		ed on ASC and Pier Re		nont									Foundation Requiremen						
		Braced		Footing	Footing		Pier			Hook	Anchors and Base Plates**	Column Length		Display	Braced	Footing	Footing	pread F Footing	ooting	Pier ar	nd Pier Re	eintorce	Hook	Anchors and Base Plates**	Column Length
- -		Column W10x15	Length 14'	Width 7'	Depth 1'6"	Steel Reinforcen #4's @ 12in O.C.		r Quantity	y Size #5	Length 8"	Option 3	14'	12 FEET LONG	Height 5'	Column W8x13	Length 14'	W idth 5' 6"	Depth 1'6"	Steel Reinforcement #4's @ 12in O.C. T&B	Diameter 3'	Quantit	y Size	length 8"	Option 1	14'
I	8'	W 8x18	14'	9'	1'6"	#4's @ 12in O.C.	T&B 3'	18	#5	8"	Option 1	17'	INSTALLATIONS	8'	W 8x15	14'	7'	1'6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 1	17'
₽Ľ		W 8x21 W 10x22	14' 14'	10' 11'	1'6"	#4's @ 12in O.C. #4's @ 12in O.C.		18 18	#5 #5	8" 8"	Option 1 Option 3	19' 21'	INGTHEERITIONS	10' 12'	W 8x18 W 8x21	14' 14'	8' 6" 9' 6"	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5		Option 1 Option 1	19' 21'
, IE	15'	W12x26	14'	13'	1'6"	#5's @ 12in O.C.	T&B 3'	18	#5	8"	Option 5	24'		15'	W 10x22	14'	11'	1' 6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 3	24'
IF.						d Foundation Requ													Foundation Requiremen						
ı	Display	Braced	Footing	Footing	Spread F Footing		Pier	and Pier Re	emorcer	Hook	Anchors and Base Plates**	Column Length		Display	Braced	Footing	Footing	pread F Footing	ooting	Pier ar	nd Pier Re	eintorce	Hook	Anchors and Base Plates**	Column Length
- -		Column W8x13	Length 12'	Width 6'6"	Depth 1'6"	Steel Reinforcen #4's @ 12in O.C.		r Quantity	y Size #5	Length 8"	Option 1	13'		Height 4'	Column W8x13	Length 12'	Width 5'	Depth 1'6"	Steel Reinforcement #4's @ 12in O.C. T&B	Diameter 3'	Quantit	y Size		Option 1	13'
I	5'	W12x14	12'	7'	1'6"	#4's @ 12in O.C.	T&B 3'	18	#5	8"	Option 5	14'	10 FEET LONG	5'	W 8x13	12'	5' 6"	1'6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 1	14'
ᄩ		W 8x15 W 8x18	12' 12'	7' 6"	1'6" 1'6"	#4's @ 12in O.C. #4's @ 12in O.C.		18 18	#5 #5	8" 8"	Option 1 Option 1	15' 17'	INSTALLATIONS	8'	W 8x13 W 10x15	12' 12'	6' 7'	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5		Option 1 Option 3	15' 17'
вН		W 8x18 W 10x22	12' 12'	10' 11'	1'6"	#4's @ 12in O.C. #4's @ 12in O.C.		18 18	#5 #5	8" 8"	Option 1 Option 3	19' 21'		10'	W 10x17 W 8x18	12' 12'	8' 6" 9' 6"	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5		Option 3 Option 1	19' 21'
ᄩ		W10x26	12'	13'		#5's @12in O.C.		18	#5	8"	Option 3	24'		15'	W 8x21	12'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5		Option 1	24'
ŀ						id Foundation Requ													 Foundation Requiremen						
II,	Display	Braced	Footing		Spread F Footing		Pier a	and Pier Re	einforcer	nent Hook	Anchors and	Column		Display	Braced	Footing		pread F	ooting	Pier ar Pier	nd Pier Re	einforce	Hook	Anchors and	Column
	Height	Column	Length	Width	Depth	Steel Reinforcen				length	Base Plates**	Length	9 FEET LONG	Height	Column	Length	Width	Depth		Diameter 3'	Quantit	,	length	Base Plates**	Length
ᄩ	4'	W 8x13	11'	6' 6"		#4's @12in O.C.		18	#5	8"	Option 1	13'	INSTALLATIONS	4'	W 8x13	11'	5'	1' 6"	#4's @12in O.C. T&B		18	#5		Option 1	13'
-					olumn ar Spread F	d Foundation Required		ed on ASC and Pier Re				0.1						mn and pread F	Foundation Requiremen ooting		on ASCE nd Pier Re			A b	Caluma
		Braced Column		Footing Width			Pier			Hook	Anchors and Base Plates**	Column Length		Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	Steel Reinforcement	Pier Diameter			Hook	Anchors and Base Plates**	Column Length
IE'		W8x13	Length 10'	5' 6"		#4's @ 12in O.C.		18	#5	Length 8"	Option 1	12'	O DDDW I ONG	3'	W 8x13	10'	4' 6"	1'6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 1	12'
- IF		W12x14 W10x17	10' 10'	7' 6"	1'6"	#4's @ 12in O.C. #4's @ 12in O.C.		18 18	#5 #5	8" 8"	Option 5 Option 3	15' 17'	8 FEET LONG	6' 8'	W 8x13 W 8x13	10' 10'	6' 7'	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5		Option 1 Option 1	15' 17'
ᆘ	10'	W 8x18	10'	10'	1'6"	#4's @ 12in O.C.	T&B 3'	18	#5	8"	Option 1	19'	INSTALLATIONS	10'	W 10x15	10'	8'	1' 6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 3	19'
L		W 8x21	10'	11'	1'6"	#4's @12in O.C.	T&B 3'	18	#5	8"	Option 1	21'		12'	W 10x17	10'	9'	1' 6"	#4's @ 12in O.C. T&B	3'	18	#5	8"	Option 3	21'
		Notes		ight i	hetur	een chart val	ies show	ahove	1196	he ne	ext highest	value													
													of the column startin	g at 10	,	^	.,44	. 0	reboard	2		ור			
. 6	above	grade.	See 2	41-04	13 for	lateral sizes.	•							Ü					reboard allation	***					
A (3. Win	d load	ing fig	gured	at Exp	osure "C" - (pen terra	ain with	scat	tered	obstruction	s havii	ng heights generally le	ess tha	ı	г		Colun			•				
													urricane prone areas. other terrain with num				4 (Joiui			Gra		evco, I	nc. ois 62246	
(closely	y space	ed obs	tructio	ons ha	ving the size	of single-f	amily d	wellir	igs or	larger. Th	ese are	as prevail in the upwi							Draw	ing No.		-,		
	directi	ion for	a dist	ance o	of 2600) feet or 20 ti	mes the s	tructure	e heig	ht, wl	hichever is	greater			L					Diaw		2	41-04	09	
	5. **P1					letermine bas ents listed is l			or siz	es fro	m the optio	n listed	l above.		Dr	awn	IJS	Date	1/11/2017	Sheet	4 of 7	_ 			
;		antitir 1					AULT AUG								- 1	(41.0		,, - :		T /				

	4	3	4	2 1
		130	MPH WIND ZO	ONES Rev
	EXPOSURE C (See Note 3)			EXPOSURE B (See Note 4)
	Column and Foundation Requirements (Based on ASCE Spread Footing Pier and Pier F	Reinforcement		Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement
	Display Braced Footing Footing Footing Pier Height Column Length Width Width Steel Reinforcement Diameter Quantit	Hook Base Plates** Length		Display Braced Footing Footing Footing Point Pier Hook Base Plates** Length Height Column Length Width Width Steel Reinforcement Diameter Quantity Size length
D	6' W8v21 20' 8' 1'6" #4's @12in O C T&B 3' 18	#5 8" Option 1 15' #5 8" Option 3 17'		6' W8x18 20' 6'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 15'
	9' W10x26 20' 10' 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 3 18'		9' W8x21 20' 9' 1'6" #4's @ 12in O.C. T&B 3' 18 #5 8" Option 1 18'
	10' W12x26 20' 11' 1'6" #4's @12in O.C. T&B 3' 18 10'6" W12x26 20' 11' 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 5 19' #5 8" Option 5 19'6"	18 FEET LONG	10' W10x22 20' 9' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 19' 10'6" W10x22 20' 9'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 19'6"
	12' W12x30 20' 12' 1'6" #4's @12in O.C. T&B 3' 18 14' W14x34 20' 14' 1'6" #5's @12in O.C. T&B 3' 18	#5 8" Option 5 21' #5 8" Option 8 23'	INSTALLATIONS	12' W10x26 20' 10' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 21' 14' W12x26 20' 11' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 5 23'
	16' W16x36 20' 15' 1'6" #5's @12in O.C. T&B 4' 24 18' W16x40 20' 16' 1'6" #5's @12in O.C. T&B 4' 24	#6 9" Option 10 25' #6 9" Option 10 27'		16' W12x30 20' 13' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 5 25' 18' W14x34 20' 14' 1'6" #5's @12in O.C. T&B 3' 18 #5 8" Option 8 27'
	20' W21x44 20' 17' 1'6" #6's @ 12in O.C. T&B 5' 30 22' W18x50 20' 19' 1'6" #6's @ 12in O.C. T&B 4' 24	#7 11" Option 14 29' #6 9" Option 11 31'		20' W16x36 20' 15' 1'6" #5's @ 12in O.C. T&B 4' 24 #6 9" Option 10 29'
	25' W 21x55 20' 20' 1' 6" #7's @ 12in O.C. T&B 5' 30	#7 11" Option 14 34'		25' W21x44 20' 17' 1'6" #6's @12in O.C. T&B 5' 30 #7 11" Option 14 34'
_	30' W21x68 20' 21' 2' #8's @12in O.C. T&B 5' 30 35' W24x76 20' 22' 2'3" #9's @12in O.C. T&B 5' 30	#7 11" Option 14 39' #7 11" Option 16 44'		30' W18x55 20' 20' 1'6" #7's @12in O.C. T&B 4' 24 #6 9" Option 11 39' 35' W21x62 20' 20' 2' #8's @12in O.C. T&B 5' 30 #7 11" Option 14 44'
	40' W24x94 20' 22' 2'9" #10's @12in O.C. T&B 5' 30	#7 11" Option 16 49'		40' W24x68 20' 22' 2' #9's @12in O.C. T&B 5' 30 #7 11" Option 16 49'
	Column and Foundation Requirements (Based on ASCE Spread Footing Pier and Pier F	Reinforcement		Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement
	Display Braced Footing Footing Footing Pier Height Column Length Width Width Steel Reinforcement Diameter Quantit	Hook Base Plates** Length		Display Braced Footing Footing Footing Pier Hook Base Plates** Length Base Plates** Length Length Width Width Steel Reinforcement Diameter Quantity Size length
	5' W8x18 18' 7'6" 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 1 14'		5' W10x15 18' 6' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 14'
	6' W8x21 18' 8' 1'6" #4's @12in O.C. T&B 3' 18 7' W8x21 18' 9' 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 1 15' #5 8" Option 1 16'	16 FEET LONG	6' W10x17 18' 6'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 15' 7' W8x18 18' 7'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 16'
C	8' W10x22 18' 10' 1'6" #4's @12in O.C. T&B 3' 18 10' W10x26 18' 11' 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 3 17' #5 8" Option 3 19'	INSTALLATIONS	8' W8x18 18' 8' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 17' 10' W8x21 18' 9' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 19'
C	12' W12x26 18' 12' 1'6" #4's @12in O.C. T&B 3' 18 14' W14x30 18' 14' 1'6" #5's @12in O.C. T&B 3' 18	#5 8" Option 5 21' #5 8" Option 8 23'		12' W14x22 18' 10' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 8 21' 14' W10x26 18' 11' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 23'
	16' W14x34 18' 15' 1'6" #5's @12in O.C. T&B 3' 18	#5 8" Option 8 25'		16' W12x26 18' 13' 1'6" #4's @ 12in O.C. T&B 3' 18 #5 8" Option 5 25'
	Column and Foundation Requirements (Based on ASCE			Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement
		Hook Base Plates** Length		Display Braced Footing Footing Footing Pier Hook Anchors and Column
	Height Column Length Width Width Steel Reinforcement Diameter Quantit 5' W10x17 14' 7'6" 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 3 14'		Height Column Length Width Width Steel Reinforcement Diameter Quantity Size length 5' W8x13 14' 6' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 14'
	8' W8x21 14' 10' 1'6" #4's @12in O.C. T&B 3' 18 10' W10x22 14' 11' 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 1 17' #5 8" Option 3 19'	12 FEET LONG	8' W10x17 14' 8' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 17' 10' W8x18 14' 9' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 19'
₽		#5 8" Option 3 21' #5 8" Option 5 24'	INSTALLATIONS	12' W8x21 14' 10' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 21' 15' W10x26 14' 12' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 21' 15' W10x26 14' 12' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 24'
	Column and Foundation Requirements (Based on ASCE Spread Footing Pier and Pier F	Reinforcement Anchors and Column		Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement Anchors and Column
	Display Braced Footing Footing Footing Pier Height Column Length Width Width Steel Reinforcement Diameter Quantit	Hook ty Size Length Base Plates** Length		Display Braced Footing Footing Footing Pier Pier Hook Height Column Length Width Width Steel Reinforcement Diameter Quantity Size length Base Plates** Length
	4' W8x13 12' 7' 1'6" #4's @12in O.C. T&B 3' 18 5' W10x15 12' 7'6" 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 1 13' #5 8" Option 3 14'	10 FEET LONG	4' W8x13 12' 5'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 13' 5' W8x13 12' 6' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 14'
	6' W10x17 12' 8' 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 3 15'	INSTALLATIONS	6' W8x13 12' 7' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 15' 8' W8x15 12' 8' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 17'
Ъ	10' W8x21 12' 11' 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 1 19'		10' W8x18 12' 9' 1'6" #4's @ 12in O.C. T&B 3' 18 #5 8" Option 1 19'
В	12' W10x22 12' 12' 11'6" #4's @12in O.C. T&B 3' 18 15' W12x26 12' 14' 11'6" #5's @12in O.C. T&B 3' 18	#5 8" Option 3 21' #5 8" Option 5 24'		12' W8x21 12' 10' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 21' 15' W10x22 12' 12' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 24'
	Column and Foundation Requirements (Based on ASCE			Column and Foundation Requirements (Based on ASCE 7-10)
	Spread Footing Pier and Pier F Display Braced Footing Footing Footing Pier	Anchors and Column	O PERT LONG	Spread Footing Pier and Pier Reinforcement Anchors and Column
	Height Column Length Width Width Steel Reinforcement Diameter Quantit 4' W8x13 11' 7' 1'6' #4's @12in O.C. T&B 3' 18		9 FEET LONG INSTALLATIONS	Height Column Length Width Width Steel Reinforcement Diameter Quantity Size length 4' W8x13 11' 5'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 13'
			1	Column and Foundation Requirements (Based on ASCE 7-10)
	Column and Foundation Requirements (Based on ASCE Spread Footing Pier and Pier F	Reinforcement Anchors and Column		Spread Footing Pier and Pier Reinforcement Anchors and Column
_	Display Braced Footing Footing Footing Height Column Length Width Width Steel Reinforcement Diameter Quantit	Hook Base Plates** Length		Display Braced Footing Footing Footing Pier Pier Hook Height Column Length Width Width Steel Reinforcement Diameter Quantity Size length
	3' W8x13 10' 6' 1'6" #4's @ 12in O.C. T&B 3' 18 6' W10x15 10' 8' 1'6" #4's @ 12in O.C. T&B 3' 18	#5 8" Option 1 12' #5 8" Option 3 15'	8 FEET LONG	3' W8x13 10' 5' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 12' 6' W8x13 10' 6'6" 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 15'
	8' W8x18 10' 9'6" 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 1 17'	INSTALLATIONS	8' W12x14 10' 8' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 5 17' 10' W10x17 10' 9' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 3 19'
	10' W8x18 10' 11' 1'6" #4's @12in O.C. T&B 3' 18 12' W10x22 10' 12' 1'6" #4's @12in O.C. T&B 3' 18	#5 8" Option 1 19' #5 8" Option 3 21'		12' W8x18 10' 10' 1'6" #4's @12in O.C. T&B 3' 18 #5 8" Option 1 21'
	Chart Notes:			
	1. If the display height is between chart values shown above, u		of the column starting	
	2. All installations will be braced with laterals placed at 10' included above grade. See 241-0413 for lateral sizes.	crements on front and back (oi the column starting	Outdoor Scoreboard
Α	3. Wind loading figured at Exposure "C" - Open terrain with			
	30 feet. This category includes flat open country, grasslands, 4. Wind loading figured at Exposure "B" - Urban and suburba	and all water surfaces in hu	irricane prone areas.	Nevco, Inc.
	closely spaced obstructions having the size of single-family dw			nd Drawing No
	direction for a distance of 2600 feet or 20 times the structure	height, whichever is greater.		241-0409
	5. **Please see DWG-0818 to determine base plate and anchor6. Quantity of Pier reinforcements listed is PER PIER.	r sizes from the option listed	above.	Drawn CJS Date $1/11/2017$ Sheet 5 7
L	4	3	Φ	2 1
	·	-	ı	

_	4 3		Φ		2		1	
		150	MPH WIND ZO	NES		5VD 6 0 UD 5 D 70	N 4 4	Rev
	EXPOSURE C (See Note 3)					EXPOSURE B (See	<u>'</u>	
D	Display Braced Footing Footing Footing Height Column Height Column Height Column Height Column Height Column Height Column Height Width Width Steel Reinforcement Diameter Cuantity Size Length Height H	Determine the control of the control	18 FEET LONG INSTALLATIONS	Height Co 6' W: 8' W1 10' W1 106" W1 12' W1 16' W1 18' W1 20' W2 22' W1 25' W1	Name	Spread Footing Spre	Pier and Pier Reinforcement Pier Jianumeter	Option 1 15' Option 3 17' Option 3 19' Option 5 196' Option 5 21' Option 8 23' Option 8 23' Option 8 25' Option 10 27' Option 14 29' Option 10 31' Option 11 34'
_	30' W24x76 20' 22' 2'3" #9's @12in O.C. T&B 5' 30 #7 11" O 35' W24x94 20' 22' 3' #10's @12in O.C. T&B 5' 30 #7 11" O	Option 14 34' Option 16 39' Option 16 44'		35' W2	24x76 20' 2	21' 2' #8's @ 12in O.C. T&B 22' 2'3" #9's @ 12in O.C. T&B 22' 2'9" #10's @ 12in O.C. T&B	5' 30 #7 11 5' 30 #7 11 5' 30 #7 11	" Option 16 44'
		Option 17 49'				Column and Foundation Requirements		
C	Display Braced Footing Footing Footing Height Column Length Width Width Steel Reinforcement Diameter Quantity Size Length Ength Width Width Steel Reinforcement Diameter Quantity Size Length Size Length Width Width Width Steel Reinforcement Diameter Quantity Size Length Size Length Size Length Width Steel Reinforcement Diameter Quantity Size Length Column Size Length Size	Column C	16 FEET LONG INSTALLATIONS	Height Co 5' W1 6' W3 7' W3 8' W3 10' W1 12' W1 14' W1	blumn Length Wi 10x17 18' 7 8x18 18' 8 8x21 18' 8' 8x21 18' 9' 10x26 18' 1 12x26 18' 1 12x30 18' 1	Spread Footing Spre	Pier and Pier Reinforcement Pier Jianus Countity Jianus Counti	Option 1
	Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Pier and Pier Reinforcement					Column and Foundation Requirements Spread Footing	(Based on ASCE 7-10) Pier and Pier Reinforcement	Anchors and Column
\rightarrow	Display Braced Height Column Footing Footing Height Column Column Column Height Column Height Column Height Hook Steel Reinforcement Diameter Quantity Size Hook Bas Size Reinforcement Diameter Quantity Size Hook Bas Height Height	nehors and Column se Plates** Length Option 1 14' Option 3 17' Option 3 19' Option 5 21' Option 8 24'	12 FEET LONG INSTALLATIONS	Height Co 5' W1 8' W3 10' W1 12' W1	blumn Length Wi 10x15 14' 7 8x18 14' 9 10x22 14' 1 14x22 14' 1	poting idth Footing idth 37 1'6" #4's @12in O.C. T&B 9' 1'6" #4's @12in O.C. T&B 11' 1'6" #4's @12in O.C. T&B 12' 1'6" #4's @12in O.C. T&B 12' 1'6" #4's @12in O.C. T&B 14' 1'6" #5's @12in O.C. T&B	Pier Quantity Size Hoto 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8'	bk Base Plates** Length Option 3 14' Option 1 17' Option 3 19'
	Column and Foundation Requirements (Based on ASCE 7-10)					Column and Foundation Requirements Spread Footing	(Based on ASCE 7-10) Pier and Pier Reinforcement	1
В	Display Braced Footing Footing Footing Footing Footing Hook Height Column Length Width Width Steel Reinforcement Diameter Quantity Size Length Length Width Width Steel Reinforcement Diameter Quantity Size Length Length Width Steel Reinforcement Diameter Quantity Size Length S	Column Column Se Plates** Length	10 FEET LONG INSTALLATIONS	Height Co 4' Wi 5' W1 6' Wi 8' Wi 10' Wi 12' W1	blumn Length Wi 8x13 12' 6' 12x14 12' 7 8x15 12' 8 8x18 12' 8 8x18 12' 8 8x21 12' 1	oting Footing	Pier Diameter Quantity Size Leng 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8' 3' 18 #5 8'	th Deter I 13' Option 1 13' Option 1 15' Option 1 17' Option 1 19' Option 3 21'
	Column and Foundation Requirements (Based on ASCE 7-10)			$\overline{}$		Column and Foundation Requirements Spread Footing	(Based on ASCE 7-10) Pier and Pier Reinforcement	
	Height Column Length Width Width Steel Reinforcement Diameter Quantity Size Length	ochors and Se Plates** Length Option 3 13'	9 FEET LONG INSTALLATIONS	Height Co	raced Footing Footing Length Williams 11' 6'	oting Footing idth Width Steel Reinforcement D	Pier Quantity Size Hoo Leng 3' 18 #5 8"	gth Base Plates Length
_	Spread Footing	Deption 1 12' Option 1 15' Option 1 17' Option 1 17' Option 3 19' Option 3 21'	8 FEET LONG INSTALLATIONS	Height Co 3' W3 6' W1 8' W1	blumn Length Wi 8x13 10' 6 12x14 10' 8 10x17 10' 9 8x18 10' 1	Spread Footing pting Footing	Pier and Pier Reinforcement Pier	th Dotton 1 12' Option 5 15' Option 3 17' Option 1 19'
A	Chart Notes: 1. If the display height is between chart values shown above, use the next had 2. All installations will be braced with laterals placed at 10' increments on a above grade. See 241-0413 for lateral sizes. 3. Wind loading figured at Exposure "C" - Open terrain with scattered obsimal feet. This category includes flat open country, grasslands, and all water 4. Wind loading figured at Exposure "B" - Urban and suburban areas, woo closely spaced obstructions having the size of single-family dwellings or large.	highest value. front and back structions havir r surfaces in hoded areas, or o	ng heights generally le turricane prone areas. other terrain with num	ess than nerous		door Scoreboard ting Installation 2 Column	Nevco, i Greenville, Illi Drawing No.	nois 62246
	direction for a distance of 2600 feet or 20 times the structure height, which 5. **Please see DWG-0818 to determine base plate and anchor sizes from the	never is greater			Drawn	Date 1/11/2017	Sheet of	0409
	6. Quantity of Pier reinforcements listed is PER PIER .		A		CJS		6 7	
	4 1 3		4		2	I	1	







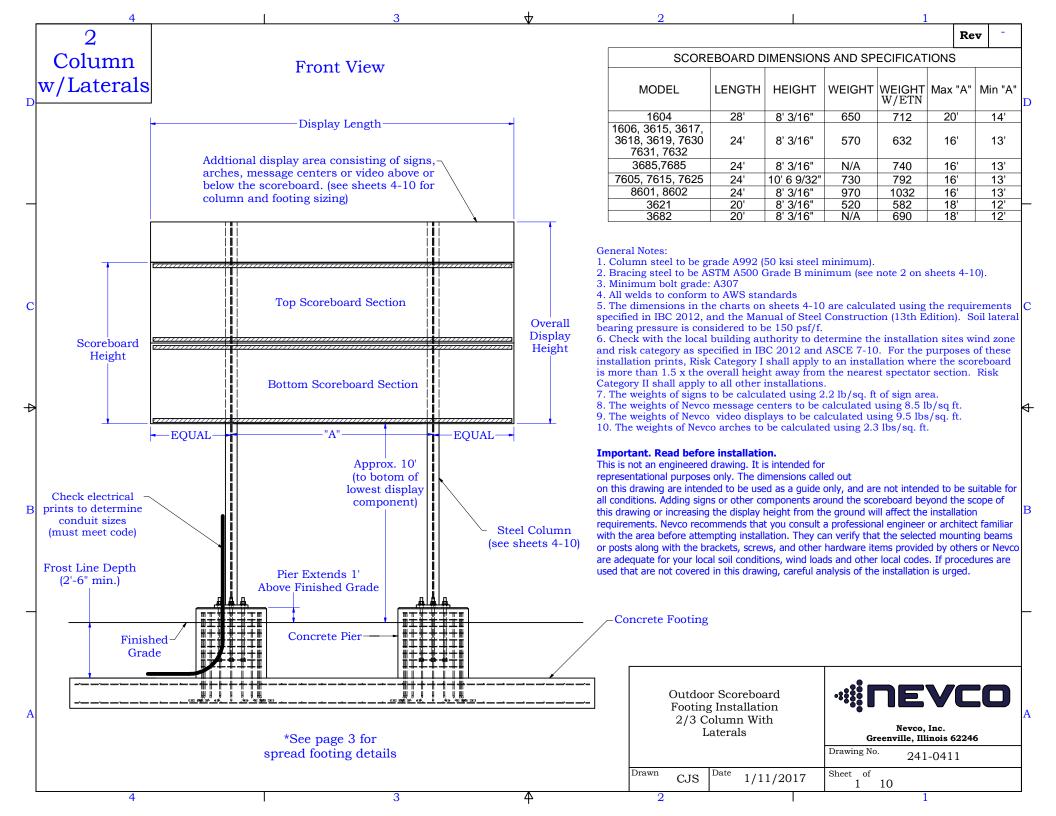
Display Height										3	105	MPH WIND ZO	ONES		2								Rev	
Height				F	XPOSURE C (S	ee Not	e 3)				100		<u> </u>				E	(POSURE B (Se	e Note	e 4)				
Height			Cali		Foundation Requiremen			7.40\								Colu		Foundation Requirement			7 10\			
Height				imn and Spread F		_ `	nd Pier Re		mont	I	1			1	1		Spread Fo			and Pier R		ement		1
Height	Braced	Footing	Footing		- County	Pier	id i idi i ke	IIIIOICE	Hook	Anchors and			Display	Braced	Footing		Footing	I	Pier	T		Hook	Anchors and	
	Column	Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size		Base Plates**	Length		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	r Quantity	Size		Base Plates**	Length
	W10x17	22'	8'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	17'		8'	W12x14	22	6'6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	17'
10'	W8x18	22'	9'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	19'		10'	W10x17	22'	7' 6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'
12'	W8x21	22'	10'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	21'		12'	W8x18	22'	8' 6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	21'
14'	W10x22	22'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	23'		14'	W8x21	22'	9'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	23'
16'	W10x26	22'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	25'	20 FEET LONG	16'	W8x21	22'	10'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	25'
18'	W12x26	22'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	27'	INSTALLATIONS	18'	W10x22	22'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	27
20'	W12x30	22'	14'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 5	29'		20'	W10x26	22	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	29'
22'	W14x34	22'	15'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	31'		22'	W12x26		13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	31' 34'
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			Colu	mn and	Foundation Boardramor	to (Boood		7 10)								Cdı	mn and E	oundation Peguirement	e (Basad)	00 ASCE	7-10)			
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Display	Braced	Footing			- County								Display	Braced	Footing		Footing	3	Pier	1	1	Hook		
Height	Column	_	Width	Depth	Steel Reinforcement	-	Quantity	Size		Base Plates**	Length		Height	Column	Length	Width	Depth	Steel Reinforcement		r Quantity	Sixe		Base Plates**	Leng
8'	W8x21	26'	8'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	17'		8'	W10x17	26'	6 6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	17'
10'	W10x22	26'	9'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'		10'	W8x18	26'	7' 6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	19'
12'	W10x26	26'	10'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	21'			W8x21	26'	8' 6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	21'
14'	W12x26	26'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	23'	24 FEET LONG												23'
						_			-	Option 5										_			•	25'
												INDIADDITIONS												27'
																							•	29' 31'
								_													_			34'
																								39'
													35'	W18x50	26'	19'	1' 6"	#6s @12in O.C. T&B	4'	24	#6	9"	Option 11	44'
40'	W24x68	26'	21	2'	#8's @12in O.C. T&B	5'	30	#7	11"	Option 16	49'		40'	W21x55	26'	21'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	49'
			Colu	mn and	Eoundation Requiremen	nts (Based	on ASCE	7-10)								Colu	mn and F	oundation Requirement	s (Based o	on ASCE	7-10)			
						_ `					٥.											ement	Anabara and	Calum
Display	Braced	Footing			Ī	Pier			Hook				Display	Braced	Footing	Footing	Footing		Pier			Hook		Colum Lengt
Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size	Length	Dase Plates	Lengun		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	r Quantity	Size	length	Dasc Flates	Large
8'	W8x21	30'	8'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	17'		8'	W8x18	30'	6'6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	17'
10'	W10x22	30'	9'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'									_	_			19'
					#4's @12in O.C. T&B	3'			8"	Option 3										_				21'
												28 FEET LONG	16'			10'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8 Option 5	23' 25'
16' 18'	W14x30 W14x34	30'	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 8 Option 8	25' 27'	INSTALLATIONS	18'	W12x26	30	11'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	27
20'	W16x36	30'	14'	1'6"	#4's @12in O.C. T&B	3 4'	24	#6	9"	Option 10	29'		20'	W12x30	30'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	29'
20	W16x40		15'	1' 6"	#5's @12in O.C. T&B		24	#6	9"	Option 10	31'		22'	W14x34		13'	1' 6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 8	31'
22'		30'	17'	1' 6"	#6's @12in O.C. T&B		30	#7		Option 14	34'		25'	W16x36		14'		#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	34'
22' 25'	W21x44			1' 6"	#7's @12in O.C. T&B		30	#7		Option 14	39'	i e e e e e e e e e e e e e e e e e e e		1444 40	201	17'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 9	
	W21x44 W21x55	30'	19'	1 0	#15 @ 1211 O.C. 100	5	50						30'	W14x48	30'	17								39'
25'			19' 20'	1' 9"	#7's @12in O.C. T&B		30	#7		Option 14	44'		30' 35' 40'	W14x48 W18x55 W21x62	30'	19' 21'	1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4' 5'	24 30	#6	9" 11"	Option 11 Option 14	39' 44' 49'
	25' 30' 35' 40' Display Height 8' 10' 12' 14' Display Height 18' 20' 22' 25' 30' 35' 40' Display Height 8' 10' 12' 14' 10' 12' 14' 14' 14' 14' 14' 14' 14' 14' 14' 14	25 W18x35 30' W14x43 35' W18x50 40' W21x55 Display Braced Height Column 8 W8x21 10' W10x22 12' W10x26 16' W12x30 20' W14x34 22' W16x36 25' W21x44 30' W18x55 35' W21x62 40' W24x68 Display Braced Height Column 8 W8x21 10' W10x22 12' W10x26 14' W12x26	25 W18x35 22' 30' W14x43 22' 35' W18x50 22' 40' W21x55 22' Display Braced Height Column Length W10x22 26' 10' W10x22 26' 11' W10x26 26' 14' W12x30 26' 18' W14x30 26' 20' W14x34 26' 22' W16x36 26' 25' W21x44 26' 30' W18x55 26' 30' W18x55 26' 40' W24x68 26' Display Braced Height Column Ength Length Research	25	25	25	25	25 W18x35 22	25 W18x35 22' 17' 1'6' #6's @12in O.C. T&B 4' 24 #6 30' W14x43 22' 19' 1'6' #6's @12in O.C. T&B 4' 24 #6 35' W18x50 22' 20 1'9' #7's @12in O.C. T&B 4' 24 #6 40' W21x55 22' 21' 2' #8's @12in O.C. T&B 5' 30 #7	25 W18x35 22' 17' 1'6' #6's @12in O.C. T&B 4' 24 #6 9' 30' W14x43 22' 19' 1'6' #6's @12in O.C. T&B 4' 24 #6 9' 35' W18x50 22' 20 1'9' #7's @12in O.C. T&B 4' 24 #6 9' 40' W21x55 22' 21' 2' #8's @12in O.C. T&B 5' 30 #7 11"	25 W18x35 22	25	W18x35	25	25 W18x36 22 17 1 6 W5 @12n O.C. T&B 4 24 W6 9 Option 11 34 34 35 W18x40 22 19 1 6 W5 @12n O.C. T&B 4 24 W6 9 Option 11 34 35 W18x40 22 20 1 9 W17 @ 012n O.C. T&B 4 24 W6 9 Option 11 44 40 W21x55 22 21 2 W5 @12n O.C. T&B 5 30 W7 11 Option 14 49 W21x55 22 21 2 W5 @12n O.C. T&B 5 30 W7 T 11 Option 14 49 W21x55 22 21 2 W5 @12n O.C. T&B 5 30 W7 T T Option 14 49 W21x55 W18x40 W21x55 W21x60 W21x55 W18x40 W21x55 W18x45 W21x60 W21x55 W18x55 W18x55 W21x60 W21x55 W18x55 W18x55 W21x60 W21x55 W18x55 W18x55 W21x60 W21x55 W18x55 W21x60 W2	25 W16x35 22 17 1 6 #65 @12n O.C. T8B 4 24 #6 9 Option 11 34	25 W/18x36 22 17 1 16 #68 @ 12n O.C. T&B 4 24 #6 9 Option 11 34	25 W18x36 22 17 1 6 868 @12n O.C. T88 4 24 86 9 Option 11 341	25 W18x25 22 17 1 16 #55 @12n O.C. T88 4 24 #6 9" Option 11 34	25 W18x36 22 17 16 16 16 16 16 16 16	25 Wilsos 22 17 16 85 812 n O C. T8B 4 24 86 9 Option 11 34	25 Wilsos 22 17 16 16 16 16 16 16 16	25 W18435 22 17 16 85 \(\frac{1}{2} \) 27 17 16 85 \(\frac{1}{2} \) 27 17 16 85 \(\frac{1}{2} \) 27 17 17 18 85 \(\frac{1}{2} \) 27 17 17 18 85 \(\frac{1}{2} \) 27 17 17 18 18 18 18 18 1	25 W18-05 ZZ 17 16 #56 812n O.C. T8B 4 24 #6 9 Option 1 34

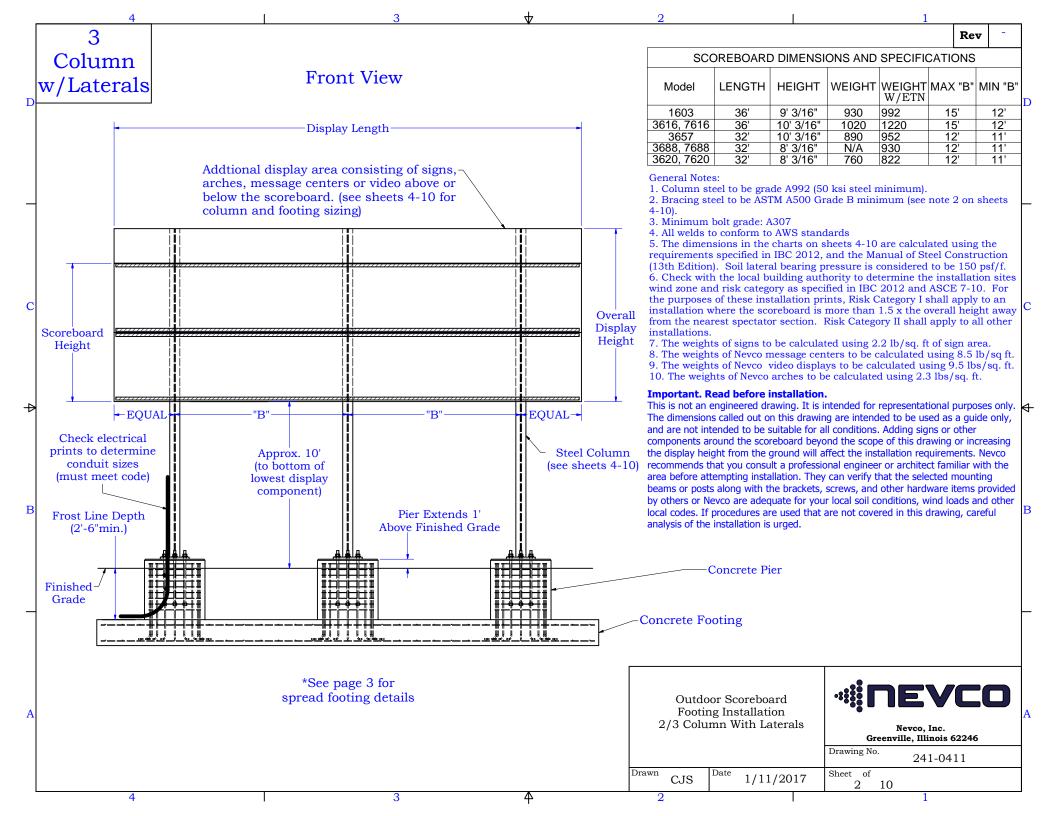
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					Е	XPOSURE C (S	See No	te 3)										E	(POSURE B (Se	e Not	te 4)				
						Foundation Requireme			-,]				Calu	mn and F	oundation Requirement	s (Based	on ASCE	7-10)			
					Spread F	ooting		nd Pier Rei		A	nchors and	Column						pread Fo			and Pier R		cement	Anchors and	Column
	Display					0. 15.7	Pier			ok l _{Ba}	ase Plates**			Display		Footing	Footing	Footing		Pier			Hook	Base Plates**	Length
	Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	,		ngth	0.0.1	47		Height	Column	Length	Width	Depth	Steel Reinforcement	Diamete			length		Ů
	8' 10'	W8x18 W10x22	22' 22'	9' 10'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B		18 18	#5 8 #5 8	_	Option 1	17'		8	W10x17	22'	7' 6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	17'
	12'	W14x22	22'	12'	1' 6"	#4's @12in O.C. T&B		18	#5 8		Option 3 Option 8	19' 21'		10'	W8x18	22'	8' 6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	19'
	14'	W12x26	22'	13'	1' 6"	#4's @12in O.C. T&B		18	#5 8	_	Option 5	23'		12'	W8x21	22'	10'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	21'
	16'	W12x26	22'	14'	1' 6"	#5's @12in O.C. T&B		18	#5 8	_	Option 5	25'	20 FEET LONG	14' 16'	W10x22 W14x22	22' 22'	11' 12'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 3 Option 8	23' 25'
	18'	W12x30	22'	15'	1' 6"	#5's @12in O.C. T&B		18	#5	_	Option 5	27'	INSTALLATIONS	18'	W10x26	22'	13'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	27
	20'	W14x34	22'	16'	1' 6"	#5's @12in O.C. T&B	3'	18	#5		Option 8	29'	INSTREMITORS	20'	W12x26	22'	14'	1'6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 5	29'
Ш	22'	W16x36	22'	17'	1' 6"	#6's @12in O.C. T&B	4'	24	#6 !)" (Option 10	31'		22	W12x30		15'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 5	31'
Ш	25'	W14x43	22'	19'	1' 6"	#6's @12in O.C. T&B	4'	24	#6 !		Option 9	34'		25'	W14x34		16'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	34'
	30'	W18x50	22'	22'	1' 6"	#7's @12in O.C. T&B		24	#6 !	_	Option 11	39'	<u> </u>	30'	W16x40	22'	19'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 10	39'
	35'	W21x55	22'	20'	2' 3"	#8's @12in O.C. T&B		30	#7 1	_	Option 14	44'	ļ	35	W16x50	22'	21'	1'6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 10	44'
	40'	W21x68	22'	21'	2' 6"	#9's @12in O.C. T&B	5'	30	#7 1	1" (Option 14	49'	1	40'	W18x55	22'	21'	2	#8's @12in O.C. T&B	4'	24	#6	9"	Option 11	49'
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Ш						Foundation Requireme	_ `]				Calu	mn and F	oundation Requirement	s (Based	on ASCE	7-10)			
					Spread F			nd Pier Rei		— A	nchors and	Column						pread Fo	oting		and Pier R	einford		Anchors and	Column
	Display	Braced	Footing				Pier			ok l _{Ba}	ase Plates**	Length		Display			Footing	Footing		Pier		_	Hook	Base Plates**	
1	Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter		-	ngth	Ontion 2	17	+	Height	Column	Length	Width	Depth	Steel Reinforcement	Diamete			length	Ontino 4	17
	8' 10'	W10x22 W10x26	26' 26'	9' 10'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B		18 18	#5 8 #5 8	_	Option 3 Option 3	17' 19'	†	8' 10'	W8x18 W8x21	26' 26'	7' 6" 8' 6"	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3,	18 18	#5 #5	8" 8"	Option 1 Option 1	17' 19'
	12'	W12x26	26'	12'	1' 6"	#4's @12in O.C. T&B		18	#5 8	_	Option 5	21'	†	12'	W10x22	26'	10'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	21'
	14'	W12x30	26'	13'	1' 6"	#4's @12in O.C. T&B		18	#5	_	Option 5	23'		14'	W10x26	26'	11'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	23'
	16'	W14x34	26'	14'	1' 6"	#5's @12in O.C. T&B		18	#5 8		Option 8	25'	24 FEET LONG	16'	W12x26	26'	12'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	25'
	18'	W16x36	26'	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6 !)" (Option 10	27'	INSTALLATIONS	18'	W12x30	26'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	27'
	20'	W16x40	26'	16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6 9)" (Option 10	29'		20'	W14x34	26'	14'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	29'
	22'	W21x44	26'	17'	1' 6"	#6's @12in O.C. T&B	5'	30	#7 1	1" (Option 14	31'		22	W18x55	26'	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 11	31'
11	25'	W18x50	26'	19'	1' 6"	#6's @12in O.C. T&B		24	#6		Option 11	34'		25'	W16x40		16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	34'
	30'	W21x62	26'	22'	1' 6"	#7's @12in O.C. T&B		30	#7 1		Option 14	39'		30'	W18x50	26'	19'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 11	39'
	35'	W24x68	26'	20'	2' 3"	#8's @12in O.C. T&B		30	#7 1	_	Option 16	44'		35'	W21x55	26'	21'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	44'
	40'	W24x84	26'	21'	2' 6"	#9's @12in O.C. T&B	5'	30	#7 1	1" (Option 16	49'		40'	W21x68	26'	21'	2	#8's @12in O.C. T&B	5'	30	#7	11"	Option 14	49'
١.																									
						Foundation Requireme													oundation Requirement	`					
					Spread F	ooting	_	nd Pier Rei		— A	nchors and	Column			l			pread Fo	oting		and Pier R	einford		Anchors and	Column
	Display	Braced	_			0. 15.7	Pier			ook Ba	ase Plates**	Length		Display		Footing	Footing	Footing	Otaal Dainfanaanant	Pier			Hook	Base Plates**	Length
3	Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	,	-	_	0-1' 0	47		Height 8'	Column W8x21	Length 30'	Width 7' 6"	Depth 1'6"	Steel Reinforcement #4's @12in O.C. T&B	Diamete 3'	er Quantity 18	size #5	length 8"	Option 1	17'
	8' 10'	W10x22 W12x26	30'	9' 10'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	_	18 18	#5 8 #5 8	_	Option 3 Option 5	17' 19'	+	10'	W10x22	30'	8'6"	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'
	12'	W12x26	30'	12'	1' 6"	#4's @12in O.C. T&B		18	#5 8		Option 5	21'	†	12'	W10x26		10'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	21'
	14'	W14x34	30'	13'	1' 6"	#4's @12in O.C. T&B		18	#5 8	_	Option 8	23'	28 FEET LONG	14'	W12x26	30'	11'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	23'
	16'	W16x36	30'	14'	1' 6"	#5's @12in O.C. T&B		24	#6 !	_	Option 10	25'	INSTALLATIONS	16'	W12x30	30'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	25'
	18'	W16x40	30'	15'	1' 6"	#5's @12in O.C. T&B	_	24	#6	_	Option 10	27'	MOINTAIIONS	18'	W14x34	30'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	27
	20'	W21x44	30'	16'	1' 6"	#5's @12in O.C. T&B		30	#7 1	_	Option 14	29'	Ī	20'	W18x35	30'	14'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 11	29'
	22'	W16x50	30'	17'	1' 6"	#6's @12in O.C. T&B		24			Option 10	31'		22	W16x40		15'		#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	31'
١l	25'	W18x55	30'	19'	1' 6"	#6's @12in O.C. T&B		24	#6 !	_	Option 11	34'	1	25'	W21x44		16'	1' 6"	#5's @12in O.C. T&B	5'	30	#7	11"	Option 14	34'
	30'	W21x68	30'	22'	1' 6"	#7's @12in O.C. T&B		30	#7 1	_	Option 14	39'	1	30'	W18x55		19'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 11	39'
	35'	W24x76	30'	21'	2' 3"	#8's @12in O.C. T&B		30	#7 1	_	Option 16	44'		<u>35'</u> 40'	W21x62 W24x68		21' 21'	1' 6" 2'	#7's @12in O.C. T&B #8's @12in O.C. T&B	5' 5'	30	#7 #7	11" 11"	Option 14 Option 16	44' 49'
۱	40'	W24x94	30'	22'	26	#9's @12in O.C. T&B	5'	30	#7 1	1" (Option 16	49'	Ţ	-10	V VZ4XUO	. w	۷.			Ü	30	#1		φωσιο	+3
	1. If th 2. All is above a 3. Wind 30 feet 4. Wind closely direction	nstallat grade. S d loading . This d loading spaced on for a	tions was a second of the category of the cate	vill be 11-041 red at ry inc red at uction nce of	braced 4 for 1 Expo ludes 1 Expo is havi	lateral sizes. sure "C" - Open flat open country sure "B" - Urban ing the size of sir feet or 20 times	terrain 7, grass 1 and su ngle-fan the stru	10' incr with so lands, a lburban nily dwe lecture he	cattered nd all v areas llings of eight, v	on from the state of the state	ront and ructions surfaces ded areas ger. Thes ever is gr	having in hus, or of se area	of the column starting g heights generally les urricane prone areas. ther terrain with num s prevail in the upwir	ss tha	n		ooting 3			•8	Gre wing No.	envi	Sevco, Ir Ille, Illin 241-0	ois 62246	0
			Pier r			termine base pla ts listed is PER		anchor s	sızes fr	om th	e option	ıısted			Drav	C	JS	Date	1/11/2017	Shee	et 4 of 7	7			
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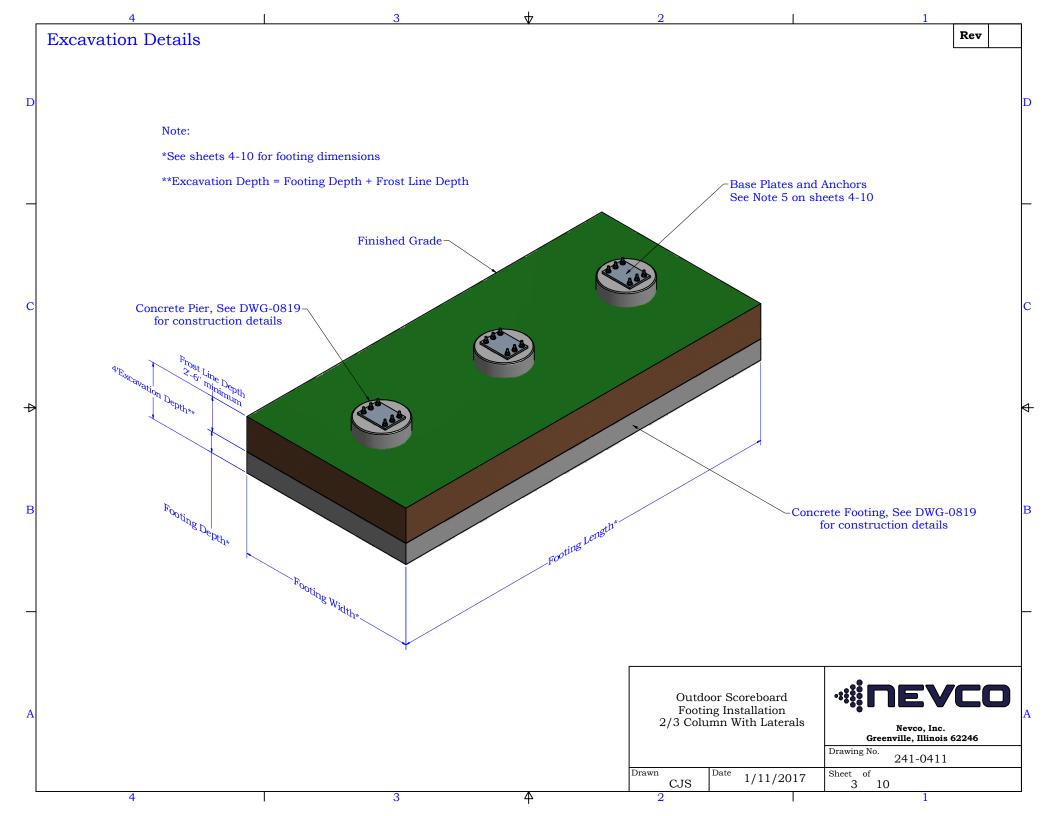
			4			1				3	3		Φ			2			1				1		
						•						130	MPH WIND ZC	NES										Rev	
					Е	XPOSURE C (S	ee Not	e 3)										E	(POSURE B (Se	e Note	4)				
						Foundation Requiremen											Colu	mn and F	oundation Requirement	s (Based o	on ASCE	7-10)			
					Spread I			nd Pier Rei	nforce		Anchors and	Column		-			5	Spread Fo	ooting	Pier a	nd Pier R	einforc	ement	Anchors and	Column
D	Display		Footing		_		Pier	0	0:	Hook	Base Plates**	Length		Display	Braced	Footing		Footing		Pier			Hook	Base Plates**	
-11	Height 8'	Column W8x21	Length 22'	Width 10'	Depth 1' 6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity 18	Size #5	Length 8"	Option 1	17'		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter		_	length		Ŭ
 	10'	W10x22	22'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'		<u>8'</u> 10'	W8x18 W8x18	22' 22'	8' 9'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B		18 18	#5 #5	8" 8"	Option 1	17' 19'
11	12'	W10x26	22'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	21'		12'	W10x22	22	11'	1'6"	#4's @12in O.C. T&B		18	#5	<u> </u>	Option 1 Option 3	21'
	14'	W12x26	22'	14	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 5	23'		14'	W14x22	22	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	23'
- [16'	W12x30	22'	15'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 5	25'	20 FEET LONG	16'	W10x26	22'	13'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 3	25'
	18'	W14x34	22'	16'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	27'	INSTALLATIONS	18'	W12x26	22'	14'	1' 6"	#5's @12in O.C. T&B		18	#5	8"	Option 5	27'
┈	20' 22'	W16x36 W16x40	22' 22'	18' 19'	1' 6" 1' 6"	#6's @12in O.C. T&B #6's @12in O.C. T&B	4' 4'	24 24	#6 #6	9" 9"	Option 10 Option 10	29' 31'		20'	W12x30	22	15'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 5	29'
┪	25'	W16x50	22'	21'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 10	34'		<u>22'</u> 25'	W14x34 W16x36	22' 22'	16' 18'	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	31' 34'
	30'	W18x55	22'	21'	2'	#8's @12in O.C. T&B	4'	24	#6	9"	Option 11	39'		30'	W21x44	22	20'	1'6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	39'
	35'	W21x62	22'	21'	2' 6"	#9's @12in O.C. T&B	5'	30	#7	11"	Option 14	44'		35'	W18x55	22'	20'	2	#8's @12in O.C. T&B	4'	24	#6	9"	Option 11	44'
١Į	40'	W24x68	22'	21'	3'	#10's @12in O.C. T&B	5'	30	#7	11"	Option 16	49'		40'	W21x62	22'	21'	2'3"	#9's @12in O.C. T&B	5'	30	#7	11"	Option 14	49'
Ш				Col		Foundation Requiremen					1				1				oundation Requirement						
	Display	Braced	Footing	Footing	Spread I		Pier ar Pier	nd Pier Rei	ritorce	ment Hook	Anchors and			Di	Denn - ,	Fortion		Spread Fo	oting T	Pier a	nd Pier R	einforc		Anchors and	Column
c	Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size	Length	Base Plates**	Length		Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	Steel Reinforcement	Diameter	Quantity	Sive	Hook length	Base Plates**	Length
	8'	W14x22	26'	10'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	17'		8'	W8x21	26'	8'	1'6"	#4's @12in O.C. T&B		18	#5	8"	Option 1	17'
	10'	W12x26	26'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	19'		10'	W10x22	26'	9'	1' 6"	#4's @12in O.C. T&B		18	#5	8"	Option 3	19'
-	12'	W12x30	26'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	21'		12'	W10x26	26'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	21'
H	14' 16'	W14x34 W16x36	26' 26'	14 15'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	23' 25'	24 FEET LONG	14' 16'	W12x26 W12x30	26 26	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 5	23' 25'
H	18'	W16x40	26'	16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	27'	INSTALLATIONS	18'	W14x34	26	14'	1'6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	27'
	20'	W21x44	26'	18'	1' 6"	#6's @12in O.C. T&B	5'	30	#7	11"	Option 14	29'		20'	W18x35	26'	15'	1'6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 11	29'
	22'	W16x50	26'	19'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 10	31'		22'	W16x40	26'	16	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	31'
₽[25'	W21x55	26'	21'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	34'		25'	W14x48	26'	18'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 9	34'
	30' 35'	W21x68 W24x76	26' 26'	21' 21'	2' 2' 6"	#8's @12in O.C. T&B #9's @12in O.C. T&B	5' 5'	30 30	#7 #7	11" 11"	Option 14 Option 16	39' 44'		30'	W18x55 W21x62	26' 26'	20' 20'	1' 6" 2'	#7's @12in O.C. T&B #8's @12in O.C. T&B	4' 5'	24 30	#6 #7	9" 11"	Option 11 Option 14	39' 44'
╟	40'	W24x94	26'	21'	3'	#10's @12in O.C. T&B	5'	30	#7	11"	Option 16	49'		40'	W24x68	26'	21'	2'3"	#9's @12in O.C. T&B		30	#7	11"	Option 16	49'
16				Col	umn and	Foundation Requiremen	nts (Based	on ASCE	7-10)							l	Colu	mn and F	oundation Requirement	s (Based o	n ASCE	7-10)			
					Spread I	Footing	Pier ar	nd Pier Rei	nforce	ment	Anchors and	Column						Spread Fo	ooting	Pier a	nd Pier R	einforc	ement	Anchors and	Column
	Display	I	Footing	_	_ ~	1	Pier			Hook	Base Plates**			Display	Braced			Footing		Pier			Hook		Length
В	Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	,		Length				Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter		-	length		_
-	8' 10'	W10x26 W12x26	30'	10' 11'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 3 Option 5	17' 19'		<u>8'</u> 10'	W8x21 W10x22	30' 30'	8' 9'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 1 Option 3	17' 19'
- ŀ	12'	W14x30	30'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	21'		12'	W12x26	30'	11'	1'6"	#4's @12in O.C. T&B		18	#5	8"	Option 5	21'
	14'	W18x35	30'	14	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 11	23'	28 FEET LONG	14'	W12x30	30'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	23'
[16'	W16x40	30'	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	25'	INSTALLATIONS	16'	W14x34	30'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	25'
	18'	W21x44	30'	16'	1' 6"	#5's @12in O.C. T&B	5'	30	#7	11"	Option 14	27'		18'	W18x35	30'	14'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 11	27'
	20'	W16x50	30'	18'	1' 6"	#6's @12in O.C. T&B	4' 4'	24	#6	9" q"	Option 10	29'		20' 22'	W16x40 W14x43	30'	15' 16'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	41	24 24	#6	9" 9"	Option 10	29' 31'
∐⊦	25'	W18x55 W21x55		19' 21'	1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	5'	30	#6	9" 11"	Option 11 Option 14	31'		25'	W16x50	30'	18'	1'6"	#6's @12in O.C. T&B		24	#6	9"	Option 9 Option 10	34'
	30'	W24x68		21'	2'	#8's @12in O.C. T&B	5'	30	#7	11"	Option 16	39'		30'	W21x55	30'	20'	1'6"	#7's @12in O.C. T&B		30	#7	11"	Option 14	39'
	35'	W24x84		21'	2' 6"			30	#7	11"	Option 16	44'		35	W21x68	30'	20'	2'	#8's @12in O.C. T&B		30	#7	11"	Option 14	44'
[40'	W21x101	30'	21'	3'	#10's @12in O.C. T&B	5'	30	#7	11"	Option 15	49'		40'	W24x76	30'	21'	2'3"	#9's @12in O.C. T&B	5'	30	#7	11"	Option 16	49'
	1. If th 2. All i above	installa grade. Id loadi	ay heig tions v See 2 ng figu	vill be 41-04 ired a	brace 14 for t Expo cludes	lateral sizes. osure "C" - Open flat open country	aced at terrair y, grass	10' inc with so lands, a	reme catte	ents of ered of all wat	n front and bstructions ter surface	l back havin s in h	of the column starting g heights generally les urricane prone areas. ther terrain with num	ss than erous			ooting 3 (***	Gree		vco, Ince, Illino	/C(
A	30 feet 4. Win closely directi 5. **Pl	d loadi space on for a ease se	ng figu d obsta a dista ee DWO	ared a ruction nce of G-081	ns hav 2600 8 to de	ving the size of si feet or 20 times etermine base pla	ngle-fan the stru ite and	nily dwe acture h	elling neigh	gs or la it, whi	arger. The chever is g	reater.		ıd	Draw	n	Ιr)ate		Drawin			41-04		
A	30 feet 4. Win closely directi 5. **Pl	d loadi space on for a ease se	ng figu d obsta a dista ee DWO	ared a ruction nce of G-081	ns hav 2600 8 to de	ring the size of si feet or 20 times	ngle-fan the stru ite and	nily dwe acture h	elling neigh	gs or la it, whi	arger. The chever is g	reater.		ıd	Draw	n Cu		Date	1/11/2017	Drawin Sheet			41-04		

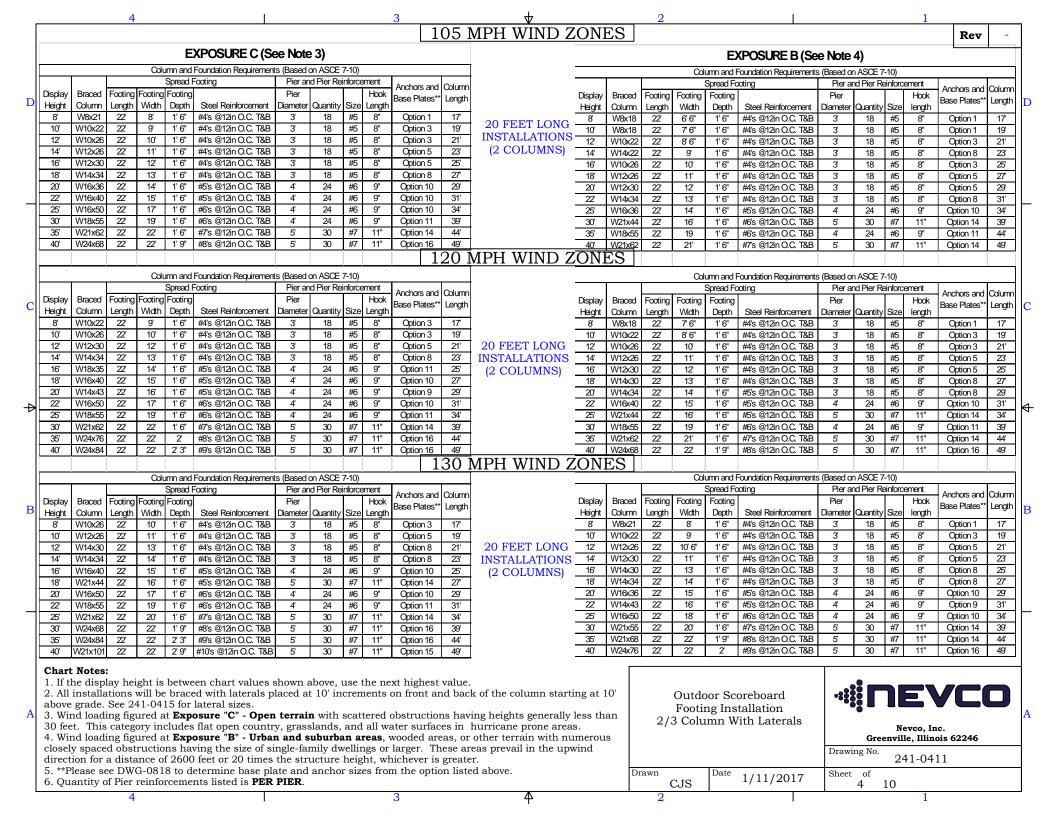
			4							3	3		lacksquare			2							1		
												150	MPH WIND ZO	NES										Rev	
					F	EXPOSURE C (S	ee Not	e 3)							_			Ð	(POSURE B (Se	e Note	4)				
l,				Colu		Foundation Requiremen			7-10)								Calı		oundation Requirements			'-10)			
lŀ					Spread I			nd Pier Rei	/	ment	Anchors and	Column						Spread Fo		,	nd Pier Re		ment	Anchors and	Column
\mathbf{D}	Display		Footing				Pier			Hook	Base Plates**	Length		Display			Footing	Footing	0: 15:4	Pier		<u>.</u>	Hook	Base Plates**	
I⊦	Height 8'	Column W10x22	Length 22'	Width 11'	Depth 1' 6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity 18	Size #5	Length 8"	Option 3	17'		Height 8'	Column W8x21	Length 22'	Width 9'	Depth 1'6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity 18	Size #5	length 8"	Option 1	17'
╢	10'	W12x26	22'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	19'		10'	W10x22	22	11'	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 3	19'
	12'	W12x30	22'	15'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 5	21'		12'	W10x26	22	12'	1' 6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 3	21'
	14'	W14x34	22'	16'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	23'	20 FEET LONG	14'	W12x26	22	13'	1' 6"	#5's @12in O.C. T&B	3,	18	#5	8"	Option 5	23'
I⊦	16' 18'	W18x35 W16x40	22' 22'	17' 19'	1' 6" 1' 6"	#6's @12in O.C. T&B #6's @12in O.C. T&B	4' 4'	24 24	#6	9" 9"	Option 11 Option 10	25' 27'	INSTALLATIONS	<u>16'</u> 18'	W12x30 W14x34	22 22	15' 16'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	3	18 18	#5 #5	8" 8"	Option 5 Option 8	25' 27'
۱ŀ	20'	W21x44	22'	20'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	29'		20'	W14x34	22	17'	1' 6"	#6's @12in O.C. T&B	3,	18	#5	8"	Option 8	29'
վ[22'	W18x50	22'	21'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	31'		22'	W16x40	22'	18'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 10	31'
╟	25'	W18x55	22'	21'	2'	#8's @12in O.C. T&B	4'	24	#6	9"	Option 11	34'		25' 30'	W21x44	22' 22'	20'	1' 6"	#7's @12in O.C. T&B	5' 4'	30 24	#7	11"	Option 14 Option 11	34' 39'
╟	30' 35'	W21x68 W24x76	22' 22'	21' 22'	2' 6"	#9's @12in O.C. T&B #10's @12in O.C. T&B	5' 5'	30 30	#7 #7	11" 11"	Option 14 Option 16	39' 44'		35	W18x55 W21x62	22	21' 21'	2' 2' 6"	#8's @12in O.C. T&B #9's @12in O.C. T&B	5	30	#6 #7	9" 11"	Option 14	39 44'
╟	40'	W24x94	22'	22'	3' 9"	#11's @12in O.C. T&B		30	#7	11"	Option 16	49'		40'	W24x68	22	21'	3'	#10's @12in O.C. T&B	5	30	#7	11"	Option 16	49
Į																									
						Foundation Requiremen	, ,												oundation Requirements						
	Diam'r.	Dun	Feette		Spread I	Footing	_	nd Pier Rei	nforce		Anchors and	Column		Dionin	Dm	Continue		Spread Fo	oting		nd Pier Re	einforce		Anchors and	Calumn
	Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	Steel Reinforcement	Pier Diameter	Quantity	Size	Hook Length	Base Plates**	Length		Display Height	Braced Column	Footing Length	Width	Footing Depth	Steel Reinforcement	Pier Diameter	Quantity	Sixe	Hook length	Base Plates**	Length
╁	8'	W12x26	26'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	17'		8'	W10x22	26	g	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 3	17'
П	10'	W12x30	26'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	19'		10'	W10x26	26	11'	1' 6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 3	19'
Iŀ	12' 14'	W14x34 W16x40	26' 26'	15' 16'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	21' 23'	OA EEET LONG	12' 14'	W12x26 W14x30	26' 26'	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3	18 18	#5 #5	8" 8"	Option 5 Option 8	21' 23'
lŀ	16'	W21x44	26'	17'	1' 6"	#6's @12in O.C. T&B	5'	30	#7	11"	Option 14	25'	24 FEET LONG INSTALLATIONS	16	W14x35	26	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 11	25'
١t	18'	W16x50	26'	19'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 10	27'	INSTALLATIONS	18'	W16x40	26'	16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	27'
П	20'	W18x55	26'	20'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	29'		20'	W14x43	26	17'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 9	29
¥ŀ	22' 25'	W21x55 W21x68	26' 26'	22' 21'	1' 6" 2'	#7's @12in O.C. T&B #8's @12in O.C. T&B	5' 5'	30 30	#7 #7	11" 11"	Option 14 Option 14	31' 34'		22' 25'	W16x50 W18x55	26' 26'	18' 20'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4' 4'	24 24	#6	9" 9"	Option 10 Option 11	31' 34'
╟	30'	W24x76	26'	21'	2' 6"	#9's @12in O.C. T&B	5'	30	#7	11"	Option 16	39'		30	W21x68	26	21'	2'	#8's @12in O.C. T&B	5	30	#7	11"	Option 14	39
I	35'	W24x94	26'	22'	3'	#10's @12in O.C. T&B	5'	30	#7	11"	Option 16	44'		35	W24x76	26'	26'	2' 6"	#9's @12in O.C. T&B	5	30	#7	11"	Option 16	44'
ļĻ	40'	W24x104	26'	22'	3' 9"	#11's @12in O.C. T&B	5'	30	#7	11"	Option 17	49'		40'	W24x94	26	29'	3'	#10's @12in O.C. T&B	5	30	#7	11"	Option 16	49'
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3	Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size	Length	Base Plates**	Length		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size	length	Base Plates**	Length
	8'	W12x26	30'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	17'		8'	W14x22	30'	9'	1' 6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 8	17'
╟	10' 12'	W14x34 W16x36	30'	13' 15'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	19' 21'		10'	W12x26 W12x30	30' 30'	11' 12'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3	18 18	#5 #5	8" 8"	Option 5 Option 5	19' 21'
	14'	W14x43	30'	16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 9	23'	28 FEET LONG	14'	W14x34	30'	13'	1' 6"	#5's @12in O.C. T&B	3	18	#5	8"	Option 8	23'
[16'	W16x50	30'	17'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 10	25'	INSTALLATIONS	16	W16x36	30'	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	25'
╁	18'	W18x55	30'	19'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 11	27'		18' 20'	W14x43	30' 30'	16'	1' 6"	#5's @12in O.C. T&B	4' 4'	24	#6	9"	Option 9	27' 29'
╁	20' 22'	W21x55 W21x62	30'	20' 22'	1' 6" 1' 6"	#7's @12in O.C. T&B #7's @12in O.C. T&B	5' 5'	30 30	#7 #7	11" 11"	Option 14 Option 14	29' 31'		22	W14x48 W18x50		17' 18'	1' 6" 1' 6"	#6's @12in O.C. T&B #6's @12in O.C. T&B	4'	24 24	#6	9" 9"	Option 9 Option 11	31'
۱۲	25'	W24x68	30'	21'	2'	#8's @12in O.C. T&B		30	#7	11"	Option 16	34'		25	W21x55	30	20'	1' 6"	#7's @12in O.C. T&B	5	30	#7	11"	Option 14	34'
[30'	W24x84	30'	22'	2' 6"			30	#7	11"	Option 16	39'		30	W24x68	30'	21'	2'	#8's @12in O.C. T&B	5	30	#7	11"	Option 16	39'
╟	35' 40'	W24x104 W24x131	30'	22' 22'	3' 3' a"	#10's @12in O.C. T&B #11's @12in O.C. T&B		30 30	#7 #7	11" 11"	Option 17 Option 17	44' 49'		35' 40'	W24x84 W21x101	30' 30'	21' 21'	2' 6" 3'	#9's @12in O.C. T&B #10's @12in O.C. T&B	5 5	30 30	#7 #7	11" 11"	Option 16 Option 15	44' 49'
L	40	VVZ4X 13 I	30	22	3 9	#115 @12IITO.C. 1&B	3	30	#1	- ' '	Орион 17	49		40	VVZIXIUI	30	21	3	#105 @1211 O.C. 1&B	5	30	#1	- 11	Ориот 15	49
	1. If th 2. All i above 3. Win 30 feet 4. Win	installa grade. Id loadi t. This Id loadi	ay heig tions v See 2- ng figu catego ng figu	will be 41-04: ared at ory inc ared at	brace 14 for t Expo tludes t Expo	lateral sizes. bsure "C" - Open flat open country bsure "B" - Urbar	aced at terrain y, grass n and s	10' inc with solands, a uburbar	reme catte and a	ents of ered of all wat eas, w	n front and ostructions er surface ooded area	d back s havin s in h s, or o	of the column starting heights generally leurricane prone areas, ther terrain with nun	ess thai	n		ooting)			-28	Gree		veo, In	C. c. sis 62246	
	directi 5. **Pl	on for a	a dista e DW0	nce of 3-0818	2600 3 to de	feet or 20 times etermine base pla	the stru te and	acture h	eigh	it, whi	chever is g	reater.		110	Dra	wn	Ī	Date	1/11/0017	Drawii	of		11-04	10	
- 1	b. Qua	antity o	t Pier i	reinfor	cemei	nts listed is PER	PIER.								"		CJS	-	1/11/2017		6 7				
L			4		_																				

EXPOSURE C (See Note 4)				4			I				3	3		Φ			2			1				1		
Control Cont													180	MPH WIND ZO	NES										Rev	
Common of contractive Sequences (Boston Control Cont						E	XPOSURE C (S	ee Not	e 3)										E	(POSURE B (Se	e Note	4)				
Notice Part	I				Col	umn and	Foundation Requiremen	nts (Based	on ASCE 7	7-10)								Col		``			7-10)			
10 Part Pa					_		Footing		nd Pier Reir	nforcer		Anchors and	Column											ment	Anaham and	Column
Part Class Sept Class Control Control Class Cl	D				_	_									Display	Braced	Footing	U	Footing		-			Hook		
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Column and Foundation Requirements (Read on ASCE 7-10) Column Registers Per and File Regis	╟									_		_														44'
Speed Forting Per and the Reinforcement Per thook Per thoo		40'	VV24x117	22	22	5'3"	#12's @12in O.C. T&B	5	30	#/	11"	Option 17	49'		40'	VV24x94	22	22	4	#12s @12in O.C. T&B	5	30	#/	11"	Option 16	49'
Speed Footing Pear of the Reinforcement Pear Pear of the Reinforcement Pear	ŀ				C-1		l Farmadation Descriptores	ta (Dasad	ACCE -	7.40)								C-1			/Decede	- 4005	7.40)			
District	╟				Col						ment		ı											ment		
		Display	Braced	Footina	Footina										Displav	Braced	Footing			- 9						
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Display Braced Footing Footi		40'	W24x146	26'	22'	5' 3"	#12's @12in O.C. T&B	5'	30	#7	11"	Option 17	49'		40'	W24x117	26'	22'	4'	#12's @12in O.C. T&B	5'	30	#7	11"	Option 17	49'
Display Braced Footing Footi																										
Display Braced Footing Footi	Щ				Col	umn and	Foundation Requiremen	_ \																		
Height Column Lergth Width Depth Steel Reinforcement Diameter Quantity Size Lergth Steel Reinforcement Diameter							Footing		nd Pier Reir	nforcer		Anchors and	Column		Dioples	Droood	Coating			ooting		nd Pier R	einforcer		Anchors and	Column
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10 WH640 30 15 16 #58 @t2n O.C T8B 4 24 #6 9 Option 10 19	В	J						_		_	_	Ontion 8	17'												Option 5	17'
12 W/44/48 30 17 16 68 @12in O.C. 78B 4 24 #6 9' Option 10 22	╟	_																								19'
16 W21x55 30 19 16 475 @12nOC 18B 5 30 47 111 Option 14 25 18 W21x68 30 22 116 475 @12nOC 18B 5 30 47 111 Option 14 25 19 W21x68 30 22 16 475 @12nOC 18B 5 30 47 111 Option 16 27 20 W24x68 30 22 2 37 475 @12nOC 18B 5 30 47 111 Option 16 27 20 W24x68 30 22 2 37 475 @12nOC 18B 5 30 47 111 Option 16 27 20 W24x76 30 22 2 37 475 @12nOC 18B 5 30 47 111 Option 16 27 21 W24x76 30 22 2 37 475 @12nOC 18B 5 30 47 111 Option 16 31 22 W24x76 30 22 36 475 @12nOC 18B 5 30 47 111 Option 17 39 30 W24x117 30 22 36 475 @12nOC 18B 5 30 47 111 Option 17 44 40 W24x176 30 22 53 4712 @12nOC 18B 5 30 47 111 Option 18 49 Chart Notes: 1. If the display height is between chart values shown above, use the next highest value. 2. All installations will be braced with laterals placed at 10' increments on front and back of the column starting at 10' above grade. See 241-0414 for lateral sizes. 3. Wind loading figured at Exposure "C" - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas. 4. Wind loading figured at Exposure *C" - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas. 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above. 6. Quantity of Pier reinforcements listed is PER PIER. Date Da				30'	17'		#6's @12in O.C. T&B	4'	24		9"		21'													21'
18 W21/x68 30 22 1 16 #7 80 210 OC. T&B 5 30 #7 11 Option 14 22										_		_		28 FEET LONG									-		•	23' 25'
18 W2/x868 30 22 16 #78 @12n O.C. T&B 5 30 #7 11' Option 16 29										_		_		INSTALLATIONS												27'
22 W24x/6 30 22 2 3' #8's @12in O.C T&B 5 30 #7 11' Option 16 31'	╟	_										_			20'	W21x55	30'	21'	1' 6"			30			•	29'
25 W24x94 30 22 26' #9\$ @12n O.C T&B 5 30 #7 11' Option 16 34	╟																				_					31'
So W24x119 30 22 3 6 #118 @12in O.C. 188B 5 30 #7 11" Option 17 44/4 40 W24x17d 30 22 5 3" #128 @12in O.C. 188B 5 30 #7 11" Option 17 44/4 40 W24x17d 30 22 5 3" #128 @12in O.C. 188B 5 30 #7 11" Option 17 44/4 40 W24x17d 30 22 5 3" #128 @12in O.C. 188B 5 30 #7 11" Option 17 44/4 40 W24x13d 30 22 4" #128 @12in O.C. 188B 5 30 #7 11" Option 17 44/4 40 W24x13d 30 22 4" #128 @12in O.C. 188B 5 30 #7 11" Option 17 44/4 40 W24x13d 30 22 4" #128 @12in O.C. 188B 5 30 #7 11" Option 17 44/4 40 W24x13d 30 22 4" #128 @12in O.C. 188B 5 30 #7 11" Option 17 44/4 for lateral sizes. 2. All installations will be braced with laterals placed at 10' increments on front and back of the column starting at 10' above grade. See 241-0414 for lateral sizes. 3. Wind loading figured at Exposure "C" - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas. 4. Wind loading figured at Exposure "B" - Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater. 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above. 6. Quantity of Pier reinforcements listed is PER PIER. Outdoor Scoreboard Footing Installation 3 Column Multi-Section Wulti-Section Outdoor Scoreboard Footing Installation 3 Column Multi-Section Footing Installation 3 Column Multi-Section Section 5 30 #7 11" Option 17 44/40 W24x131 30 22 4 # #12s @12in O.C. 18B 5 30 #7 11" Option 17 44/40 W24x131 30 E2 4 # #12s @12in O.C. 18B 5 30 #7 11" Option 17 44/40 E2 4 # #12s @12in O.C. 18B 5 30 #7 11" Option 17 44/40 E2 4 # #12s @12in O.C. 18B 5 30 #7 11" Option 17 44/40 E2 4 # #12s @12in O.C. 18B 5 30 #7 11" Option 17 44/40 E2 4 # #12s @12in O.C. 18B 5 30 #7 11" Option 17 44/40 E2 4 # #12s @12in O.C	4	25'	W24x94	30'	22'	2' 6"	#9's @12in O.C. T&B	5'	30	#7	11"	Option 16	34'													34' 30'
Chart Notes: 1. If the display height is between chart values shown above, use the next highest value. 2. All installations will be braced with laterals placed at 10' increments on front and back of the column starting at 10' above grade. See 241-0414 for lateral sizes. 3. Wind loading figured at Exposure "C" - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas. 4. Wind loading figured at Exposure "B" - Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater. 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above. 6. Quantity of Pier reinforcements listed is PER PIER. **Wind loading figured at Exposure "B" - Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater. 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above. 6. Quantity of Pier reinforcements listed is PER PIER. **Diama** Total Advanced Adv										_		_														39 44'
Chart Notes: 1. If the display height is between chart values shown above, use the next highest value. 2. All installations will be braced with laterals placed at 10' increments on front and back of the column starting at 10' above grade. See 241-0414 for lateral sizes. 3. Wind loading figured at Exposure "C" - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas. 4. Wind loading figured at Exposure "B" - Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater. 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above. 6. Quantity of Pier reinforcements listed is PER PIER. Outdoor Scoreboard Footing Installation 3 Column Multi-Section Nevco, Inc. Greenville, Illinois 62246 Drawing No. 241-0410 Sheet 7 7 7	╟																									49'
1. If the display height is between chart values shown above, use the next highest value. 2. All installations will be braced with laterals placed at 10' increments on front and back of the column starting at 10' above grade. See 241-0414 for lateral sizes. 3. Wind loading figured at Exposure "C" - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas. 4. Wind loading figured at Exposure "B" - Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater. 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above. 6. Quantity of Pier reinforcements listed is PER PIER. Outdoor Scoreboard Footing Installation 3 Column Multi-Section Nevco, Inc. Greenville, Illinois 62246 Drawing No. 241-0410 Drawin CJS CJS Date 1/11/2017 Sheet 7 7		4 U	v v∠4X 1/6	30		53	[#128 @1211 U.U. 1&B	1 2	ე ა∪	#1	11	Option 18	49			,										
A 3. Wind loading figured at Exposure "C" - Open terrain with scattered 30 feet. This category includes flat open country, grasslands, and all v 4. Wind loading figured at Exposure "B" - Urban and suburban areas , closely spaced obstructions having the size of single-family dwellings o direction for a distance of 2600 feet or 20 times the structure height, w 5. **Please see DWG-0818 to determine base plate and anchor sizes from 6. Quantity of Pier reinforcements listed is PER PIER .		40' Chart 1. If th 2. All i	W24x176 Notes: ne displ installa	30' lay hei	22' ght is will be	5'3" between	#12's @12'n O.C. T&B een chart values sed with laterals pl	5' hown a	30 bove, us	#7	11 ie n	" ex	" Option 18 ext highest v	Option 18 49' ext highest value.	" Option 18 49 ext highest value.	" Option 18 49 40 40 ext highest value.	Option 18 49 40 W24x131	Option 18 49 40 W24x131 30 ext highest value.	Option 18 49 40 W24x131 30 22 ext highest value.	Option 18 49 40 W24x131 30 22 4	Option 18 49 40 W24x131 30 22 4 #12s @12in O.C. T&B ext highest value.	Option 18 49 40 W24x131 30 22 4 #12s @12in O.C. T&B 5	Option 18 49 40 W24x131 30 22 4 #12s @12in O.C. T&B 5 30 ext highest value.	Option 18 49 40 W24x131 30 22 4 #12s @12in O.C. T&B 5 30 #7 ext highest value.	Option 18 49 40 W24x131 30 22 4 #12s @12in O.C. T&B 5 30 #7 11" ext highest value.	Option 18 49 40 W24x131 30 22 4' #12's @12in O.C. T&B 5' 30 #7 11" Option 17 ext highest value.
closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater. 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above. 6. Quantity of Pier reinforcements listed is PER PIER . CJS CJS CJS CJS CJS CJS CJS CJ	A	above 3. Win 30 feet	grade. Id loadi t. This	See 2 ing figi catego	41-04 ared a ory inc	14 for t Exp e cludes	lateral sizes. osure "C" - Open flat open country	terrair y, grass	ı with so lands, a	catte ind a	red ol	bstructions ter surface	s havir s in h	ng heights generally le urricane prone areas.	ss tha	n		ooting)	g Insta Colun	allation nn	-38					_
direction for a distance of 2600 feet or 20 times the structure height, whichever is greater. 5. **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above. 6. Quantity of Pier reinforcements listed is PER PIER . Drawn CJS Date 1/11/2017 Sheet of 7 7																		141 (11	500				nville	, Illino	is 62246	
6. Quantity of Pier reinforcements listed is PER PIER . CJS Date 1/11/2017 Sheet 7 of 7		directi	on for	a dista	nce o	f 2600	feet or 20 times	the stru	icture h	eigh	t, whi	chever is g	greater		114				D :				24	1-04	10	
				f Pier	reinfo								_ 115100			Dra	(Date	1/11/2017	Sheet	7 of 7	•			









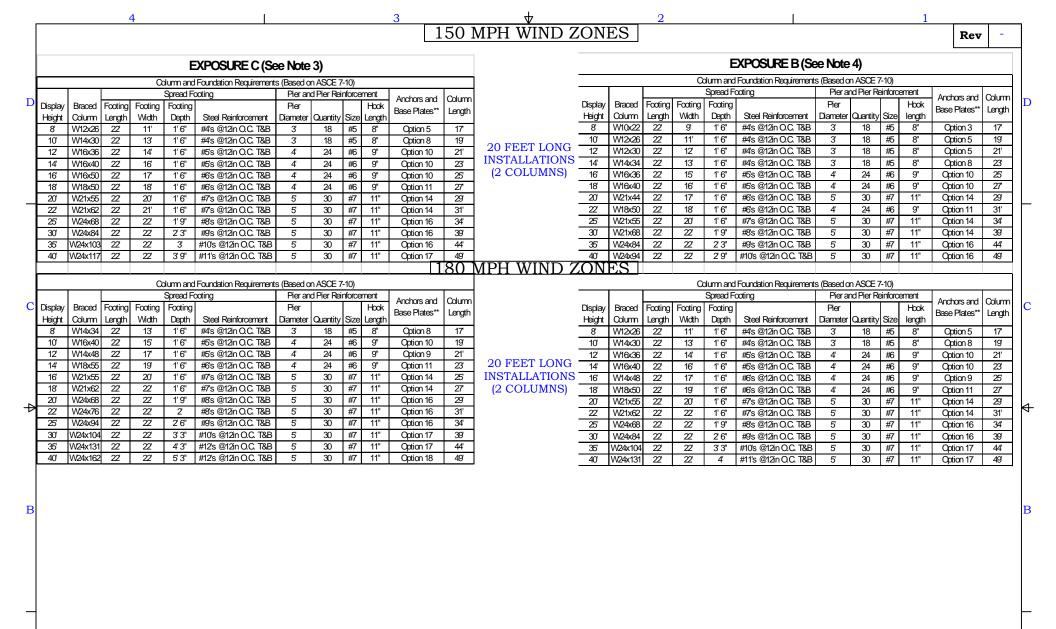


Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. All installations will be braced with laterals placed at 10' increments on front and back of the column starting at 10' above grade. See 241-0415 for lateral sizes.
- 3. Wind loading figured at **Exposure "C" Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.
- 5, **Please see DWG-0818 to determine base plate and anchor sizes from the option listed above.
- 6. Quantity of Pier reinforcements listed is **PER PIER**.

Outdoor Scoreboard Footing Installation 2/3 Column With Laterals



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0411

Drawn CJS Date 1/11/2017 Sheet of 5 10

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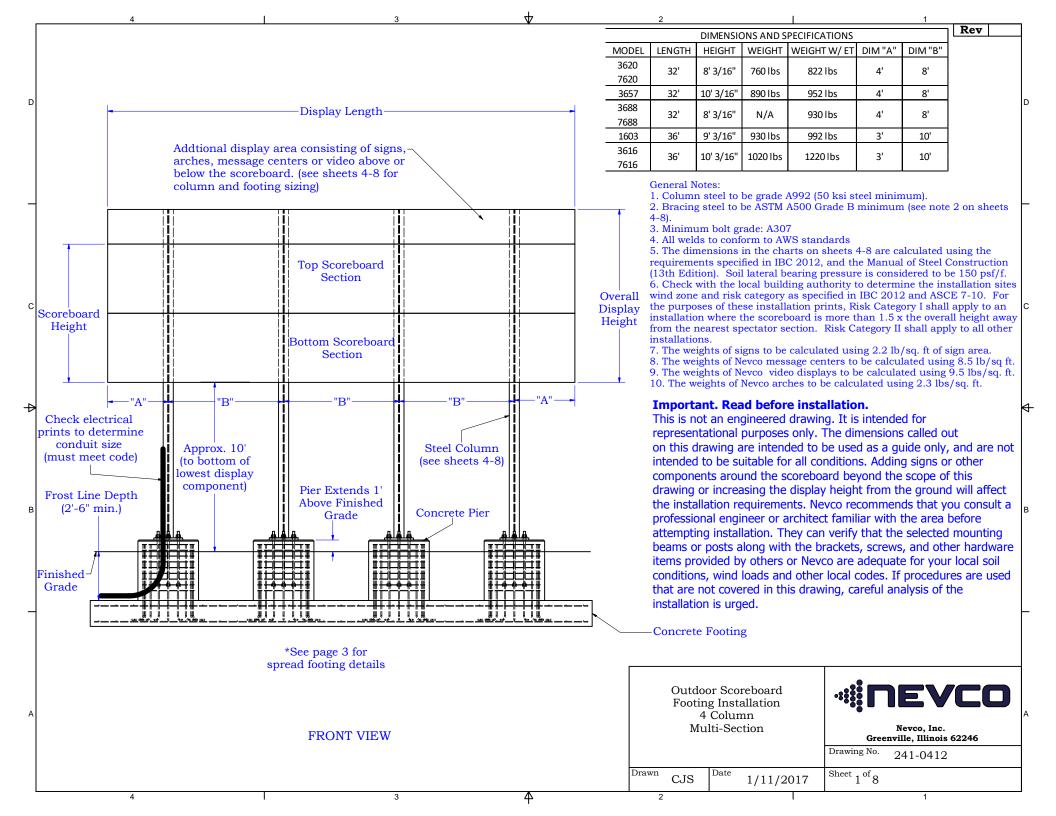
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					E	XPOSURE C	(See N	ote 3)										E	XPOSURE B (Se	e Note	⊋ 4)			
					lumn and Spread F	Foundation Require		sed on ASCE rand Pier Re		ment	ı		•		ı				Foundation Requiremen				1	
	Display	Braced	Footing	Footing	Footing		Pie	r		Hook	Anchors and Base Plates**	Column Length		Display	Braced		Footing	pread Fo Footing		Pier	nd Pier Reinfo	Hook	Anchors and Base Plates**	Column Length
D	Height 8'	Column W 10x22	Length 26'	W idth 7' 6"	Depth 1'6"	#4's @12in O.C. To	kB 3'	ter Quantity 18	Size #5	Length 8"	Option 3	17'		Height 8'	Column W8x18	Length 26'	Width 6' 6"	Depth 1' 6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity Si		Option 1	17'
-1	10' 12'	W 10x26 W 12x26	26' 26'	9' 10'	1' 6"	#4's @ 12in O.C. T8		18	#5 #5	8" 8"	Option 3 Option 5	19' 21'		10' 12'	W8x21 W10x22	26' 26'	7' 6" 8' 6"	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 # 18 #		Option 1 Option 3	19' 21'
	14' 16'	W 12x30 W 14x34	26'	11' 12'	1' 6"	#4's @12in O.C. T8	kB 3'	18 18	#5 #5	8"	Option 5 Option 8	23' 25'	24 FEET LONG	14'	W10x26	26'	9'	1' 6"	#4's @12in O.C. T&B	3'	18 #	5 8"	Option 3	23'
	18'	W16x36	26' 26'	13'	1' 6"	#4's @12in O.C. T&	kB 4'	24	#6	9"	Option 10	27'	INSTALLATIONS	16' 18'	W 12x26 W 12x30	26' 26'	10' 11'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'		5 8" 5 8"	Option 5 Option 5	25' 27'
	20'	W 16x40 W 21x44	26' 26'	14' 15'	1' 6"	#5's @ 12in O.C. T8		24 30	#6	9" 11"	Option 10 Option 14	29' 31'	(2 COLUMNS)	20'	W 14x34 W 18x35	26' 26'	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3' 4'	18 # 24 #		Option 8 Option 11	29' 31'
	25' 30'	W 18x55 W 21x62	26' 26'	17' 19'	1' 6" 1' 6"	#6's @ 12in O.C. T8		24 30	#6 #7	9" 11"	Option 11 Option 14	34' 39'	•	25' 30'	W 16x40 W 18x50	26' 26'	14' 17'	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4' 4'	24 # 24 #		Option 10 Option 11	34' 39'
	35'	W 24x68	26'	22'	1' 6"	#7's @12in O.C. T&	kB 5'	30	#7	11"	Option 16	44'		35'	W 21x55	26'	19'	1' 6"	#6's @12in O.C. T&B	5'	30 #	7 11"	Option 14	44'
- [40'	W 24x84	26'	22'	1' 9"	#8's @12in O.C. T&	kB 5'	30	#7	11"	Option 16	49'		40'	W21x68	26'	21'	1' 6"	#7's @12in O.C. T&B	5'	30 #	7 11"	Option 14	49'
						Foundation Require						1			,				Foundation Requiremen					
	Display	Braced	Footing	Footing			Pie			ment Hook	Anchors and Base Plates**	Column Length		Display	Braced	Footing	Footing	Footing	oting	Pier a Pier	nd Pier Reinfo	Hook Hook	Anchors and Base Plates**	Column Length
	Height 8'	Column W 10x22	Length 30'	Width 8'	Depth 1'6"	Steel Reinforcemer		ter Quantity 18	Size #5	Length 8"	Option 3	17'		Height 8'	Column W8x21	Length 30'	Width 6' 6"	Depth 1' 6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity Si		Option 1	17'
	10' 12'	W 12x26 W 12x30	30' 30'	9'	1' 6"	#4's @12in O.C. T8	kB 3'	18	#5	8"	Option 5 Option 5	19' 21'		10'	W 10x22 W 10x26	30'	7' 6" 8' 6"	1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 #	5 8"	Option 3 Option 3	19' 21'
	14'	W14x34	30'	11'	1' 6"	#4's @12in O.C. T&	kB 3'	18	#5	8"	Option 8	23'	28 FEET LONG	14'	W12x26	30'	9'	1' 6"	#4's @12in O.C. T&B	3'	18 #	5 8"	Option 5	23'
	16' 18'	W 16x36 W 16x40	30'	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T8		24 24	#6 #6	9" 9"	Option 10 Option 10	25' 27'	INSTALLATIONS	16' 18'	W 12x30 W 14x34	30'	10' 11'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 # 18 #		Option 5 Option 8	25' 27'
	20' 22'	W 21x44 W 16x50	30'	14' 15'	1' 6" 1' 6"	#5's @ 12in O.C. T8		30 24	#7 #6	11" 9"	Option 14 Option 10	29' 31'	(2 COLUMNS)	20'	W 18x35 W 16x40	30'	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	4' 4'	24 # 24 #		Option 11 Option 10	29' 31'
	25' 30'	W 18x55 W 21x68	30' 30'	17' 19'	1' 6" 1' 6"	#6's @12in O.C. T8	kB 4'	24 30	#6 #7	9" 11"	Option 11 Option 14	34' 39'	•	25'	W 21x44 W 18x55	30'	14' 17'	1' 6"	#5's @ 12in O.C. T&B #6's @ 12in O.C. T&B	5' 4'	30 #		Option 14	34' 39'
	35'	W 24x76	30'	22'	1' 6"	#7's @12in O.C. T&	kB 5'	30	#7	11"	Option 16	44'		30'	W 21x62	30'	19'	1' 6"	#6's @12in O.C. T&B	5'	30 #	7 11"	Option 11 Option 14	44'
	40'	W 24x94	30'	22'	1' 9"	#8's @ 12in O.C. T8	kB 5'	30	#7	11"	Option 16	49'		40'	W 24x68	30'	21'	1' 6"	#7's @12in O.C. T&B	5'	30 #	7 11"	Option 16	49'
		·	· ·		lumn and Spread F	Foundation Require		sed on ASCE and Pier Re		ment		I	•		1			umn and pread Fo	Foundation Requiremen		on ASCE 7-1 nd Pier Reinfo		T	
	Display	Braced	Footing	Footing	Footing		Pier	r		Hook	Anchors and Base Plates**	Column Length		Display	Braced	Footing	Footing Width	Footing		Pier		Hook	Anchors and Base Plates**	Column Length
	Height 8'	Column W8x21	Length 34'	Width 8'	Depth 1'6"	#4's @12in O.C. To	kB 3'	18	Size #5	Length 8"	Option 1	17'		Height 8'	Column W 10x17	Length 34'	6' 6"	Depth 1' 6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity Si	5 8"	Option 3	17'
₹ [10' 12'	W 10x22 W 10x26	34' 34'	9' 10'	1' 6"	#4's @ 12in O.C. T8		18	#5	8" 8"	Option 3 Option 3	19' 21'		10'	W8x18 W8x21	34' 34'	7' 6" 8' 6"	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 # 18 #		Option 1 Option 1	19' 21'
	14' 16'	W 12x26 W 12x30	34' 34'	11' 12'	1' 6" 1' 6"	#4's @12in O.C. T8		18 18	#5 #5	8" 8"	Option 5 Option 5	23' 25'	32 FEET LONG	14' 16'	W 10x22 W 10x26	34' 34'	9' 6" 10'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3' 3'	18 # 18 #		Option 3 Option 3	23' 25'
	18'	W14x34	34'	13'	1' 6"	#4's @12in O.C. T&	kB 3'	18	#5	8"	Option 8	27'	INSTALLATIONS	18'	W12x26	34'	11'	1' 6"	#4's @12in O.C. T&B	3'	18 #	5 8"	Option 5	27'
	20' 22'	W 16x36 W 16x40	34' 34'	15' 15'	1' 6" 1' 6"	#5's @ 12in O.C. T8 #5's @ 12in O.C. T8		24 24	#6 #6	9"	Option 10 Option 10	29' 31'	(3 COLUMNS)	20'	W 12x30 W 14x34	34' 34'	12' 13'	1' 6" 1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3' 3'	18 # 18 #	5 8"	Option 5 Option 8	29' 31'
	25' 30'	W 21x44 W 18x55	34' 34'	17' 19'	1' 6" 1' 6"	#6's @ 12in O.C. T8		30 24	#7 #6	11" 9"	Option 14 Option 11	34' 39'	•	25'	W 18x35 W 21x44	34' 34'	15' 17'	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4' 5'	24 # 30 #		Option 11 Option 14	34' 39'
	35' 40'	W 21x62 W 24x68	34' 34'	22' 22'	1' 6" 2'	#7's @12in O.C. T8	kB 5'	30 30	#7 #7	11"	Option 14 Option 16	44' 49'	•	35' 40'	W 18x55 W 21x62	34' 34'	19' 21'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4' 5'	24 # 30 #		Option 11 Option 14	44' 49'
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	Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	Steel Reinforceme	Pier nt Diame		Size	Hook Length	Base Plates**	Length		Display Height	Braced Column	Length	Footing Width	Footing Depth	Steel Reinforcement	Pier Diameter	Quantity Si		Base Plates**	Length
	9' 10'	W 10x22 W 10x26	38' 38'	8' 6" 9'	1' 6" 1' 6"	#4's @ 12in O.C. T8		18 18	#5 #5	8" 8"	Option 3 Option 3	18' 19'	•	9'	W8x21 W8x21	38' 38'	7' 7' 6"	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3' 3'	18 # 18 #		Option 1 Option 1	18' 19'
	11'	W12x26	38'	10'	1' 6"	#4's @12in O.C. T&	kB 3'	18	#5	8"	Option 5	20'	06 DDD# 10112	11'	W 10x22 W 10x22	38' 38'	8' 6"	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 #	5 8"	Option 3 Option 3	20'
	12' 13'	W 12x30 W 12x30	38' 38'	10' 11'	1' 6" 1' 6"	#4's @12in O.C. T8 #4's @12in O.C. T8	kB 3'	18 18	#5 #5	8"	Option 5 Option 5	21' 22'	36 FEET LONG	13'	W14x22	38'	9'	1' 6"	#4's @12in O.C. T&B	3'	18 #	5 8"	Option 8	22'
	14' 15'	W 12x30 W 14x30	38' 38'	11' 12'	1' 6" 1' 6"	#5's @ 12in O.C. T8		18 18	#5 #5	8" 8"	Option 5 Option 8	23' 24'	INSTALLATIONS (3 COLUMNS)	14' 15'	W 10x26 W 12x26	38' 38'	9' 6" 10'	1' 6" 1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 #	5 8" 5 8"	Option 3 Option 5	23' 24'
-	20' 25'	W 16x40 W 18x50	38' 38'	15' 17'	1' 6" 1' 6"	#5's @ 12in O.C. T8		24 24	#6 #6	9" 9"	Option 10 Option 11	29' 34'	(o colonino)	20'	W 14x34 W 16x40	38' 38'	12' 15'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'		5 8" 6 9"	Option 8 Option 10	29' 34'
	30'	W 21x55	38'	20'	1' 6"	#7's @ 12in O.C. T&	kB 5'	30	#7	11"	Option 14	39'		30'	W16x50	38'	17'	1' 6"	#6's @12in O.C. T&B	4'	24 #	6 9"	Option 10	39' 44'
	35' 40'	W 21x68 W 24x84	38' 38'	22'	1' 6" 2'	#7's @ 12in O.C. T8		30 30	#7 #7	11"	Option 14 Option 16	44' 49'		35' 40'	W 21x55 W 21x68	38' 38'	19' 21'	1' 6" 1' 6"	#6's @ 12in O.C. T&B #7's @ 12in O.C. T&B	5' 5'		7 11" 7 11"	Option 14 Option 14	49'
A	1. If the control of	nstalla grade. d loadi t. This d loadi space on for a ease se	ay heig tions v See 24 ng figu catego ng figu d obstra d dista e DWC	will be 1-041 ared a pry inced a ruction of 3-081	brace to for 1 t Expo cludes t Expo ns hav f 2600 8 to de	lateral sizes. osure "C" - Op flat open cour osure "B" - Urb ring the size of feet or 20 time etermine base	en terr en try, gra oan and single- es the s plate an	at 10' in ain with asslands, I suburba family dv structure and ancho	scati and an ai vellir heig	tered of all wareas, was ngs or ht, wh	on front an obstruction ater surface wooded are larger. Th nichever is	d back as havir es in h as, or o ese are greater		ess tha	an s]	Footin	g Inst	oreboard callation ith Laterals	Draw	ring No.	Nevco, Ilville, Illin	ois 62246	
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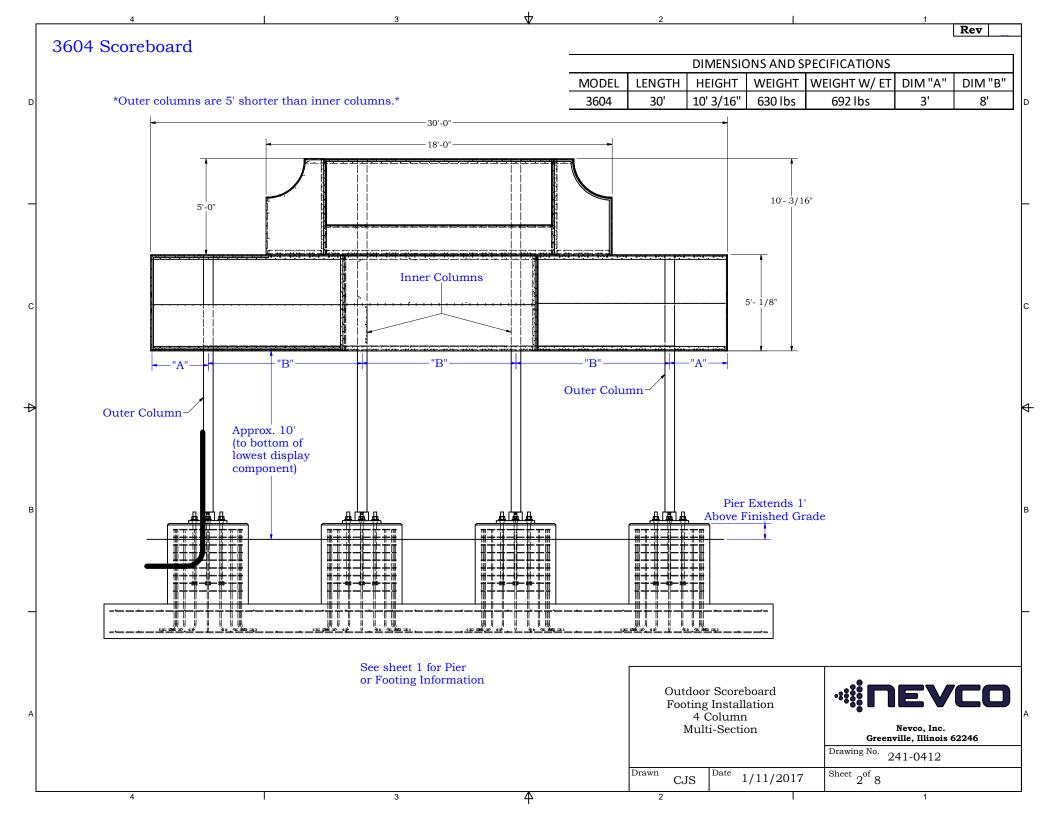
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												12	0 M	IPH WIND Z	ONE	ES									Rev	-
				Cali		XPOSUF Foundation I			•	7 10)									E	KPOSURE B (Se	e Note	4)				
		Ι			Spread F		Requiremen	Pier an	d Pier Re		ment	Anchors and	Column			1	ı		umn and F	Foundation Requirement		n ASCE 7		nent I		
	Display Height	Braced Column	Length	Footing Width	Depth	Steel Rein		Pier Diameter		Size	Length	Base Plates**	Length		Display Height	Braced Column	Footing		Footing	Steel Reinforcement	Pier	Quantity		Hook	Anchors and Base Plates**	Column Length
D	8' 10'	W 10x26 W 12x26	26' 26'	9' 10'		#4's @ 12in #4's @ 12in		3'	18 18	#5 #5	8" 8"	Option 3 Option 5	17' 19'		8'	W 8x21	26'	7' 6"	1'6"	#4's @12in O.C. T&B	3'	18	#5	length 8"	Option 1	17'
	12' 14'	W 14x30 W 18x35	26' 26'	12' 13'		#4's @ 12in #4's @ 12in		3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 11	21' 23'		10'	W 10x22 W 12x26		8' 6" 10'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 3 Option 5	19' 21'
	16' 18'	W 16x40 W 21x44	26' 26'	14' 15'		#5's @ 12in #5's @ 12in		4' 5'	24 30	#6 #7	9" 11"	Option 10 Option 14	25' 27'	24 FEET LONG	14' 16'	W12x30		11' 12'	1'6" 1'6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 8	23' 25'
	20'	W 16x50 W 18x55	26' 26'	16'	1' 6"	#5's @ 12in #6's @ 12in	O.C. T&B	4'	24	#6	9"	Option 10 Option 11	29' 31'	INSTALLATIONS	18' 20'	W14x34 W16x40		13' 14'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	27' 29'
	25'	W 21x62	26'	19'	1' 6"	#6's @ 12in	O.C. T&B	5'	30	#7	11"	Option 14	34'	(2 COLUMNS)	22'	W 14x43 W 18x50		15' 16'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	4' 4'	24 24	#6 #6	9"	Option 9 Option 11	31' 34'
	30' 35'	W 24x68 W 24x84	26' 26'	22' 22'	2'	#7's @ 12in #8's @ 12in	O.C. T&B	5' 5'	30 30	#7 #7	11"	Option 16 Option 16	39' 44'		30'	W21x55	26'	19' 21'	1'6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	5' 5'	30	#7 #7	11"	Option 14 Option 14	39' 44'
	40'	W 21x101	26'	22'	2' 6"	#9's @ 12in	1 O.C. T&B	5'	30	#7	11"	Option 15	49'		40'	W24x76		22'	1'9"	#8's @12in O.C. T&B	5'	30		11"	Option 16	49'
			1		mn and Spread F	Foundation I	Requiremer		on ASCE d Pier Re		m ent	Anahara and	Caluma							oundation Requirement						
	Display Height	Braced Column	Footing Lenath	Footing Width	Footing	Steel Rein	forcement	Pier Diameter	Quantity	Size	Hook Length	Anchors and Base Plates**	Column Length		Display	Braced	Footing		Spread Fo	ooting	Pier ar Pier	nd Pier Re		Hook	Anchors and Base Plates**	Column Length
	8' 10'	W 12x26 W 12x30	30' 30'	9'	1' 6"	#4's @ 12in #4's @ 12in	O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 5	17' 19'		Height 8'	Column W10x22	Length 30'	W idth 7' 6"	Depth 1'6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity 18	Size I #5	length 8"	Option 3	17'
	12'	W 14x34	30'	12'	1' 6"	#4's @ 12in	O.C. T&B	3'	18	#5	8"	Option 8	21'		10' 12'	W10x26		8' 6" 10'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8"	Option 3 Option 5	19' 21'
	14' 16'	W 16x40 W 21x44	30'	13' 14'		#4's @ 12in #5's @ 12in		4' 5'	24 30	#6 #7	9" 11"	Option 10 Option 14	23' 25'	OO EEET LONG	14'	W14x30	30'	11'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	23'
	18' 20'	W 16x50 W 18x55	30'	15' 16'	1' 6"	#5's @ 12in #5's @ 12in		4' 4'	24 24	#6 #6	9"	Option 10 Option 11	27' 29'	28 FEET LONG INSTALLATIONS	16'	W 14x34	30'	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	25' 27'
C	22' 25'	W 21x55 W 21x62	30'	17' 19'	1' 6" 1' 6"	#6's @ 12in #6's @ 12in		5' 5'	30 30	#7 #7	11" 11"	Option 14 Option 14	31' 34'	(2 COLUMNS)	20'	W 14x43	30'	14' 15'	1'6" 1'6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	4' 4'	24 24	#6 #6	9" 9"	Option 9 Option 9	29' 31'
	30' 35'	W 24x76 W 24x94	30'	22' 22'		#7's @ 12in #8's @ 12in	O.C. T&B	5' 5'	30 30	#7 #7	11" 11"	Option 16 Option 16	39' 44'	,	25' 30'	W 18x55 W 21x62		16' 19'	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4' 5'	24 30	#6 #7	9" 11"	Option 11 Option 14	34' 39'
	40'	W 24x104		22'		#9's @ 12in		5'	30	#7	11"	Option 17	49'		35' 40'	W 24x76		21' 21'	1' 6" 1' 9"	#7's @ 12in O.C. T&B #8's @ 12in O.C. T&B	5' 5'	30 30	#7 #7	11" 11"	Option 16 Option 16	44' 49'
				Colu	mn and	Foundation I	Requiremer	its (Based	on ASCE	7-10)										oundation Requirement						
					Spread F	ooting		Pier an	d Pier Re	inforce	em ent	Anchors and	Column							•			·			
	Display	Braced	Footing	Footing	Footing			Pier			Hook	Base Plates**	Length						Spread Fo	ooting		nd Pier Re			Anchors and Base Plates**	
	Height 8'	Column W 10x22	Length 34'	W idth		Steel Rein		Diameter 3'	Quantity 18	Size #5	Length 8"	Option 3	17'		Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	Steel Reinforcement	Pier Diameter	Quantity		Hook length		
₽	10' 12'	W 10x26 W 12x30	34' 34'	10' 6" 12'		#4's @ 12in #4's @ 12in	O.C. T&B	3'	18	#5 #5	8"	Option 3 Option 5	19' 21'		8' 10'	W 8x18 W 10x22	34' 34'	7' 6" 8' 6"	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 1 Option 3	17' •
	14'	W 14x30	34'	13'	1'6"	#4's @ 12in	O.C. T&B	3'	18	#5	8"	Option 8	23'	32 FEET LONG	12' 14'	W14x22 W12x26		9' 6" 11'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3' 3'	18 18	#5 #5	8" 8"	Option 8 Option 5	21' 23'
	16' 18'	W 14x34 W 16x40	34' 34'	14' 15'	1' 6" 1' 6"	#5's @ 12in #5's @ 12in	0.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	25' 27'	INSTALLATIONS	16'	W 12x30 W 14x30	34'	12' 13'	1'6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18	#5 #5	8"	Option 5 Option 8	25' 27'
	20'	W 14x43 W 16x50	34' 34'	17' 18'	1' 6"	#5's @ 12in #6's @ 12in	O.C. T&B	4' 4'	24 24	#6 #6	9"	Option 9 Option 10	29' 31'	(3 COLUMNS)	20'	W14x34	34'	14'	1'6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	29'
	25' 30'	W 18x55 W 21x62	34' 34'	19' 22'	1' 6"	#6's @ 12in #7's @ 12in		4' 5'	24 30	#6 #7	9" 11"	Option 11 Option 14	34' 39'		25'	W 16x36 W 14x43		15' 17'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	4' 4'	24 24	#6 #6	9"	Option 10 Option 9	31' 34'
	35' 40'	W 24x76 W 24x84	34' 34'	22' 22'	2' 2' 6"	#8's @ 12in #9's @ 12in		5' 5'	30 30	#7 #7	11" 11"	Option 16 Option 16	44' 49'		35'	W 18x50 W 21x62		19' 22'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4' 5'	24 30	#6 #7	9" 11"	Option 11 Option 14	39' 44'
В						Foundation I		nts (Based					-		40'	W24x68	34'	21'	1' 9"	#8's @12in O.C. T&B	5'	30	#7	11"	Option 16	49'
_				1	Spread F		requiremen		d Pier Re		m ent	Anchors and	Column			1	ì		umn and F	oundation Requirement		n ASCE 7		nent		
	Display	Braced		Footing			,	Pier				Base Plates**	Length		Display	Braced	Footing		Footing		Pier				Anchors and Base Plates**	Column Length
	Height 9'	Column W 10x26	Length 38'	10'		Steel Rein #4's @ 12in	O.C. T&B	Diameter 3'	18	#5	Length 8"	Option 3	18'		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size I	length		Ů
	10' 11'	W 12x26 W 12x30	38'	10' 6" 11'	1' 6"	#4's @ 12in #4's @ 12in	O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 5	19' 20'	06 DDD# 1 0312	9'	W 10x22	38'	9'	1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18	#5 #5	8"	Option 3 Option 3	18' 19'
	12' 13'	W 14x30 W 14x34	38' 38'	12' 12'	1' 6" 1' 6"	#4's @ 12in #4's @ 12in		3'	18 18	#5 #5	8" 8"	Option 8 Option 8	21' 22'	36 FEET LONG INSTALLATIONS	11'	W10x26	38'	9' 6"	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 3 Option 3	20' 21'
	14' 15'	W 14x34 W 16x36	38'	13' 14'	1' 6"	#5's @ 12in #5's @ 12in	O.C. T&B	3'	18	#5 #6	8"	Option 8 Option 10	23'	(3 COLUMNS)	13' 14'	W 12x26		10' 11'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 5	22' 23'
\neg	20'	W 16x50 W 21x55	38'	17' 19'		#5's @ 12in #6's @ 12in	0.C. T&B	4' 5'	24	#6 #7	9"	Option 10	29'		15' 20'	W12x30 W16x36	38'	11' 14'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 5 Option 10	24' 29'
	30'	W 21x68		22'	1'6"	#7's @ 12in	0.C. T&B	5'	30	#7	11"	Option 14 Option 14	39'		25'	W 16x50	38'	17' 19'	1'6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4' 5'	24	#6	9"	Option 10 Option 14	34' 39'
	35' 40'	W 24x76 W 21x101		22' 22'		#8's @ 12in #9's @ 12in			30 30	#7 #7	11" 11"	Option 16 Option 15	44' 49'		35'	W 21x68	38'	22'	1'6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	44'
	Chart 1. If to 2. All	Notes: he displ	lay hei	ght is will be	betwee		terals pl		bove, u	se th	ne nex	t highest v	alue.	of the column starti	40'	0') 22'	1'9" or Sco	#8's @12in O.C. T&B	5'	30) E	11"	Option 16	49'
Α	3. Wii	nd loadi	ng fig	ıred a	Expo	sure "C"	' - Open							g heights generally l		ın				allation		2				
**	30 fee 4. Wii closel	et. This nd load y space	catego ing figi d obst	ory inc ared a ruction	ludes t Expo ns hav	flat open sure "B" ing the s	country ' - Urbar size of si	y, grassl and su ngle-fam	lands, a iburba nily dwe	and a n arc elling	all wat eas , we gs or la	er surfaces ooded area arger. The	s in hi s, or o se area	arricane prone areas ther terrain with nur as prevail in the upw	merous					th Laterals	Deservi			co, Inc Illinoi	s 62246	
												chever is g									Drawii	11g 110.	241	-041	<u>L</u>	
						termine its listed			anchor	size	s irom	the option	nsted	anove.		Dr	awn (IJS	Date	1/11/2017	Sheet		0			
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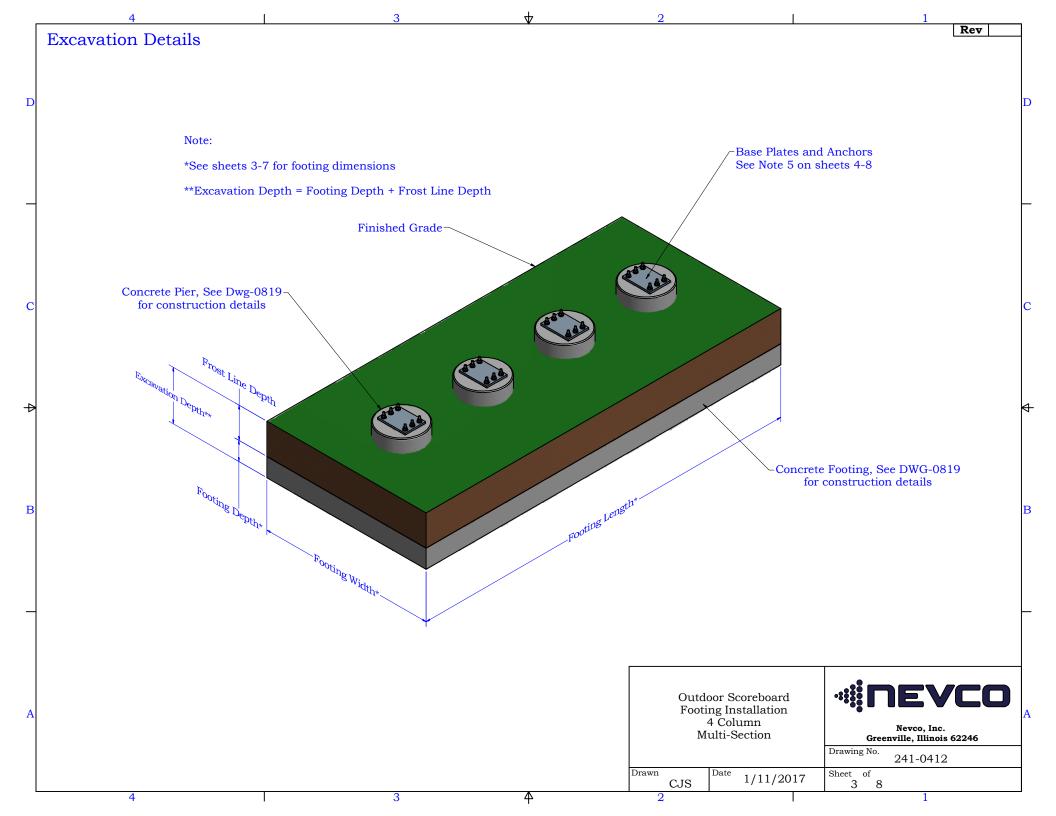
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						XPOSURE C	•		•										EX	POSURE B (Se	e Note	4)				
						Foundation Requirer ooting	ments		on ASCE d Pier Re		nent	A b	Caluma			1	1		umn and Fo	oundation Requirementing		on ASCE		ement		l
	Display Height	Braced Footi			oting epth	Steel Reinforceme	ent C	Pier Diameter	Quantity	Size	Hook Length	Anchors and Base Plates**	Column Length		Display Height	Braceo		Footing Width	Footing Depth	Steel Reinforcement	Pier Diameter	Quantity	Size	Hook length	Anchors and Base Plates**	Length
D	8' 10'	W12x26 26 W12x30 26	1	0' 1	'6"	#4's @12in O.C. T8 #4's @12in O.C. T8	&В	3'	18	#5 #5	8" 8"	Option 5 Option 5	17' 19'		8' 10'	W 10x2	2 26'	8' 9'		#4's @12in O.C. T&B #4's @12in O.C. T&B	3' 3'	18	#5 #5	8" 8"	Option 3 Option 3	17' 19'
	12'	W 14x34 26	1	3' 1	' 6"	#4's @12in O.C. T&	&B	3'	18	#5	8"	Option 8	21'		12'	W12x2	3 26'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	21'
	14' 16'	W 16x40 26 W 21x44 26	1	5' 1	'6" '6"	#4's @12in O.C. T8 #5's @12in O.C. T8	&B	4' 5'	24 30	#6 #7	9" 11"	Option 10 Option 14	23' 25'	24 FEET LONG	14' 16'	W 14x3 W 14x3	4 26'	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 8 Option 8	23' 25'
	18' 20'	W16x50 26 W18x55 26			' 6" ' 6"	#5's @ 12in O.C. T8 #6's @ 12in O.C. T8		4' 4'	24 24	#6 #6	9"	Option 10 Option 11	27' 29'	INSTALLATIONS	20'	W 16x4 W 14x4		14' 15'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	4' 4'	24 24	#6 #6	9"	Option 10 Option 9	27' 29'
	22' 25'	W 21x55 26 W 21x68 26	_		' 6" ' 6"	#6's @ 12in O.C. T8 #7's @ 12in O.C. T8	_	5' 5'	30 30	#7 #7	11"	Option 14 Option 14	31' 34'	(2 COLUMNS)	22' 25'	W 14x4 W 18x5		16' 18'	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4' 4'	24 24	#6 #6	9" 9"	Option 9 Option 11	31' 34'
	30' 35'	W24x76 26 W24x94 26			' 9" !' 3"	#8's @12in O.C. T8		5' 5'	30 30	#7 #7	11" 11"	Option 16 Option 16	39' 44'		30' 35'	W 21x6 W 24x7		20' 21'	1' 6" 1' 9"	#7's @12in O.C. T&B #8's @12in O.C. T&B	5' 5'	30 30	#7 #7	11" 11"	Option 14 Option 16	39' 44'
	40'	W 24x 104 26			2' 9"	#10's @12in O.C. T		5'	30	#7	11"	Option 17	49'		40'	W24x9		22'	2'	#9's @12in O.C. T&B	5'	30	#7	11"	Option 16	49'
						Foundation Requirer	ments													oundation Requiremen						
	Display		ng Foo	ting Fo	oting	ooting		Pier	d Pier Re		Hook	Anchors and Base Plates*	Column Length		Display	Braceo		Footing	Spread Foo Footing		Pier	and Pier R	eintorce	Hook	Anchors and Base Plates**	Column Length
	Height 8'	Column Leng W12x26 30	_	_	epth '6"	#4's @ 12in O.C. T8		Diameter 3'	Quantity 18	Size #5	Length 8"	Option 5	17'	•	Height 8'	Column W 14x2		Width 8'	Depth 1'6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity 18	Size #5	length 8"	Option 8	17'
	10' 12'	W14x34 30 W16x36 30			' 6" ' 6"	#4's @12in O.C. T8 #4's @12in O.C. T8		3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	19' 21'		10' 12'	W 12x2 W 12x3		9' 11'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 5	19' 21'
	14' 16'	W14x43 30 W16x50 30	1	4' 1	' 6"	#4's @12in O.C. T8 #5's @12in O.C. T8	&B	4' 4'	24 24	#6 #6	9"	Option 9 Option 10	23' 25'	28 FEET LONG	14' 16'	W 14x3 W 16x3	4 30'	12' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	23' 25'
	18'	W 18x55 30 W 21x55 30	1	6' 1	'6" '6"	#5's @12in O.C. T8	&B	4' 5'	24	#6 #7	9"	Option 11 Option 14	27' 29'	INSTALLATIONS	18'	W 14x4 W 16x5	3 30'	14' 15'	1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	4' 4'	24	#6 #6	9"	Option 9 Option 10	27' 29'
1	22'	W21x62 30	1	9' 1	' 6"	#6's @12in O.C. T8	&В	5' 5'	30	#7	11"	Option 14	31'	(2 COLUMNS)	22'	W 18x5	30'	16'	1' 6"	#5's @12in O.C. T&B	4' 5'	24	#6 #7	9"	Option 11	31'
	25' 30'	W24x64 30 W24x94 30	2	2' 1	' 6" ' 9"	#7's @12in O.C. T8 #8's @12in O.C. T8	&В	5'	30 30	#7 #7	11"	Option 16 Option 16	34' 39'		25' 30'	W 21x5 W 24x6	3 30'	18' 20'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	5'	30 30	#7	11"	Option 14 Option 16	34' 39'
	35' 40'	W 24x 104 30 W 24x 131 30			2' 3" 2' 9"	#9's @12in O.C. T8 #10's @12in O.C. T		5' 5'	30 30	#7 #7	11"	Option 17 Option 17	44' 49'		35' 40'	W 24x8		22' 22'	1' 9" 2'	#8's @12in O.C. T&B #9's @12in O.C. T&B	5' 5'	30	#7 #7	11" 11"	Option 16 Option 15	44' 49'
				Columi	n and	Foundation Requirer	ments	s (Based o	on ASCE	7-10)								Col	umn and Fo	oundation Requiremen	s (Based	on ASCE	7-10)			
	Display	Braced Foot	ng Foo	·	read F oting	ooting		Pier and	d Pier Re	inforcen	n ent Hook	Anchors and			Display	Braceo	Footing	1	Spread Foo Footing	oting	Pier a	and Pier R	einforce	ment Hook	Anchors and	Column
	Height 8'	Column Leng W10x26 34	th Wi	dth D	epth	Steel Reinforceme #4's @12in O.C. T8		Diameter 3'	Quantity 18	Size #5	Length 8"	Base Plates** Option 3	Length		Height 8'	Columi W8x21	Length	Width 8'	Depth 1'6"	Steel Reinforcement #4's @12in O.C. T&B	Diam eter	Quantity	Size #5	length 8"	Base Plates** Option 1	Length 17'
>	10'	W12x26 34	1	1' 1	' 6"	#4's @12in O.C. T&	&B	3'	18	#5	8"	Option 5	19'		10'	W10x2	2 34'	9' 6"	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'
	12' 14'	W12x30 34 W14x34 34	1	4' 1	'6" '6"	#4's @12in O.C. T8 #4's @12in O.C. T8	&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 8	21' 23'	32 FEET LONG	12'	W 10x2 W 12x2	34'	11' 12'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18	#5 #5	8"	Option 3 Option 5	21' 23'
	16' 18'	W 16x40 34 W 21x44 34			' 6" ' 6"	#5's @ 12in O.C. T8 #5's @ 12in O.C. T8		4' 5'	24 30	#6 #7	9" 11"	Option 10 Option 14	25' 27'	INSTALLATIONS	16' 18'	W 14x3 W 14x3	1 34'	13' 14'	1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 8 Option 8	25' 27'
	20' 22'	W16x50 34 W18x50 34			' 6" ' 6"	#6's @ 12in O.C. T8 #6's @ 12in O.C. T8		4' 4'	24 24	#6 #6	9"	Option 10 Option 11	29' 31'	(3 COLUMNS)	20'	W 16x3		15' 16'	1' 6" 1' 6"	#5's @ 12in O.C. T&B #5's @ 12in O.C. T&B	4' 4'	24 24	#6 #6	9"	Option 10 Option 10	29' 31'
	25' 30'	W21x55 34 W21x68 34			'6" '9"	#7's @ 12in O.C. T8 #8's @ 12in O.C. T8		5' 5'	30 30	#7 #7	11" 11"	Option 14 Option 14	34' 39'		25' 30'	W 16x5 W 21x5		18' 21'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4' 5'	24 30	#6 #7	9" 11"	Option 10 Option 14	34' 39'
	35' 40'	W24x84 34 W21x101 34	2	2' 2	2' 3" 2' 9"	#9's @12in O.C. T8 #10's @12in O.C. T	&В	5' 5'	30 30	#7 #7	11" 11"	Option 16 Option 15	44' 49'		35' 40'	W 21x6 W 24x7		22' 22'	1' 9" 2' 3"	#8's @12in O.C. T&B #9's @12in O.C. T&B	5' 5'	30 30	#7 #7	11" 11"	Option 14 Option 16	44' 49'
3						Foundation Requirer														oundation Requirement			7-10)			
	D'l.	D	le	Sp	read F	ooting		Pier an	d Pier Re			Anchors and	Column		Display	Braceo	Footing	,	Spread Foo			and Pier R		ment Hook	Anchors and	Column
	Display Height	Column Leng		dth D	oting epth	Steel Reinforceme		Pier Diameter	Quantity		Hook Length	Base Plates*	Length		Height	Columi	Length	Width	Depth	Steel Reinforcement	Diameter			length	Base Plates**	Length
	9' 10'	W 12x26 38 W 12x30 38			' 6" ' 6"	#4's @ 12in O.C. T8 #4's @ 12in O.C. T8		3' 3'	18 18	#5 #5	8" 8"	Option 5 Option 5	18' 19'		9' 10'	W 10x2 W 10x2	38'	9' 9'		#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 3 Option 3	18' 19'
	11' 12'	W 14x30 38 W 14x34 38			' 6" ' 6"	#4's @ 12in O.C. T8 #4's @ 12in O.C. T8		3'	18 18	#5 #5	8"	Option 8 Option 8	20' 21'	36 FEET LONG	11' 12'	W 12x2		10' 11'	1' 6" 1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 5	20' 21'
	13' 14'	W 18x35 38 W 16x36 38	-		'6" '6"	#4's @ 12in O.C. T8	0.0	4' 4'	24 24	#6 #6	9" 9"	Option 11 Option 10	22' 23'	INSTALLATIONS	13'	W 12x3 W 12x3		11' 12'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8"	Option 5 Option 5	22' 23'
	15' 20'	W 16x40 38 W 18x55 38			' 6" ' 6"	#5's @ 12in O.C. T8 #6's @ 12in O.C. T8		4' 4'	24 24	#6 #6	9" 9"	Option 10 Option 11	24' 29'	(3 COLUMNS)	15' 20'	W 14x3		12' 14'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 9	24' 29'
	25' 30'	W 21x62 38 W 24x76 38	2	1 1	'6" '9"	#7's @ 12in O.C. T8 #8's @ 12in O.C. T8	&В	5' 5'	30	#7 #7	11"	Option 14 Option 16	34' 39'		25' 30'	W 18x5	38'	18' 21'	1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4' 5'	24	#6 #7	9" 11"	Option 11 Option 14	34' 39'
	35'	W 24x 94 38	2	2' 2	2' 3"	#9's @ 12in O.C. T8	&B	5'	30	#7	11"	Option 16	44'		35' 40'	W 24x6 W 24x9	3 38'	22'	1' 9"	#8's @12in O.C. T&B #9's @12in O.C. T&B	5' 5'	30	#7	11"	Option 16 Option 16	44' 49'
	40'	W 24x104 38	1 2	2'	3'	#10's @12in O.C. T	αB	5'	30	#7	11"	Option 17	49'	I	40	VV Z4X9	30	1	۷.	#53 @ 1211 U.U. 1&B		30	#7	11	Орион 16	48
	1. If th 2. All i above 3. Win 30 feet 4. Win	installation grade. See Id loading fi t. This cate Id loading fi	s will 241-(gured gory gured	be br 0415 : I at E includ I at E	for la xpo des la xpo	ateral sizes. sure "C" - Ope flat open count sure "B" - Urb	placen to try, an a	ced at i errain grassla and su	10' inc with s ands, a burb a	remer catter and al n area	nts or ed ob Il wat as , wo	n front and estructions er surface ooded area	l back s havin s in h s, or o	of the column starting heights generally lurricane prone areas ther terrain with nur	ess tha nerous	ın		Footin	g Insta	reboard Illation h Laterals	•30	Gree	Ne	vco, Ince, Illino	/C(c. dis 62246	
						ing the size of a feet or 20 time								as prevail in the upw	ınd						Draw	ing No.	24	1-041	1	
	5. **Pl	ease see DV	VG-0	818 t	o de	termine base p its listed is PEI	olate	e and a								D	rawn	IC	Date	1/11/2017	Sheet			1-0-1	1	
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							'					1	50 N	IPH WIND Z	ONE	S				•				Rev	-
					Е	XPOS	URE C (S	See No	ote 3))									E	XPOSURE B (Se	e Note	4)			
					ımn and Spread F		on Requireme			SCE 7-1		1		7				Col	umn and I Spread Fo	Foundation Requirement poting		n ASCE 7-10 nd Pier Reinf		1	
	Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	Steel R	einforcement	Pier Diame		antity Si	Hool ze Leng	Base Plate	nd Columi s** Length		Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	Steel Reinforcement	Pier Diameter	Quantity Si	Hook ze length	Anchors and Base Plates*	Length
D	8' 10'	W 12x30 W 18x35	26' 26'	11' 13'	1' 6" 1' 6"	#4's @1	2in O.C. T&E 2in O.C. T&E	3 3'		18 #	5 8" 6 9"	Option 5			8' 10'	W 10x2	3 26'	9' 11'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 # 18 #	5 8"	Option 3 Option 5	17' 19'
	12' 14'	W 16x40 W 16x50	26' 26'	14'	1' 6"	#5's @1	2in O.C. T&E 2in O.C. T&E	3 4'		24 #	6 9" 6 9"	Option 1	21'		12' 14'	W 14x3	1 26'	12' 13'	1' 6"	#4's @ 12in O.C. T&B #5's @ 12in O.C. T&B	3' 4'	18 #		Option 8 Option 10	21'
	16'	W 18x55 W 21x55	26' 26'	17' 19'	1' 6"	#6's @1	2in O.C. T&E 2in O.C. T&E	3 4'	- 1	24 #	6 9" 7 11"	Option 1	1 25'	1 24 FEET LONG INSTALLATIONS	16'	W 16x4	26'	15' 16'	1' 6"	#5's @ 12in O.C. T&B #5's @ 12in O.C. T&B	4' 4'	24 #	6 9"	Option 10 Option 9	25' 27'
	20' 22'	W21x62 W21x68	26' 26'	20'	1' 6"	#7's @1	2in O.C. T&E 2in O.C. T&E	3 5'	:	30 #	7 11" 7 11" 7 11"	Option 1	1 29'	(2 COLUMNS)	20'	W 18x5	26'	17' 18'	1' 6"	#6's @ 12in O.C. T&B	4'	24 #	6 9"	Option 11 Option 11	29'
	25' 30'	W 24x76 W 21x101	26' 26'	22' 22'	1' 9"	#8's @1	2in O.C. T&E 2in O.C. T&E 2in O.C. T&E	3 5'	- ;	30 #	7 11" 7 11" 7 11"	Option 1	34'	<u> </u>	25' 30'	W21x6	26'	20'	1' 6"	#7's @ 12in O.C. T&B #8's @ 12in O.C. T&B	5' 5'	30 #	7 11"	Option 14 Option 16	34' 39'
	35'	W 24x 117	26'	22'	3'	#10's @1	12in O.C. T&I 12in O.C. T&I	B 5'	- ;	30 #	7 11"	Option 1	7 44'	_	35' 40'	W24x94 W24x10	1 26'	22'	2' 3"	#9's @ 12in O.C. T&B #10's @ 12in O.C. T&B	5' 5'	30 #		Option 16 Option 17	44'
	40'	W 24x 146	26'	22'	3' 9"							Option 1	7 49'		40	VV 24X 10	4 20							Option 17	49
	D'anda	B	E		Spread F		on Requireme			er Reinfo	rcement	Anchors a	nd Colum	_ n	Diaglass	Description	Fastina		Spread Fo	Foundation Requirement poting	Pier a	nd Pier Reinf	rcement	Anchors and	Column
	Display Height	Column	Length		Depth		einforcement				Ze Leng	Base Plate	s** Length	1	Display Height	Column	Length	Width	Footing Depth	Steel Reinforcement	Pier Diameter	Quantity Si		Base Plates*	Length
	10'	W14x34 W16x40	30'	11'	1' 6"	#4's @1	2in O.C. T&E 2in O.C. T&E	3 4'	- 2	24 #	5 8" 6 9"	Option 8	19'	_	10'	W 12x2	30'	9'	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3' 3' 4'	18 #	5 8"	Option 5 Option 8	17' 19'
	12' 14'	W 21x44 W 18x50	30'	14' 16'	1' 6" 1' 6"	#5's @1	2in O.C. T&E 2in O.C. T&E	3 4'	- 1	24 #	7 11" 6 9"	Option 1	1 23'	28 FEET LONG	12'	W 18x3	30'	12' 13'	1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	4'	24 #	6 9"	Option 11 Option 10	21'
	16' 18'	W 21x55 W 21x62	30'	18' 19'	1' 6" 1' 6"	#6's @1	2in O.C. T&E 2in O.C. T&E	3 5'	:	30 #	7 11" 7 11"	Option 1	1 27'	INSTALLATIONS	16'	W21x4	30'	15' 16'	1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	5' 4'	30 # 24 #	6 9"	Option 14 Option 11	25' 27'
С	20' 22'	W 21x68 W 18x76	30'	20' 22'	1' 6" 1' 6"	#7's @1	2in O.C. T&E 2in O.C. T&E	3 4'6"	' 2	27 #	7 11" 6 9"	Option 1:	2 31'	(2 COLUMNS)	20'	W18x5	30'	17' 18'	1' 6"	#6's @ 12in O.C. T&B #6's @ 12in O.C. T&B	4' 5'	24 # 30 #	7 11"	Option 11 Option 14	29' 31'
	25' 30'	W 24x84 W 24x104	30'	22' 22'	1' 9" 2' 6"		2in O.C. T&E 2in O.C. T&E				7 11" 7 11"	Option 1	7 39'	_	25' 30'	W21x6	30'	20' 22'	1' 6" 1' 9"	#7's @12in O.C. T&B #8's @12in O.C. T&B	5' 5'	30 # 30 #	7 11"	Option 14 Option 16	34' 39'
	35' 40'	W 24x 131 W 24x 162	30'	22' 22'	3' 9"		12in O.C. T& 12in O.C. T&				7 11" 7 11"	Option 1			35' 40'	W24x10 W24x11		22' 22'	2' 3"	#9's @12in O.C. T&B #10's @12in O.C. T&B	5' 5'	30 # 30 #		Option 16 Option 17	44' 49'
				Colu	umn and	Foundation	on Requireme											Col		Foundation Requirement					
	Display	Braced	Footing	Footing	Spread Footing	Footing		Pier Pier		er Reinfo	rcement	Anchors a			Display	Braced	Footing	Footing	Spread Fo	ooting	Pier a Pier	nd Pier Reinf	Hook	Anchors and Base Plates*	Column Length
	Height 8'	Column W 12x26	Length 34'	Width 11'	Depth 1'6"		einforcement 2in O.C. T&E			,	ze Leng	Option 5	Ů	_	Height 8'	Column W 10x2		Width 9'	Depth 1'6"	#4's @ 12in O.C. T&B	Diameter 3'	Quantity Si 18 #		Option 3	17'
7	10' 12'	W 14x30 W 18x35	34' 34'	13' 15'	1' 6" 1' 6"	#4's @1	2in O.C. T&E 2in O.C. T&E	3 3'		18 #	5 8" 6 9"	Option 8	19'	_	10' 12'	W 12x2i		11' 12'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 # 18 #	5 8" 5 8"	Option 5 Option 5	19' 21'
	14' 16'	W 16x40 W 21x44	34' 34'	16' 17'	1' 6" 1' 6"	#5's @1	2in O.C. T&E 2in O.C. T&E	3 4'	- 2	24 #	6 9" 7 11"	Option 1	23'	32 FEET LONG	14' 16'	W 14x3		13' 15'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'	18 # 24 #		Option 8 Option 10	23' 25'
	18' 20'	W 18x50 W 21x55	34' 34'	19' 20'	1' 6"	#6's @1	2in O.C. T&E 2in O.C. T&E	3 4'	- 2	24 #	6 9" 7 11"	Option 1	1 27'	INSTALLATIONS (3 COLUMNS)	18' 20'	W 16x4		16' 17'	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4' 5'	24 # 30 #		Option 10 Option 14	27' 29'
	22' 25'	W21x62 W21x68	34' 34'	22' 22'	1' 6"	#7's @1	2in O.C. T&E 2in O.C. T&E	3 5'	- ;	30 #	7 11" 7 11"	Option 1	1 31'	- (3 COLOWINS)	22' 25'	W 18x5		18' 21'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4' 5'	24 # 30 #	6 9" 7 11"	Option 11 Option 14	31' 34'
	30' 35'	W24x84 W21x101	34' 34'	22'	2' 6"	#9's @1	2in O.C. T&E 12in O.C. T&	3 5'	- ;	30 #	7 11" 7 11"	Option 1	39'	=	30' 35'	W21x6	34'	22' 22'	1' 9" 2' 3"	#8's @ 12in O.C. T&B #9's @ 12in O.C. T&B	5' 5'	30 # 30 #		Option 14 Option 16	39' 44'
	40'	W 24x117	34'	22'	3' 9"		12in O.C. T&		_		7 11"	Option 1			40'	W24x9	34'	22'	2' 9"	#10's @12in O.C. T&B	5'	30 #	7 11"	Option 16	49'
В					ımn and Spread F		on Requireme			SCE 7-1							Ì	Col	umn and I Spread Fo	Foundation Requirement poting		n ASCE 7-10 nd Pier Reinf	<i>,</i>	i	
	Display	Braced		Footing	Footing		einforcement	Pier	r		Hoo	Anchors a Base Plate			Display Height	Braced		Footing Width	Footing Depth	Steel Reinforcement	Pier Diameter	Quantity Si	Hook ze length	Anchors and Base Plates*	Column Length
	Height 9'	W14x34	Length 38'	Width 12'	1' 6"	#4's @1	2in O.C. T&E	3 3'		18 #	ze Leng	Option 8			9'	W 12x2	38'	10'	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 #	5 8"	Option 5 Option 5	18' 19'
	10' 11'	W14x34 W16x36	38'	13'	1' 6"	#4's @1	2in O.C. T&E 2in O.C. T&E	3 4'	- 2	24 #	5 8" 6 9"	Option 8	20'	26 EEET LONG	11' 12'	W12x3	38'	11' 12'	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3'	18 #	5 8"	Option 5 Option 8	20'
	12' 13'	W 16x40 W 14x43	38'	15' 15'	1' 6"		2in O.C. T&E 2in O.C. T&E				6 9" 6 9"	Option 1		36 FEET LONG INSTALLATIONS	13'	W 14x3	1 38'	13'	1' 6"	#4's @ 12in O.C. T&B #4's @ 12in O.C. T&B	3' 4'		5 8"	Option 8 Option 11	22'
	14' 15'	W 21x44 W 16x50	38'	16'	1' 6"	#5's @1	2in O.C. T&E 2in O.C. T&E	3 4'			7 11" 6 9"	Option 1	24'	(3 COLUMNS)	15'	W 16x3	38'	14'	1' 6"	#5's @ 12in O.C. T&B #6's @ 12in O.C. T&B	4'	24 #	6 9"	Option 10 Option 11	24' 29'
	20' 25'	W 21x62 W 24x76	38' 38'	20' 22'	1' 6"	#8's @1	2in O.C. T&E 2in O.C. T&E	3 5'	- ;	30 #	7 11" 7 11"	Option 1	34'		25' 30'	W21x6	2 38'	21'	1' 6"	#7's @ 12in O.C. T&B #8's @ 12in O.C. T&B	5'	30 #	7 11"	Option 14 Option 16	34' 39'
	30' 35'	W 24x94 W 24x104	38' 38'	22' 22'	2' 6" 3'	#10's @1	2in O.C. T&E 12in O.C. T&	B 5'		30 #	7 11" 7 11"	Option 1	7 44'		35' 40'	W24x84 W24x10	1 38'	22' 22'	2' 3"	#9's @ 12in O.C. T&B #10's @ 12in O.C. T&B	5' 5'	30 #		Option 16	44' 49'
	40'	W 24x 146	38'	22'	3' 9"	#11's @1	12in O.C. T&	B 5'		30 #	7 11"	Option 1	7 49'	_	40	VV 24X 10	4 30		29	#105 @ 12III O.C. 1&B		30 #	/ !!	Option 17	49
A	1. If th 2. All in above § 3. Wind 30 feet 4. Wind	nstallat grade. S d loadii . This d loadii	ions viece 24 ng figu catego ng figu	vill be 1-041 ared at ory incl ared at	braced 5 for la Expo ludes t Expo	d with lateral s sure "C flat ope sure "E	sizes. C" - Open en countr B" - Urbai	laced a terrai y, gras n and	at 10' in wit ssland subu r	increr h scat ls, and rban a	nents of tered of all wa reas, v	n front ar bstruction ter surfact rooded are	nd back ns havir es in h eas, or o	of the column starting ng heights generally le urricane prone areas ther terrain with nur	ess thai nerous		I	ootin	g Insta	reboard allation th Laterals	-286		Jevco, Inc	/C(c. is 62246	
							20 times							as prevail in the upwi	ша						Drawin	ng No. 2	41-041	1	
	5. **Ple	ease se	e DWC	G-0818	to de	termine	e base pla d is PER	ate and								Dra	awn C	JS	Date	1/11/2017	Sheet				
ᆫ			4				1					3		4			2					. 10	1		

Coting Footing Footi	th Depth Steel Reinforcement 1 1 6" #4"s @ 12 in O.C. T&B 1 1 1 6" #5"s @ 12 in O.C. T&B 1 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 2 1 9" #8"s @ 12 in O.C. T&B 2 1 9" #8"s @ 12 in O.C. T&B 2 1 9" #8"s @ 12 in O.C. T&B 2 1 9" #5"s @ 12 in O.C. T&B 3 3" 3" #10"s @ 12 in O.C. T&B 4 1 3" #10"s @ 12 in O.C. T&B 5 3" #10"s @ 12 in O.C. T&B 5 3" #12"s @ 12 in O.C. T&B 5 1 9" #10"s @ 12 in O.C. T&B 5 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 6" #5"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 1 9" #8"s @ 12 in O.C. T&B 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(Based on AS Pier and Pie Pier Diameter 4' 2 5' 3 4' 2 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3	SCE 7-10 ier Reinfor lier lier lier lier lier lier lier lie	Cement Hook	Anchors and Base Plates** Option 10 Option 14 Option 14 Option 14 Option 14 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Option 19 Anchors and Base Plates** Option 10 Option 10	Column Length 17' 19' 21' 23' 25' 27' 31' 34' 49' Column Length 17'	Displate	ay Braced Footi htt Column Leng W12x30 26' W14x34 26' W14x48 26' W14x48 26' W12x55 26' W21x55 26' W21x62 26' W21x62 26' W21x61 26' W24x76 26' W24x76 26' W24x76 26' W24x101 26' W24x101 26'	Sprea Sprea	th Steel Reinforcement " #4's @ 12in O.C. T&B " #4's @ 12in O.C. T&B " #4's @ 12in O.C. T&B " #5s @ 12in O.C. T&B " #5s @ 12in O.C. T&B " #6s @ 12in O.C. T&B " #6s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #8s @ 12in O.C. T&B " #8s @ 12in O.C. T&B " #8s @ 12in O.C. T&B #12s @ 12in O.C. T&B #12s @ 12in O.C. T&B #12s @ 12in O.C. T&B	ts (Based on ASCE Pier and Pier Rei Pier Diameter 3' 18 3' 18 4' 24 4' 24 4' 24 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' Based on ASCE Pier and Pier Rei	inforcement Hook Ba Ho	option 5 Option 8 Option 9 Option 10 Option 9 Option 14 Option 14 Option 14 Option 14 Option 16 Option 15 Option 17 Option 17 Option 17	Column Length 17' 19' 21' 23' 25' 27' 29' 31' 34' 39' 44' 49'
Coding Footing Footi	Spread Footing Steel Reinforcement	(Based on AS Pier and Pie Pier Diameter 4' 2 5' 3 4' 2 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3	SCE 7-10 ier Reinfor lier lier lier lier lier lier lier lie	Cement Hook	Base Plates** Option 10 Option 14 Option 14 Option 14 Option 16 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Option 18 Option 10	Length 17' 19' 21' 23' 25' 27' 29' 31' 34' 39' 44' 49' Column Length	24 FEET LONG 16' INSTALLATIONS 26' (2 COLUMNS) 22' 30' 30' 36' 40' Displa	ht Column Leng W12x30 26' W14x34 26' W14x34 26' W16x40 26' W18x50 26' W18x50 26' W21x55 26' W21x62 26' W21x62 26' W21x61 26' W21x61 26' W24x76 26'	Sprea Sprea	Ind Foundation Requirement of Footing (Ind Foundation Requirement of Footing) (Ind Footing of Footing	ts (Based on ASCE Pier and Pier Rei Pier Diameter 3' 18 3' 18 4' 24 4' 24 4' 24 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' Based on ASCE Pier and Pier Rei	inforcement Hook Ba Ho	option 5 Option 8 Option 9 Option 10 Option 9 Option 14 Option 14 Option 14 Option 14 Option 16 Option 15 Option 17 Option 17 Option 17	17' 19' 21' 23' 25' 27' 29' 31' 34' 39' 44'
Coding Footing Footi	Spread Footing Topoting Top	Pier and Pie Pier Diameter 4' 2 5' 3 4' 2 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 6' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5	ier Reinfor antity Siz 24 ## 30 #;	Cement Hook	Base Plates** Option 10 Option 14 Option 14 Option 14 Option 16 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Option 18 Option 10	Length 17' 19' 21' 23' 25' 27' 29' 31' 34' 39' 44' 49' Column Length	24 FEET LONG 16' INSTALLATIONS 26' (2 COLUMNS) 22' 30' 30' 36' 40' Displa	ht Column Leng W12x30 26' W14x34 26' W14x34 26' W16x40 26' W18x50 26' W18x50 26' W21x55 26' W21x62 26' W21x62 26' W21x61 26' W21x61 26' W24x76 26'	Sprea Sprea	d Footing (ing) th	Pier and Pier Rei Pier Diameter 3' 18 3' 18 4' 24 4' 24 4' 24 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' Based on ASCE Pier and Pier Rei	inforcement Hook Ba Ho	option 5 Option 8 Option 9 Option 10 Option 9 Option 14 Option 14 Option 14 Option 14 Option 16 Option 15 Option 17 Option 17 Option 17	17' 19' 21' 23' 25' 27' 29' 31' 34' 39' 44'
Lumn Length Width		Pier Diameter Qua 4" 2 5" 3 5" 3 5" 3 5" 3 5" 3 5" 3 5" 3 5	Size	Hook Lengt 6 9" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 8 9" 9 11" 9 11" 9 11" 9 11" 1	Base Plates** Option 10 Option 14 Option 14 Option 14 Option 16 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Option 18 Option 10	Length 17' 19' 21' 23' 25' 27' 29' 31' 34' 39' 44' 49' Column Length	24 FEET LONG 16' INSTALLATIONS 26' (2 COLUMNS) 22' 30' 30' 36' 40' Displa	ht Column Leng W12x30 26' W14x34 26' W14x34 26' W16x40 26' W18x50 26' W18x50 26' W21x55 26' W21x62 26' W21x62 26' W21x61 26' W21x61 26' W24x76 26'	th Width Dep 11' 1' 1' 6 13' 1' 6 14' 1' 6 16' 1' 6 17' 1' 6 22' 1' 6 22' 1' 6 22' 2' 6 22' 3' 3 22' 4' Column a Spera	th Steel Reinforcement " #4's @ 12in O.C. T&B " #4's @ 12in O.C. T&B " #4's @ 12in O.C. T&B " #5s @ 12in O.C. T&B " #5s @ 12in O.C. T&B " #6s @ 12in O.C. T&B " #6s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #8s @ 12in O.C. T&B " #8s @ 12in O.C. T&B " #8s @ 12in O.C. T&B #12s @ 12in O.C. T&B #12s @ 12in O.C. T&B #12s @ 12in O.C. T&B	Diameter Quantity 3" 18 3" 18 4" 24 4" 24 5" 30 30 5" 30 30 30 30 30 30 30 3	Hook Size length #5 8" #5 8" #6 9" #6 9" #7 11"	option 5 Option 8 Option 9 Option 10 Option 9 Option 14 Option 14 Option 14 Option 14 Option 16 Option 15 Option 17 Option 17 Option 17	17' 19' 21' 23' 25' 27' 29' 31' 34' 39' 44'
16x36 26' 13' 21x44 26' 15' 18x50 26' 17' 21x55 26' 19' 21x62 26' 22' 24x62 26' 22' 24x76 26' 22' 24x103 26' 22' 24x103 26' 22' 4x1103 26' 22' 4x1104 30' 13' 16x50 30' 15' 18x55 30' 17' 21x62 30' 19' 24x76 30' 22' 24x104 30' 22' 24x104 30' 22' 4x1104 30' 22'	1'6'	4' 2 5' 3 4' 2 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3	24 ## 30 #:	6 9" 7 11" 8 9" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 8 Hook 6 9" 6 9" 6 9" 7 11"	Option 10 Option 14 Option 14 Option 14 Option 14 Option 14 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Option 18 Option 10 Option 10 Option 10 Option 10 Option 10	17' 19' 21' 23' 25' 27' 29' 31' 34' 49' Column Length	8' 10' 12' 12' 14' 14' 15' 15' 16' 18' 16' 18'	W12x30	11' 1'6 13' 1'6 14' 1'6 16' 1'6 17' 1'6 21' 1'6 22' 1'6 22' 1'9 22' 2'6 22' 2'3 3 22' 4' Column a Spreading Footing Footing Footing	#* #4's @12in O.C. T&B #4's @12in O.C. T&B #4's @12in O.C. T&B 12'i #5's @12in O.C. T&B 12'i #5's @12in O.C. T&B 12'i #5's @12in O.C. T&B 12'i #6's @12in O.C. T&B 12'i #6's @12in O.C. T&B 12'i #7's @12in O.C. T&B 12'i #7's @12in O.C. T&B 12'i #7's @12in O.C. T&B 12'i #9's @12in O.C. T&B 12'i #9's @12in O.C. T&B 12'i #10's @12'i #10's @12'i #10's @12'i #10's @12'i #10's @12'i #10's @1'i #10's @12'i #10's @1'i #	3' 18 3' 18 4' 24 4' 24 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30	#5 8" #5 8" #6 9" #6 9" #6 9" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11"	Option 8 Option 10 Option 9 Option 11 Option 14 Option 14 Option 14 Option 16 Option 15 Option 17 Option 17	19' 21' 23' 25' 27' 29' 31' 34' 39' 44' 49'
21x44	1'6' #5's @12in O.C. T&B 1'6' #5's @12in O.C. T&B 1'6' #6's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'9' #8's @12in O.C. T&B 2' #8's @12in O.C. T&B 2' #8's @12in O.C. T&B 3'3' #10's @12in O.C. T&B 3'3' #10's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 1'6' #5's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'9' #8's @12in O.C. T&B 2' #9's @12in O.C. T&B	5' 3 4' 2 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3	30 #: 24 ## 30 #:	7 11" 3 9" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 9 11" 7 11" 9 10 ccement Hook Lengt 6 9" 6 9" 6 9" 7 11"	Option 14 Option 14 Option 14 Option 14 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Option 18 Option 19 Option 19	19' 21' 23' 25' 27' 29' 31' 34' 39' 44' 49'	24 FEET LONG 12' 14' 18' 18' 18' 18' 20' (2 COLUMNS) 22' 22' 30' 35' 40' Displa	' W16x40 26' W14x48 26' ' W18x50 26' ' W21x55 26' ' W21x62 26' ' W21x68 26' ' W21x61 26' ' W24x76 26' ' W24x117 26' ' W24x146 26' w24x146 26'	14' 1'6 16' 1'6 17' 1'6 19' 1'6 21' 1'6 22' 1'9 22' 2'6 22' 3'3 22' 4' Column a Sprea	#5 @12in O.C. T&B #5s @12in O.C. T&B #5s @12in O.C. T&B #5s @12in O.C. T&B #5s @12in O.C. T&B #7s #9s @12in O.C. T&B #1s #1s	4' 24 4' 24 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30	#6 9" #6 9" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11" #7 11"	Option 10 Option 9 Option 11 Option 14 Option 14 Option 14 Option 14 Option 16 Option 16 Option 17 Option 17	21' 23' 25' 27' 29' 31' 34' 39' 44' 49'
21x55	1'6' #6's @12in O.C. T&B 1 16' #7's @12in O.C. T&B 1 1'6' #7's @12in O.C. T&B 1 1'9' #8's @12in O.C. T&B 2' #8's @12in O.C. T&B 2' #8's @12in O.C. T&B 3'3' #10's @12in O.C. T&B 5'3' #10's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 6's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 6's #12's @12in O.C. T&B 1'6' #4's @12in O.C. T&B 1'6' #5's @12in O.C. T&B 1'6' #5's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'9' #8's @12in O.C. T&B 1'9' #9's @12in O.C. T&B	5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3	30 #:30 30 #:30 #:30 #:30 #:30 #:30 #:30	7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 9	Option 14 Option 14 Option 16 Option 16 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Option 19 Anchors and Base Plates** Option 10 Option 10	23' 25' 27' 29' 31' 34' 39' 44' 49'	24 FEET LONG 14' INSTALLATIONS 18' (2 COLUMNS) 22' 30' 35' 40' Displa	W14x48 26' W18x50 26' W21x55 26' W21x62 26' W21x68 26' W24x76 26' W24x117 26' W24x146 26' W24x146 26'	16' 1'6 17' 1'6 19' 1'6 21' 1'6 22' 1'6 22' 1'9 22' 2'6 22' 2'3'3 22' 2'6 Column a Spere	#5 @ 12in O.C. T&B #6s @ 12in O.C. T&B #6s @ 12in O.C. T&B #6s @ 12in O.C. T&B #7s #9s @ 12in O.C. T&B #12s @ 12in O.C. T	4' 24 4' 24 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30	#6 9° #6 9° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11°	Option 9 Option 11 Option 14 Option 14 Option 14 Option 16 Option 15 Option 17 Option 17	23' 25' 27' 29' 31' 34' 39' 44' 49'
21x62 26' 21' 24x68 26' 22' 24x76 26' 22' 24x84 26' 22' 24x103 26' 22' 24x103 26' 22' 4x103 26' 22' 4x1102 30' 15' 21x62 30' 15' 21x62 30' 17' 21x62 30' 21' 24x68 30' 21' 24x68 30' 22' 24x104 30' 22' 24x104 30' 22' 24x104 30' 22' 24x104 30' 22' 4x1104 30' 22' 4x1105 30' 22' 2x1107 30' 22'	1'6'	5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3	30 #:3 30 #:3	7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 6 Lengt 6 9" 6 9" 7 11"	Option 14 Option 16 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Option 18 Option 10 Base Plates** Option 10 Option 10	25' 27' 29' 31' 34' 39' 44' 49'	24 FEET LONG INSTALLATIONS (2 COLUMNS) (2 COLUMNS) (30 35 40 Displa	W18x50 26' W21x55 26' W21x52 26' W21x62 26' W21x68 26' W24x76 26' W21x101 26' W24x117 26' W24x146 26'	17' 1'6 19' 1'6 21' 1'6 22' 1'6 22' 1'6 22' 2'6 22' 2'6 22' 2'3'3 22' 4' Column a Sprea	" #6s @ 12in O.C. T&B " #6s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #7s @ 12in O.C. T&B " #8s @ 12in O.C. T&B " #9s @ 12in O.C. T&B " #9s @ 12in O.C. T&B " #12s @ 12in O.C. T&B #12s @ 12in O.C. T&B	4' 24 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30	#6 9° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11° #7 11°	Option 11 Option 14 Option 14 Option 14 Option 14 Option 16 Option 15 Option 17 Option 17	25' 27' 29' 31' 34' 39' 44' 49'
24x68 26' 22' 24x76 26' 22' 24x84 26' 22' 24x103 26' 22' 24x103 26' 22' 24x1102 26' 22' 4x1192 26' 22' 4x1192 26' 22' 4x192 30' 13' 16x50 30' 15' 18x55 30' 17' 21x62 30' 19' 24x746 30' 22' 24x84 30' 22' 24x84 30' 22' 24x104 30' 22' 26x104 30' 22' 27x104 30' 22'	1'6'	5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 6' 3 6' 3 6' 3 6' 3 6' 4 7 6' 4' 2 4' 2 4' 2 4' 2 5' 3 5' 3 5' 3 5' 3 5' 3	30 #:30 #:30 #:30 #:30 #:30 #:30 #:30 #:	7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 9 10 10 10 10 10 10 10 10 10 10 10 10 10	Option 16 Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Anchors and Base Plates** Option 10 Option 10	27' 29' 31' 34' 39' 44' 49' Column Length	(2 COLUMNS) 20' 22' 25' 30' 35' 40' Displa	" W21x62 26" W21x68 26" W21x68 26" W24x76 26" W21x101 26" W24x117 26" W24x146 26"	21' 1'6 22' 1'6 22' 1'9 22' 1'9 22' 2'6 22' 3'3 22' 4' Column a Sprea	#7 #7s @12in O.C. T&B #7s @12in O.C. T&B #7 #8s @12in O.C. T&B #7 #8s @12in O.C. T&B #1 #9s @12in O.C. T&B #12s @12in O.C. T&B #12s @12in O.C. T&B	5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30 5' 30	#7 11" #7 11" #7 11" #7 11" #7 11" #7 11" 7-10)	Option 14 Option 14 Option 16 Option 15 Option 17 Option 17	29' 31' 34' 39' 44' 49'
24x84 26' 22' 4x103 26' 22' 4x103 26' 22' 4x162 26' 22' 4x162 26' 22' 6x162 26' 22' 6x162 26' 22' 6x162 26' 22' 6x162 30' 13' 6x50 30' 15' 6x50 30' 15' 6x40 30' 22' 6x44 30' 22' 6x84 30' 22'	2' #8's @12in O.C. T&B 2'6' #9's @12in O.C. T&B 3'3' #10's @12in O.C. T&B 4'3' #12's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 5'0lumn and Foundation Requirements Spread Footing Toolting	5' 3 5' 3 5' 3 5' 3 5' 3 5' 3 6' 3 6' 3 6' 3 6' 3 6' 3 6' 3 6' 3 6	30 #: 30 #:	7 11" 7 11" 7 11" 7 11" 7 11" 7 11" 9 10 10 10 10 10 10 10 10 10 10 10 10 10	Option 16 Option 16 Option 16 Option 17 Option 18 Option 18 Option 18 Anchors and Base Plates** Option 10 Option 10	31' 34' 39' 44' 49' Column Length	(2 COLUMNS) 22' 25' 30' 35' 40' Displa	W21x68 26' W24x76 26' W24x101 26' W24x117 26' W24x146 26'	22' 1'6 22' 1'9 22' 2'6 22' 3'3 22' 4' Column a Sprea ng Footing Footing	# #7s @12in O.C. T&B # #8s @12in O.C. T&B # #9s @12in O.C. T&B # #19s @12in O.C. T&B # #12s @12in O.C. T&B # #12s @12in O.C. T&B and Foundation Requirement	5' 30 5' 30 5' 30 5' 30 5' 30 5' 30	#7 11" #7 11" #7 11" #7 11" #7 11" #7 11" 7-10)	Option 14 Option 16 Option 15 Option 17 Option 17	31' 34' 39' 44' 49'
4x103	2'6' #9's @12in O.C. T&B 3'3' #10's @12in O.C. T&B 4'3' #10's @12in O.C. T&B 5'3' #12's @12in O.C. T&B 5'3' #12's @12in O.C. T&B Column and Foundation Requirements Spread Footing 10 Footing 11 Poeting 12 Poeting 13 Poeting 14 Poeting 15 Poeting 16 Poeting 16 Poeting 17 Poeting 18 Poeting 19 Poeti	5' 3 5' 3 5' 3 5' 3 5' 3 (Based on AS Pier and Pie Pier Diameter 4' 2 4' 2 4' 2 5' 3 5' 3 5' 3 5' 3	30 #: 30 #: 30 #: 30 #: 30 #: 30 #: 30 #: \$SCE 7-10 ier Reinfor uantity Si224 #: 24 #: 24 #: 30 #: 30 #: 30 #: 30 #:	7 11" 7 11" 7 11" 7 11") cement Hook re Lengt 6 9" 6 9" 7 11"	Option 16 Option 17 Option 18 Option 18 Option 18 Anchors and Base Plates** Option 10 Option 10	34' 39' 44' 49' Column Length	25' 30' 35' 40'	W24x76 26' W21x101 26' W24x117 26' W24x146 26'	22' 1'9 22' 2'6 22' 3'3 22' 4' Column a Sprea ng Footing Footi	" #8s @12in O.C. T&B " #9s @12in O.C. T&B " #10s @12in O.C. T&B #12s @12in O.C. T&B #12s @12in O.C. T&B and Foundation Requirement	5' 30 5' 30 5' 30 5' 30 5' 30 tts (Based on ASCE Pier and Pier Rei	#7 11" #7 11" #7 11" #7 11"	Option 16 Option 15 Option 17 Option 17	34' 39' 44' 49'
4x131	3'3' #10's @12in O.C. T&B	5' 3 5' 3 5' 3 (Based on AS Pier and Pie Pier Diameter Qua 4' 2 4' 2 4' 2 5' 3 5' 3 5' 3 5' 3	30 #3 30 #3 30 #3 30 #3 SCE 7-10 ier Reinfor Jantity Siz 24 #4 24 #4 24 #4 30 #3 30 #3 30 #3	7 11" 7 11" 7 11") cement Hook Lengt 6 9" 6 9" 7 11"	Option 17 Option 18 Option 18 Option 18 Anchors and Base Plates** Option 10 Option 10	39' 44' 49' Column Length	35' 40' ——————————————————————————————————	W24x117 26' W24x146 26' ay Braced Footi	22' 3'3 22' 4' Column a Sprea ng Footing Footi	#10s @12in O.C. T&B #12s @12in O.C. T&B and Foundation Requiremend d Footing	5' 30 5' 30 ts (Based on ASCE Pier and Pier Rei	#7 11" #7 11" 7-10)	Option 17 Option 17	44'
Co	5'3" #12's @12in O.C. T&B	5' 3 (Based on AS Pier and Pie Pier Diameter Qua 4' 2 4' 2 4' 2 5' 3 5' 3 5' 3 5' 3 5' 3	30 #3 SCE 7-10 ier Reinfor Jantity Siz 24 #4 24 #4 30 #3 30 #3	7 11") cement Hook Lengt 6 9" 6 9" 7 11"	Anchors and Base Plates** Option 10 Option 10	49' Column Length	Displa	w 24x146 26	Column a Sprea	#12s @12in O.C. T&B and Foundation Requiremend d Footing	5' 30 its (Based on ASCE Pier and Pier Rei	#7 11" 7-10)	Option 17	49'
Co aced Footing Footing	Spread Footing Steel Reinforcement	(Based on AS Pier and Pier Pier Diameter Unimeter Unimete	SCE 7-10 ier Reinfor uantity Siz 24 #6 24 #6 24 #6 30 #7 30 #7) cement Hook Lengt 6 9" 6 9" 7 11"	Anchors and Base Plates** Option 10 Option 10	Column Length	Displa	ay Braced Footi	Column a Sprea	and Foundation Requiremend Footing	ts (Based on ASCE Pier and Pier Rei	7-10)		
aced Footing Footing	Spread Footing rog Footing The proof of the proof o	Pier and Pie Pier Diameter Qua 4' 2 4' 2 5' 3 5' 3 5' 3 5' 3	ier Reinfor uantity Siz 24 #6 24 #6 24 #6 24 #6 30 #3 30 #3	Hook Lengt 6 9" 6 9" 7 11"	Base Plates** Option 10 Option 10	Length			Sprea ng Footing Footi	d Footing	Pier and Pier Rei	inforcement	nchors and C	─ [
lumn Length Width (6x40) 30' 13' (6x50) 30' 15' (8x55) 30' 17' 11x62 30' 19' 12x65 30' 21' 12x76 30' 22' 24x76 30' 22' 24x84 30' 22' 24x94 30' 22' 24x104 30' 22' 4x146 30' 22' 4x192 30' 22' 6x192 2x1 6x192 2x1 7x193 2x2' 7x194 2x1 8x195 2x1 8x196 2x1 8x197 2x2' 8x198 2x2' 8x199 2x1 8x199 2x1 8x199 2x2' 8x199 2x2' 8x199 2x1 8x199 2x1 8x199 2x1	No. Footing Footing Footing Steel Reinforcement 1'6'	Pier Diameter Qua 4' 2 4' 2 5' 3 5' 3 5' 3 5' 3 5' 3	24 #6 24 #6 24 #6 24 #6 30 #7 30 #7	Hook te Lengt 6 9" 6 9" 7 11"	Base Plates** Option 10 Option 10	Length			ng Footing Footi			Illioicement	nchors and C	
lumn Length Width (6x40) 30' 13' (6x50) 30' 15' (8x55) 30' 17' 11x62 30' 19' 12x65 30' 21' 12x76 30' 22' 24x76 30' 22' 24x84 30' 22' 24x94 30' 22' 24x104 30' 22' 4x146 30' 22' 4x192 30' 22' 6x192 2x1 6x192 2x1 7x193 2x2' 7x194 2x1 8x195 2x1 8x196 2x1 8x197 2x2' 8x198 2x2' 8x199 2x1 8x199 2x1 8x199 2x2' 8x199 2x2' 8x199 2x1 8x199 2x1 8x199 2x1	th Depth Steel Reinforcement 1 '6" #4's @12in O.C. T&B 1 '6" #5's @12in O.C. T&B 1 '6" #5's @12in O.C. T&B 1 '6" #5's @12in O.C. T&B 1 '6" #6's @12in O.C. T&B 1 '6" #7's @12in O.C. T&B 1 '6" #7's @12in O.C. T&B 1 '9" #8's @12in O.C. T&B 2 '#9's @12in O.C. T&B 2 '#9's @12in O.C. T&B 3 '3" #11's @12in O.C. T&B	Diameter Qua 4' 2 4' 2 4' 2 5' 3 5' 3 5' 3 5' 3	24 #6 24 #6 24 #6 30 #7 30 #7	te Lengt 6 9" 6 9" 7 11"	Option 10 Option 10					ing j	Pier	I Hook I		Column
16x50 30' 15' 18x55 30' 17' 17' 18x55 30' 17' 17' 18x55 30' 19' 19' 18x68 30' 21' 18x76 30' 22' 18x76 30' 20' 20' 20' 20' 20' 20' 20' 20' 20' 2	1'6' #5's @12in O.C. T&B 1'6' #5's @12in O.C. T&B 1'6' #6's @12in O.C. T&B 1'6' #6's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'9' #8's @12in O.C. T&B 2' #9's @12in O.C. T&B 2' #9's @12in O.C. T&B 3'3' #11's @12in O.C. T&B	4' 2 4' 2 5' 3 5' 3 5' 3 5' 3	24 #6 24 #6 30 #7 30 #7	9" 9 9" 7 11"	Option 10	17'				th Steel Reinforcement	Diameter Quantity	Size length		Length
18x55 30' 17' 21x62 30' 19' 24x68 30' 21' 24x76 30' 22' 24x76 30' 22' 24x84 30' 22' 24x94 30' 22' 24x104 30' 22' 4x104 30' 22' 4x104 30' 22' 2x104 30' 22' 2x105 30' 30' 3x105 30' 30'	1'6" #5's @12in O.C. T&B 1'6" #6's @12in O.C. T&B 1'6" #7's @12in O.C. T&B 1'6" #7's @12in O.C. T&B 1'9" #8's @12in O.C. T&B 2' #9's @12in O.C. T&B 2' #9's @12in O.C. T&B 3'3" #11's @12in O.C. T&B	4' 2 5' 3 5' 3 5' 3 5' 3	24 #6 30 #3 30 #3 30 #3	6 9" 7 11"			<u>8'</u> 10'	W14x34 30' W16x36 30'	11' 1' 6 13' 1' 6		3' 18 4' 24		Option 8 Option 10	17' 19'
21x62 30' 19' 24x68 30' 21' 24x76 30' 22' 24x84 30' 22' 24x84 30' 22' 24x94 30' 22' 4x104 30' 22' 4x104 30' 22' 4x1192 30' 22' 6x1	1'6' #6's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'6' #7's @12in O.C. T&B 1'9' #8's @12in O.C. T&B 2' #9's @12in O.C. T&B 2'6' #9's @12in O.C. T&B 3'3' #11's @12in O.C. T&B	5' 3 5' 3 5' 3 5' 3 5' 3	30 #7 30 #7 30 #7	7 11"	Option 11	19' 21'	12'				5' 30		Option 14	21'
24x76 30' 22' 24x84 30' 22' 24x94 30' 22' 24x94 30' 22' 4x104 30' 22' 4x146 30' 22' 4x146 30' 22' 6x14192 30' 22'	1' 6" #7's @12in O.C. T&B 1' 9" #8's @12in O.C. T&B 2' #9's @12in O.C. T&B 2'6" #9's @12in O.C. T&B 3' 3" #11's @12in O.C. T&B	5' 3 5' 3 5' 3	30 #7		Option 14	23'	28 FEET LONG 14'				4' 24		Option 11	23'
24x84 30' 22' 24x94 30' 22' 4x104 30' 22' 4x146 30' 22' 4x146 30' 22' 4x192 30' 22'	1' 9" #8's @12in O.C. T&B 2' #9's @12in O.C. T&B 2' 6" #9's @12in O.C. T&B 3' 3" #11's @12in O.C. T&B	5' 3 5' 3			Option 16 Option 16	25' 27'	INSTALLATIONS 18'				5' 30 5' 30		Option 14 Option 14	25' 27'
24x94 30' 22' 4x104 30' 22' 4x146 30' 22' 4x192 30' 22' Co	2' #9's @12in O.C. T&B 2' 6" #9's @12in O.C. T&B 3' 3" #11's @12in O.C. T&B	5' 3	30 #		Option 16	29'	(2 COLUMNS) 20'	' W21x68 30'	21' 1' 6	" #7s @12in O.C. T&B	5' 30	#7 11"	Option 14	29'
4x146 30' 22' 4x192 30' 22' Co	3' 3" #11's @12in O.C. T&B	5' 3	30 #7		Option 16	31'	,				4'6" 27 5' 30		Option 12	31'
4x192 30' 22'			30 #7		Option 17 Option 17	34' 39'	25' 30'				5' 30 5' 30		Option 16 Option 17	34'
			30 #3		Option 18	44'	35'				5' 30		Option 17	44'
		/D1 A.O	00F 7.40	,					Column	and Foundation Requiremen	to (Boood on ASCE	7.10)		
aced Footing Footing	Column and Foundation Requirements Spread Footing	Pier and Pie			1	1				d Footing	Pier and Pier Rei	inforcement	nchors and C	
	_ · _ ·	Pier	101 11011101	Hook	Anchors and Base Plates**	Column Length	Displa				Pier	Hook B		Column Length
lumn Length Width			uantity Siz		h	_	Heigh 8'	ht Column Leng W12x26 34			Diameter Quantity 3' 18	Size length	Option 5	17'
4x34 34' 14' 6x40 34' 16'			18 #5		Option 8 Option 10	17' 19'	10'				3' 18		Option 8	19'
21x44 34' 17'	1' 6" #5's @12in O.C. T&B	5' 3	30 #7	7 11"	Option 14	21'	12'				4' 24		Option 11	21'
18x50 34' 19'			24 #6		Option 11	23'	14'				4' 24 5' 30		Option 10	23'
						25'	32 FEET LONG 18'				4' 24		Option 11	27'
24x68 34' 22'	2' #8's @12in O.C. T&B	5' 3	30 #7	7 11"	Option 16	29'					5' 30			29'
					Option 16									31'
4x104 34' 22'					Option 17	39'	30'				5' 30	+	Option 16	39'
4x131 34' 22'					Option 17	44'	35'				5' 30			44'
4x162 34' 22'	5' 6" #12's @12in O.C. T&B	5' 3	30 #7	7 11"	Option 18	49'	40'	' W 24x117 34'	22' 4'	#12s @12in O.C. T&B	5' 30	#7 11"	Option 17	49'
Co	Column and Foundation Requirements	(Based on AS	SCE 7-10)										
	Spread Footing	Pier and Pie	ier Reinfor	cement	Anchore and	Column			Sprea	d Footing	Pier and Pier Rei		nchors and	Column
aced Footing Footing	na Footina	Pier		Hook			Displa	ay Braced Footi	ng Footing Footi	ing	Pier			Length
lumn Length Width	th Depth Steel Reinforcement	Diameter Qua		e Lengt	h		Heigh	ht Column Leng	th Width Dep	th Steel Reinforcement	Diameter Quantity	Size length		
														18' 19'
16x50 38' 16'					Option 10	20'	11'				4' 24		Option 10	20'
8x50 38' 17'			24 #6	9"	Option 11	21'	36 FEET LONG 12'				4' 24	#6 9"	Option 10	21'
							INSTALLATIONS 13'							22'
21x62 38' 20'	1' 6" #6's @12in O.C. T&B	5' 3	30 #7	7 11"	Option 14	24'	(3 COLUMNS) 15'	' W16x50 38'	17' 1' 6	" #5's @12in O.C. T&B	4' 24	#6 9"	Option 10	24'
24x76 38' 22'					Option 16	29'	20'				5' 30		Option 14	29'
						34' 39'								34' 39'
	4' 6" #12's @12in O.C. T&B	5' 3	30 #7	7 11"	Option 17	44'	35'							
	5' 3" #12's @12in O.C. T&B			7 1 441		49'	40'				5' 30 5' 30		Option 17 Option 17	44' 49'
24x68 24x76 24x84 4x10 4x13 4x16 34x16 6x40 8x50 8x50 8x50 21x5 21x6 22x76 4x76 4x11	2 34' 22' 3 34' 22' 3 34' 22' 4 34' 22' 4 34' 22' 7 34' 22' 7 38' 16' 6 38' 16' 6 38' 19' 6 38' 19' 6 38' 22' 6 38' 22' 6 38' 22'	2 34' 22' 1'6' #7's @12in O.C. T&B 3 34' 22' 2' #8's @12in O.C. T&B 5 34' 22' 2' 3' #8's @12in O.C. T&B 6 34' 22' 2' 3' #8's @12in O.C. T&B 6 34' 22' 2' 3' #6' #12's @12in O.C. T&B 6 34' 22' 2' 9' #9's @12in O.C. T&B 7 34' 22' 4'6' #12's @12in O.C. T&B 8 2 34' 22' 5'6' #12's @12in O.C. T&B 8 2 34' 22' 5'6' #12's @12in O.C. T&B 8 2 34' 22' 5'6' #12's @12in O.C. T&B 8 36' 15' 1'6' #5's @12in O.C. T&B 9 38' 15' 1'6' #5's @12in O.C. T&B 9 38' 16' 1'6' #5's @12in O.C. T&B 9 38' 16' 1'6' #5's @12in O.C. T&B 9 38' 18' 1'6' #5's @12in O.C. T&B 9 38' 18' 1'6' #6's @12in O.C. T&B 9 38' 19' 1'6' #6's @12in O.C. T&B 9 38' 20' 1'6' #6's @12in O.C. T&B 9 38' 20' 1'6' #6's @12in O.C. T&B 9 38' 22' 2' #8's @12in O.C. T&B 9 38' 22' 3'6' #11's @12in O.C. T&B 9 38' 22' 4'6' #11's @12in O.C. T&B 9 38' 22' 4'6' #11's @12in O.C. T&B	2 34' 22' 1'6' #7's @12in O.C. T&B 5'	2 34' 22' 1'6" #7's @ 12in O.C. T&B 5' 30 #7's 334' 22' 2' #8's @ 12in O.C. T&B 5' 30 #7's 334' 22' 2' 3" #8's @ 12in O.C. T&B 5' 30 #7's 334' 22' 2'9" #9's @ 12in O.C. T&B 5' 30 #7's 334' 22' 2'9" #9's @ 12in O.C. T&B 5' 30 #7's 334' 22' 3'6" #11's @ 12in O.C. T&B 5' 30 #7's 334' 22' 3'6" #11's @ 12in O.C. T&B 5' 30 #7's 334' 22' 5'6" #12's @ 12in O.C. T&B 5' 30 #7's 334' 22' 5'6" #12's @ 12in O.C. T&B 5' 30 #7's 334' 22' 5'6" #12's @ 12in O.C. T&B 5' 30 #7's 334' 32's 334' 32's 35's 35	2 34' 22' 1'6' #T's @12in O.C. T&B 5' 30 #T 11" 3 34' 22' 2' #8's @12in O.C. T&B 5' 30 #T 11" 3 34' 22' 2' #8's @12in O.C. T&B 5' 30 #T 11" 4 34' 22' 2'9' #9's @12in O.C. T&B 5' 30 #T 11" 4 34' 22' 3'6' #1's @12in O.C. T&B 5' 30 #T 11" 5 34' 22' 3'6' #1's @12in O.C. T&B 5' 30 #T 11" 6 38' 22' 5'6' #12's @12in O.C. T&B 5' 30 #T 11" 7 36' 37' 38' 3	2 34' 22' 1'6' #7's @12in O.C. T&B 5' 30 #7 11" Option 14 3 34' 22' 2' #8's @12in O.C. T&B 5' 30 #7 11" Option 16 3 34' 22' 2' 3' #8's @12in O.C. T&B 5' 30 #7 11" Option 16 4 34' 22' 2' 9' #9's @12in O.C. T&B 5' 30 #7 11" Option 16 4 34' 22' 3' 6' #1's @12in O.C. T&B 5' 30 #7 11" Option 16 4 34' 22' 3' 6' #1's @12in O.C. T&B 5' 30 #7 11" Option 16 4 34' 22' 3' 6' #12's @12in O.C. T&B 5' 30 #7 11" Option 17 5 34' 22' 5' 6' #12's @12in O.C. T&B 5' 30 #7 11" Option 17 6 38' 21' 31	2 34' 22' 1'6' #7's @ 12in O.C. T&B 5' 30 #7 11' Option 14 27' 3 34' 22' 2' #8's @ 12in O.C. T&B 5' 30 #7 11' Option 16 29' 4 34' 22' 2'9' #9's @ 12in O.C. T&B 5' 30 #7 11' Option 16 31' 5 34' 22' 2'9' #9's @ 12in O.C. T&B 5' 30 #7 11' Option 16 31' 6 34' 22' 2'9' #9's @ 12in O.C. T&B 5' 30 #7 11' Option 16 34' 7 34' 22' 3'6' #11's @ 12in O.C. T&B 5' 30 #7 11' Option 16 34' 8 34' 22' 3'6' #12's @ 12in O.C. T&B 5' 30 #7 11' Option 17 39' 9 34' 22' 5'6' #12's @ 12in O.C. T&B 5' 30 #7 11' Option 17 39' 1 34' 22' 5'6' #12's @ 12in O.C. T&B 5' 30 #7 11' Option 18 49' Column and Foundation Requirements (Based on ASCE 7-10)	18	34' 22' 1'6' #7's @12in O.C. T&B 5' 30 #7 11' Option 14 27' INSTALLATIONS 34' 22' 2' #8's @12in O.C. T&B 5' 30 #7 11' Option 16 29' INSTALLATIONS 20' W21'x55 34' 34' 22' 2' 9' #9's @12in O.C. T&B 5' 30 #7 11' Option 16 34' 34' 32' 2' 2' 2' 9' #9's @12in O.C. T&B 5' 30 #7 11' Option 16 34' 34' 32' 2' 2' 3' 6' #11's @12in O.C. T&B 5' 30 #7 11' Option 17 39'	2 34' 22' 1'6' #7's @12in O.C. T&B 5' 30 #7 11' Option 14 27' 3 34' 22' 2' #8's @12in O.C. T&B 5' 30 #7 11' Option 16 29' 4 34' 22' 2'9' #9's @12in O.C. T&B 5' 30 #7 11' Option 16 34' 4 34' 22' 2'9' #9's @12in O.C. T&B 5' 30 #7 11' Option 16 34' 4 34' 22' 2'9' #9's @12in O.C. T&B 5' 30 #7 11' Option 16 34' 5 34' 22' 2'9' #9's @12in O.C. T&B 5' 30 #7 11' Option 17 39' 6 34' 32' 2'9' #9's @12in O.C. T&B 5' 30 #7 11' Option 17 39' 7 38' 22' 3'6' #11's @12in O.C. T&B 5' 30 #7 11' Option 18 49' 7 38' 22' 3'6' #11's @12in O.C. T&B 5' 30 #7 11' Option 18 49' 7 38' 22' 2' #8's @12in O.C. T&B 5' 30 #7 11' Option 18 49'	2 34' 22' 1'6' #7's @ 12in O.C. T&B 5' 30 #7 11' Option 14 27'	2 34' 22' 1'6' #7'8 @12in O.C. T&B 5' 30 #7 11" Option 14 27 34' 22' 2' #8'8 @12in O.C. T&B 5' 30 #7 11" Option 16 31' 34' 22' 2' 9' #8'8 @12in O.C. T&B 5' 30 #7 11" Option 16 31' 34' 32' 2' 9' #8'8 @12in O.C. T&B 5' 30 #7 11" Option 16 31' 34' 32' 2' 9' #8'8 @12in O.C. T&B 5' 30 #7 11" Option 16 31' 34' 32' 2' 1'6' #1'8 @12in O.C. T&B 5' 30 #7 11" Option 16 31' 34' 32' 2' 1'6' #1'2'8 @12in O.C. T&B 5' 30 #7 11" Option 16 31' 34' 32' 3'6' #11'8 @12in O.C. T&B 5' 30 #7 11" Option 17 39' Column and Foundation Requirements (Based on ASCE 7-10) Spread Footing Footi	2 34 22 1 6 87 89 20 0.C. T&B 5 30 87 11 Option 14 27	2 34 22 1 6 87 s 812n O.C. T&B 5 30 87 11 Option 14 27 34 22 2 88 s 812n O.C. T&B 5 30 87 11 Option 16 29 34 34 22 2 3 88 s 812n O.C. T&B 5 30 87 11 Option 16 31 34 34 22 2 3 88 s 812n O.C. T&B 5 30 87 11 Option 16 31 34 34 22 3 6 812s 82 32 32 88 s 812n O.C. T&B 5 30 87 11 Option 16 34 34 34 22 3 6 812s 82 32 32 81 812s 82 32 32 81 812s 82 32 32 32 32 32 32 32







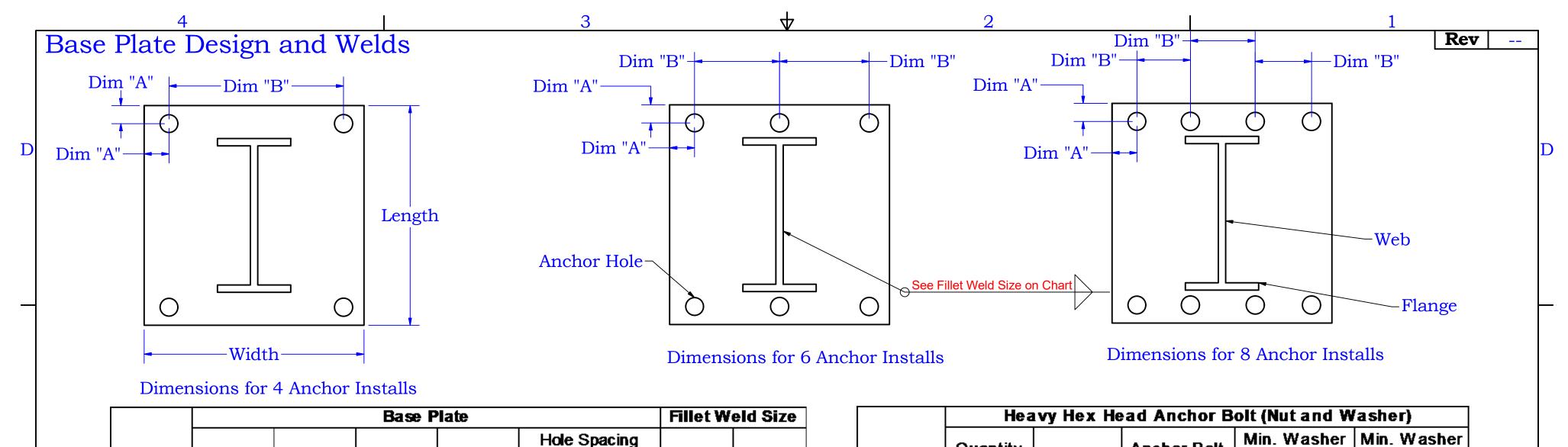
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				Co	lumn and	l Foundation Requireme	nts (Basec	on ASCE	7-10)								Cal	umn and	Foundation Requirement	ts (Based	on ASCE T	7-10)			
					Spread F	ooting	Pier ar	nd Pier Rei	nforce	ment	Anchors and	Column					S	pread Fo	oting	Piera	nd Pier Re	inforce	ment	Anchors and	Column
D	Display	Braced	Footing	_	Footing		Pier			Hook	Base Plates**	Length		Display	Braced	Footing	Footing	Footing		Pier			Hook	Base Plates**	Length
	Height	Column	Length	Width	Depth	Steel Reinforcement		Quantity	-	Length	Dabo i idioo			Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size	length	Dasc i iaico	шуш
	10'	W8x21	32'	9'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	19'		10'	W8x18	32	7'6"	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	19
١Ļ	12'	W14x22	32'	10'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	21'		12	W8x21	32	8'6"	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 1	21'
ΙĻ	14'	W10x26	32'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	23'		14'	W10x22	32	9'6"	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 3	23'
1 4	16'	W12x30	32'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	25	30 FEET LONG	16	W14x22	32	10'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	25
14	18'	W14x30	32'	13'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	27'	INSTALLATIONS	18	W10x26	32	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	27
	20'	W14x34	32'	14'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	29'		20	W12x26	32	12	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 5	29
ᅪ	22'	W16x36	32'	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	31'		22	W12x30	32	13'	1'6"	#5's @12'n O.C. T&B	3'	18	#5	8"	Option 5	31'
1-	25' 30'	W16x40 W16x50	32 32	17' 19'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4'	24 24	#6 #6	9" 9"	Option 10 Option 10	34' 39'		25 30	W14x34	32	14' 17'	1' 6" 1' 6"	#5s @12in O.C. T&B	3' 4'	18 24	#5	8" 9"	Option 8	34'
- -	35'	W21x55	32	22'	1'6"	#8's @12in O.C. T&B	5'	30	#7	11"	Option 14	44'		35	W16x40 W16x50	32 32	19	1'6"	#6's @12'n O.C. T&B #7's @12'n O.C. T&B	<u>4</u> 4'	24	#6 #6	9' 9'	Option 10 Option 10	39 44'
1 -	40'	W21x68	32	22'	1' 9"	#8's @12in O.C. T&B	5'	30	#7	11"	Option 14	49'		40	W18x55	32	21'	1'6"	#7's @12in O.C. T&B	4 //	24	#6	9"	Option 11	49
-	70	VVZIXOO	OZ.		1.5	#03 @12I11 O.O. 10ID		- 50	mi		Ориот 14	70			VVIOX	JE	21	10	#13 @IZITO.C. IQD	-	24	#0	3	фил	40
								1 4005	7.40								0.1		- I D		4005	7.40			
-						Foundation Requireme	<u> </u>			mont									Foundation Requirement	_ \			mont		
	Dienler	Brook	Ecotion		Spread F	wung I	Pier ar Pier	nd Pier Rein 1	IUCE		Anchors and	Column		Dicala :	Dmaad	Ecction		pread Fo		Pier a	nd Pier Re	ıı ildirde			Column
$C \prod$	Display Height	Braced Column	Footing Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size	Hook Length	Base Plates**	Length		Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	Steel Reinforcement	Diameter	Quantity	Sivo	Hook length	Base Plates**	Length
~ -	Height 8'	W8x21	Lengin 34'	vvicim 8'	1' 6"	#4's @12in O.C. T&B	3'	Quantity 18	#5	Lengin 8"	Option 1	17'	}	Regnt 8	W10x17	Lengin 34'	6'6"	1'6"	#4's @12in O.C. T&B	3'	18	#5	engun 8"	Option 3	17'
-	10'	W10x22	34'	9'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'		10	W8x18	34'	7'6"	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 1	19
I⊦	12'	W10x26	34'	10'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	21'		12	W8x21	34'	8'6"		#4's @12in O.C. T&B	3,	18	#5	8"	Option 1	21'
۱ŀ	14'	W12x26	34'	11'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	23'	-	14'	W10x22	34'	9'6"	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	23
۱ħ	16'	W12x30	34'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	25'	32 FEET LONG	16	W10x26	34'	10	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	25
۱ħ	18'	W14x30	34'	13'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	27'	INSTALLATIONS	18'	W12x26	34'	11'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	27
	20'	W14x34	34'	14'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	29'		20	W12x30	34	12'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	29
⊌□	22'	W16x36	34'	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	31'	•	22	W14x30	34'	13'	1'6"	#5s @12in O.C. T&B	3'	18	#5	8"	Option 8	31'
٦г	25'	W21x44	34'	17'	1' 6"	#6's @12in O.C. T&B	5'	30	#7	11"	Option 14	34'		25	W18x35	34'	14'	1'6"	#5s @12in O.C. T&B	4'	24	#6	9"	Option 11	34'
	30'	W18x55	34'	19'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	39'		30	W14x43	34'	17'	1'6"	#6's @12'n O.C. T&B	4'	24	#6	9"	Option 9	39
	35'	W21x62	34'	22'	1' 6"	#8's @12in O.C. T&B	5'	30	#7	11"	Option 14	44'		35	W18x50	34'	19	1'6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	44'
	40'	W24x68	34'	22'	1' 9"	#8's @12in O.C. T&B	5'	30	#7	11"	Option 16	49'		40'	W21x55	34'	21'	1'6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	49
-									- 10										- I D .	. 15	1005	7.40			
۱Ļ			1			Foundation Requireme	_ `				ı	1						umn and Opread Fo	Foundation Requirement	_ ` _	nd Pier Re		mont	1	
	NI	D	F4:		Spread F	Ooting		nd Pier Rei	niorce		Anchors and	Column		Dioplay	Drocod	Footing		Footing		Pier	I u riei rie	IIIOG		Anchors and	Column
в	Display ⊔oidet	Braced Column	Footing	Width	Footing Depth	Steel Reinforcement	Pier	Quantity	Size	Hook	Base Plates**	Length		Display Height	Braced Column	Footing Length	Width	Depth		Diameter	Quantity	970	Hook length	Base Plates**	Length
미ト	Height 8'	W8x21	Length 38'	8'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	Length 8"	Option 1	17'		8	W10x17	38	6'6"	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	17'
-	10'	W10x22	38'	9'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'	1	10	W8x18	38	7'6"	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 1	19
	12'	W10x26	38'	10'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	21'		12	W8x21	38	8'6"	1'6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 1	21'
	14'	W12x26	38'	11'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	23'	36 FEET LONG	14'	W10x22	38	9'6"	1'6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 3	23
-	16'	W12x30	38'	12'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	25	INSTALLATIONS	16	W10x26	38	10	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 3	25
	18'	W14x34	38'	13'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	27'		18'	W12x26	38	11'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	27
		W16x36	38'	15'	1' 6"	#5's @12in O.C. T&B		24	#6	9"	Option 10	29'	<u> </u>	20	W12x30	38	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	29
	22'	W16x40	38'	15'	1' 6"	#5's @12in O.C. T&B		24	#6	9"	Option 10	31'	†	22	W14x34	38	13'	1' 6"	#5's @12'n O.C. T&B	3	18	#5	8"	Option 8	31'
71	25'	W21x44	38'	17'	1' 6"	#6's @12in O.C. T&B		30	#7	11"	Option 14	34'		25	W18x35	38	15		#5's @12'n O.C. T&B	4'	24	#6	9"	Option 11	34'
	30'	W18x55	38'	19'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	39'		30	W14x43	38	17'		#6's @12in O.C. T&B	4'	24	#6	9"	Option 9	39
	35'	W21x62	38'	22	1' 6"	#7's @12in O.C. T&B		30	#7	11"	Option 14	44'		35	W18x50	38	19		#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	44'
	40'	W24x68	38'	22	2'	#8's @12in O.C. T&B	5'	30	#7	11"	Option 16	49'		40	W21x62	38	21'	1'6"	#7's @12in O.C. T&B	5	30	#7	11"	Option 14	49
	. If the	nstallat grade. S d loadii	ay heig tions w See 24 ng figu catego	vill be 1-041 red at ry inc	braced 6 for la Expo ludes f	ateral sizes. sure "C" - Open flat open country	aced at terrain r, grassl	10' incr with so ands, a	eme eatte nd a are	nts or red ob 11 wate as , we	n front and estructions er surfaces ooded areas	back o having in hu , or oth	f the column starting heights generally less tricane prone areas. her terrain with nume	s than crous			oting	Insta Colum		•88		Ne	evco, In	c. ois 62246	
A 3 3 4 6 6	3. Wind 30 feet 4. Wind closely	d loadii spaced	d obstr	uction	ıs havi	ing the size of sir							s prevail in the upwin	a						Drawi	ing No.				
A 3 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B. Wind BO feet L. Wind closely lirection	d loadii spaced on for a	d obstr a distar	uction nce of	ns havi 2600 :	ng the size of sir feet or 20 times t	he stru	cture h	eight	t, whic	chever is gr	eater.		a								24	1-041	2	
A 3 3 4 6 6 6 5	B. Wind BO feet L. Wind Blosely Birection	d loading spaced on for a case see	d obstr a distar e DWG	uction nce of 3-0818	ns havi 2600 : 3 to de	ing the size of sir	he stru te and a	cture h	eight	t, whic	chever is gr	eater.		a	Drav		CJS I	Date	1/11/2017	Sheet			1-041	.2	

			4							3			lacksquare			2							1			
												120	MPH WIND ZO	NES										Rev		
					Е	XPOSURE C (S	ee Not	e 3)										E	(POSURE B (Se	e Note	<u>4</u>)					
ᆙ				Colu		Foundation Requiremen			E 7-10)	1							Calu		Foundation Requirement			7-10)				
					Spread I	ooting		d Pier Re			Anchors and	Column						pread Fo		_ `	nd Pier F		ement	Anchors and	Column	
D	Display	Braced	_	_	_	1	Pier			Hook	Base Plates**			Display	Braced	Footing	-	Footing		Pier			Hook	Base Plates*		
~ -	Height 10'	Column W14x22	Length 32'	Width 11'	Depth 1' 6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity 18	/ Size #5	Length 8"	Option 8	19'		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	_		_			
IJŀ	12'	W12x26	32'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	21'		10'	W8x21 W10x22	32 32	9' 10'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3,	18 18	#5 #5	8" 8"	Option 1 Option 3	19' 21'	
	14'	W12x30	32'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	23'		14'	W10x26	32	11'	1'6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 3	23'	
L	16'	W14x34	32'	14'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	25'	30 FEET LONG	16'	W12x26	32	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	25'	
╂	18' 20'	W18x35 W16x40	32' 32'	15' 16	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4' 4'	24 24	#6	9" 9"	Option 11 Option 10	27' 29'	INSTALLATIONS	18'	W12x30	32	13'	1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	3,	18	#5	8"	Option 5	27'	
lŀ	22'	W14x43	32'	17'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 9	31'		<u>20'</u> 22'	W14x30 W14x34	32 32	14' 15'	1' 6" 1' 6"	#5's @12in O.C. T&B	3	18 18	#5 #5	8" 8"	Option 8 Option 8	29' 31'	
IJĖ	25'	W16x50	32'	19'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 10	34'		25'	W16x40	32	16	1'6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 10	34'	
ΙĹ	30'	W21x55	32'	22'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	39'		30′	W14x48	32	19'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 9	39'	
۱ŀ	35' 40'	W21x68 W24x76	32' 32'	22' 22'	2' 2' 6"	#8's @12in O.C. T&B #9's @12in O.C. T&B	5' 5'	30	#7 #7	11" 11"	Option 14 Option 16	44' 49'		35'	W21x55	32 32	21' 22'	1' 6"	#7's @12in O.C. T&B	5 5	30	#7	11"	Option 14 Option 14	44'	
╟	40	VV24X70	32		20	#95 @12110.0. 100	3	30	#1	11	Орноп ю	49		40'	W21x62	32	22	1' 9"	#8's @12in O.C. T&B	5	30	#7	11"	Cption 14	49'	
ľ				Colu	mn and	Foundation Requiremen	nts (Based	on ASCI	= 7-10)						Column and Foundation Requirements (Based on ASCE 7-10)											
胩					Spread I			d Pier Re			Anghere en -1	Column						oread Fo			nd Pier F		ement	A	O-I	
11	Display	Braced	_	_	_	1	Pier			Hook	Anchors and Base Plates**			Display	Braced	Footing	-	_		Pier			Hook	Anchors and Base Plates**		
╢	Height 8'	Column W10x22	Length 34'	Width 9' 6"	Depth	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	_ ′	/ Size	Length 8"		17'		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter			_			
lŀ	10'	W10x22	34'	10' 6"	1' 6" 1' 6"	#4's @12in O.C. T&B	3'	18 18	#5	8"	Option 3 Option 3	19'		<u>8'</u> 10'	W8x18 W8x21	34' 34'	7' 6" 9'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3,	18 18	#5 #5	8" 8"	Option 1 Option 1	17' 19'	
lŀ	12'	W12x26	34'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	21'		12	W14x22	34'	10'	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 8	21'	
I	14'	W14x30	34'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	23'		14'	W12x26	34'	11'	1' 6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 5	23'	
╟	16'	W14x34	34'	14'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	25'	32 FEET LONG	16	W12x26	34'	12	1' 6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 5	25'	
ŀ	18' 20'	W16x40 W14x43	34' 34'	15' 16	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4' 4'	24 24	#6	9" 9"	Option 10 Option 9	27' 29'	INSTALLATIONS -	<u>18'</u> 20'	W14x30 W14x34	34' 34'	13' 14'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	3	18 18	#5 #5	8" 8"	Option 8 Option 8	27' 29'	
I۲	22'	W14x48	34'	17'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 9	31'		22	W16x36	34'	15'	1'6"	#5's @12in O.C. T&B	4	24	#6	9"	Option 10	31'	
١Ľ	25'	W18x50	34'	19'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	34'		25'	W16x40	34'	17'	1'6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 10	34'	
IL	30'	W21x62	34'	22'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	39'			30'	W18x50	34'	19'	1' 6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	39'
╟	35' 40'	W18x76 W24x84	34' 34'	22' 22'	2' 2' 6"	#8's @12in O.C. T&B #9's @12in O.C. T&B	4'6" 5'	27 30	#6	9" 11"	Option 12 Option 16	44' 49'			<u>35</u> 40	W21x62	34'	21' 22'	1' 6"	#7's @12in O.C. T&B	5 5	30	#7 #7	11"	Option 14	44' 49'
╟	40	VVZ4X04	54	22	20	#93 @1211 O.C. 100	0 00 111		'''	Option to	40	_	40	W21x68	34'	22	1' 9"	#8's @12in O.C. T&B	5	30	#1	11"	Option 14	49		
lr				Colu	mn and	Foundation Requiremen	nts (Based	on ASCI	= 7-10)								Colu	mn and F	 Foundation Requirement	s (Based o	n ASCE	7-10)				
۱۲					Spread I			d Pier Re			Anchors and	Column						pread Fo	•		nd Pier F		ement	Anaham and	Column	
	Display	Braced	Footing	Footing	Footing		Pier			Hook	Base Plates**			Display	Braced	Footing	Footing	Footing	_	Pier			Hook	- Anchors and Base Plates**		
3 -	Height		Length		Depth		Diameter							Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter						
╟	8' 10'	W10x22 W10x26	38' 38'	9' 6" 10' 6"	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 3 Option 3	17' 19'		8' 10'	W8x18 W10x22	38 38	7'6" 9	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3,	18 18	#5 #5	8" 8"	Option 1 Option 3	17' 19'	
胩	12'	W12x26	38'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	21'		12	W14x22	38'	10'	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	21'	
	14'	W14x30	38'	13'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 8	23'	36 FEET LONG	14'	W12x26	38'	11'	1' 6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 5	23'	
╟	16'	W14x34	38' 38'	14'	1' 6"	#5's @12in O.C. T&B	3' 4'	18 24	#5	8"	Option 8	25' 27'	INSTALLATIONS	16	W12x30	38'	12	1' 6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 5	25'	
╟	18' 20'	W16x40 W14x43	38'	15' 17'	1' 6" 1' 6"	#5's @12in O.C. T&B #6's @12in O.C. T&B	4'	24	#6	9" 9"	Option 10 Option 9	29'		<u>18'</u> 20'	W14x30 W14x34	38' 38'	13' 14'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3,	18 18	#5 #5	8" 8"	Option 8 Option 8	27' 29'	
胩		W16x50	38'	18'		#6's @12in O.C. T&B		24	#6	9"	Option 10	31'		22	W16x36		15'		#5's @12in O.C. T&B		24	#6	9"	Option 10	31'	
վ[W18x55		19'	1' 6"	#6's @12in O.C. T&B		24	#6	9"	Option 11	34'		25'	W14x43	38'	17'	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 9	34'	
-		W21x62	38'	22'	1' 6"	#7's @12in O.C. T&B		30	#7		Option 14	39'		30'	W18x50	38'	19	1' 6"	#6's @12in O.C. T&B	4'	24	#6	9"	Option 11	39' 44'	
		W24x68 W24x84		22' 22'	2' 6"	#8's @12in O.C. T&B #9's @12in O.C. T&B		30	#7 #7		Option 16 Option 16	44' 49'		<u>35</u> 40	W21x55 W24x68	38' 38'	22' 22'		#7's @12in O.C. T&B #8's @12in O.C. T&B		30	#7 #7		Option 14 Option 16	49	
lŀ		1/104	- 30		0			~_	1 ""		- OpO. 10		I		1	_ ~~		. 0			<u> </u>	1	···	- Sp. 101 10		
E	40		Chart Notes: 1. If the display height is between chart values shown above, use the next highest value. 2. All installations will be braced with laterals placed at 10' increments on front and back of the cabove grade. See 241-0416 for lateral sizes. 3. Wind loading figured at Exposure "C" - Open terrain with scattered obstructions having heigh 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurrican. 4. Wind loading figured at Exposure "B" - Urban and suburban areas, wooded areas, or other terrain.											y less than eas. Outdoor Scoreboard Footing Installation 4 Column Nevco, Inc.												
1 2 2 4 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Chart 1. If th 2. All in above § 3. Wine 30 feet 4. Wine	e displanstallat grade. S d loadin This d loadin	cions we see 24 ang figu catego ang figu	vill be 1 1-0410 red at ry incl red at	oraceo for la Expo udes i Expo	l with laterals pla ateral sizes. sure "C" - Open s flat open country sure "B" - Urban	terrain , grassla and sul	10' inci with so ands, a burbar	catte and a	nts on red ob- ll wate as , wo	front and structions or surfaces oded areas	back o having in hu , or oth	heights generally les rricane prone areas. ner terrain with nume	s than erous			ooting 4	g Insta Colun	allation nn	-88		N	evco, Ir	nc. ois 62246		
A 3 3 2 2 0 0 5	Chart 1. If th 2. All in above § 3. Wine 30 feet 4. Wine closely directic 5. **Ple	e displated in the display of the di	tions we have 24 mg figu catego mg figu distant distan	vill be 1-0410 ared at ry included at ruction nce of 3-0818	for la Expo udes to to de to de	l with laterals pla ateral sizes. sure "C" - Open s flat open country sure "B" - Urban	terrain ; , grassla and sul gle-fami he structe and at	with so ands, a burbar ily dwe	catter and a are elling eight	nts on red ob- ll wate as, wo s or la: , whic	front and structions or surfaces oded areas rger. These hever is gro	back o having in hu , or oth e areas eater.	heights generally les cricane prone areas. her terrain with nume prevail in the upwin	s than erous	Drav	F	ooting 4 (Mul	g Insta Colun ti-Sec	allation nn	Drawi	ng No.	No envil	evco, Ir	ois 62246		

			4								3			Φ			2							1		
													130	MPH WIND ZO	NES										Rev	
					Е	EXP	OSURE C (Se	e Note	3)										Ð	(POSURE B (Se	e Note	2 4)				
				Col			ndation Requirement		•	7-10)								Calu		oundation Requirement			7-10)			
					Spread	_	ing		d Pier Rei	nforce		Anchors and	Column						Spread Fo	oting		nd Pier R	einforce		Anchors and	Column
D	Display Height	Braced Column	Footing Length	Footing Width	Footing Depth	_	eel Reinforcement	Pier Diameter	Quantity	Sizo	Hook Length	Base Plates**	Length		Display		Footing	Footing	Footing	Ota al Dainfana annont	Pier	O montite	C:	Hook	Base Plates**	
۱ŀ	10'	W10x26		11'	1' 6"	_	s @12in O.C. T&B	3'	18	#5	8"	Option 3	19'		Height 10'	Column W10x22	Length 22'	Width 9'6"	Depth 1'6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity 18	#5	length 8"	Option 3	19'
	12'	W12x30		13'	1' 6"	_	s @12in O.C. T&B	3'	18	#5	8"	Option 5	21'		12	W10x26	22	11'	1'6"	#4's @12in O.C. T&B	3,	18	#5	8"	Option 3	21'
-	14'	W14x30 W18x35		14' 16'	1' 6" 1' 6"	_	s @12in O.C. T&B	3' 4'	18 24	#5	8" 9"	Option 8	23' 25'	00 PPPM LONG	14'	W12x26	22	12'	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 5	23'
۱ŀ	16' 18'	W16x40		16'	1' 6"	_	s @12in O.C. T&B s @12in O.C. T&B	4'	24	#6 #6	9"	Option 11 Option 10	25' 27'	30 FEET LONG INSTALLATIONS	16 18	W12x30 W14x30	22 22	13' 14'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 8	25' 27'
	20'	W21x44		18'	1' 6"	#6's	s @12in O.C. T&B	5'	30	#7	11"	Option 14	29'	INSTALLATIONS	20'	W14x34	22	15'	1'6"	#5's @12in O.C. T&B	3,	18	#5	8"	Option 8	29
-	22'	W16x50		19'	1' 6"	_	s @12in O.C. T&B	4' 4'	24	#6	9"	Option 10	31'		22	W16x36	22	16	1'6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	31'
∃ ⊦	25' 30'	W18x55 W21x62		21' 22'	1' 6" 1' 9"		s @12in O.C. T&B s @12in O.C. T&B	5'	24 30	#6 #7	9" 11"	Option 11 Option 14	34' 39'		25 30	W14x43 W18x50	22 22	18' 20'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4'	24 24	#6 #6	9" 9"	Option 9 Option 11	34' 39'
	35'	W24x76	22'	22'	2' 3"	#9's	s @12in O.C. T&B	5'	30	#7	11"	Option 16	44'		35	W21x62	22	22	1' 9"	#8's @12in O.C. T&B	5	30	#7	11"	Option 14	44'
	40'	W24x94	22'	22'	2' 9"	#10)'s @12in O.C. T&B	5'	30	#7	11"	Option 16	49'		40'	W24x68	22	22'	2'3"	#9's @12in O.C. T&B	5	30	#7	11"	Option 16	49'
16				Cal		d Farm	n detice Descrivenses	- (Deced	ACCE	7.40)								0-1-			- /DI-	A 000	7.40)			
-	I				umn and Spread		ndation Requirement	_	on ASCE d Pier Rei		ment		0.1						umn and F Soread Fo	oundation Requirement otina	`	on ASCE Ind Pier R		ement	l	
	Display		Footing	Footing	Footing	g	-	Pier			Hook	Anchors and Base Plates**			Display	Braced	Footing	Footing	Footing		Pier			Hook	Anchors and Base Plates**	
c -	Height	Column W10x26		Width 10'	Depth 1' 6"	_	eel Reinforcement s @12in O.C. T&B		Quantity 18		Length		Ŭ		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	_ ,		length		
-	8' 10'	W10x26		11'	1'6"		s @12in O.C. T&B	3' 3'	18	#5 #5	8" 8"	Option 3 Option 5	17' 19'		8' 10'	W8x21 W10x22	26 26	8' 9'6"	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3	18 18	#5 #5	8" 8"	Option 1 Option 3	17' 19'
	12'	W12x30		13'	1' 6"	_	s @12in O.C. T&B	3'	18	#5	8"	Option 5	21'		12'	W10x26	26'	11'	1' 6"	#4's @12in O.C. T&B		18	#5	8"	Option 3	21'
-	14' 16'	W14x34 W16x36		14' 15'	1' 6" 1' 6"		s @12in O.C. T&B s @12in O.C. T&B	3'	18 24	#5 #6	8" 9"	Option 8 Option 10	23'		14'	W12x26	26 26	12 13'	1'6"	#4's @12in O.C. T&B	3	18 18	#5	8" 8"	Option 5	23' 25'
-	18'	W14x43		16'	1'6"		s @12in O.C. T&B	4'	24	#6	9"	Option 9	25' 27'	32 FEET LONG INSTALLATION	16 18	W12x30 W14x34	26	14'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3	18	#5 #5	8"	Option 5 Option 8	27'
	20'	W16x50		18'	1' 6"	#6's	s @12in O.C. T&B	4'	24	#6	9"	Option 10	29'	INSTALLATIONS	20'	W16x36	26'	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	29'
. -	22' 25'	W18x50 W21x55		19' 21'	1' 6" 1' 6"	_	s @12in O.C. T&B s @12in O.C. T&B	4' 5'	24 30	#6 #7	9" 11"	Option 11 Option 14	31' 34'		<u>22'</u> 25'	W16x40 W14x48	26 26	16 18'	1' 6" 1' 6"	#5's @12in O.C. T&B	4' 4'	24 24	#6 #6	9" 9"	Option 10 Option 9	31' 34'
₹ -	30'	W21x68		22'	1' 9"		s @12in O.C. T&B	5'	30	#7	11"	Option 14	39'		30	W18x55	26	20'	1'6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4	24	#6	9"	Option 11	39'
	35'	W24x84		22'	2' 3"	#9's	s @12in O.C. T&B	5'	30	#7	11"	Option 16	44'	35		W21x68	26'	22	1' 9"	#8's @12in O.C. T&B	5	30	#7	11"	Option 14	44'
L	40'	W24x94	26'	22'	2' 9"	#10)'s @12in O.C. T&B	5'	30	#7	11"	Option 16	49'		40'	W24x76	26	22	2'	#9's @12in O.C. T&B	5	30	#7	11"	Option 16	49'
-				Colu	Imp one	d Equi	ndation Requirement	to (Pacad)	n ASCE	7 10)								Colu	mon and E	oundation Requirement	o (Poood o	m ACCE	7 10)			
-					Spread			_ `	d Pier Rei		ment	A a la a la	0-1			1			Spread Fo		_	nd Pier R		ement		0.1
	Display		Footing	_		٠,		Pier			Hook	Anchors and Base Plates**	Length		Display	Braced	Footing	Footing	Footing		Pier			Hook	Anchors and Base Plates**	
в	Height 8'	Column W10x26		Width 10'	Depth 1' 6"	_	eel Reinforcement s @12in O.C. T&B	Diameter 2'	Quantity 18	Size #5	Length 8"	Option 3	17'		Height 8'	Column W8x21	Length 30'	Width 8'	Depth 1'6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	Quantity 18	Size #5	length 8"	Option 1	17'
۱ŀ	10'	W12x26		11'	1' 6"	_	s @12in O.C. T&B	3'	18	#5	8"	Option 5	19'		10'	W10x22	30'	9'6"	1'6"	#4's @12in O.C. T&B	3'	18	#5	8"	Option 3	19'
[12'	W12x30		13'	1' 6"	#4's	s @12in O.C. T&B	3'	18	#5	8"	Option 5	21'		12'	W10x26	30'	11'	1'6"	#4's @12in O.C. T&B	3	18	#5	8"	Option 3	21'
-	14' 16'	W14x34 W16x36		14' 15'	1' 6" 1' 6"		s @12in O.C. T&B s @12in O.C. T&B	3' 4'	18 24	#5 #6	8" 9"	Option 8 Option 10	23' 25'	36 FEET LONG	14' 16'	W12x26 W14x30	30' 30'	12' 14'	1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B	3	18 18	#5 #5	8" 8"	Option 5 Option 8	23' 25'
	18'	W14x43	30'	16'	1'6"	_	s @12in O.C. T&B	4'	24	#6	9"	Option 9	27'	INSTALLATIONS	18'	W14x34	30'	14'	1'6"	#5's @12in O.C. T&B	3	18	#5	8"	Option 8	27'
	20'	W16x50		18'	1' 6"		s @12in O.C. T&B	4'	24	#6	9"	Option 10	29'		20	W16x36	30'	15'	1'6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	29'
		W18x50 W21x55		19' 21'	1' 6" 1' 6"		s @12in O.C. T&B s @12in O.C. T&B	4' 5'	24 30	#6 #7	9" 11"	Option 11 Option 14	31' 34'		22' 25'	W16x40 W16x50		16 18		#5's @12in O.C. T&B #6's @12in O.C. T&B		24 24	#6 #6	9' 9'	Option 10 Option 10	31' 34'
7		W21x68		22'	1' 9"	_	s @12in O.C. T&B	5'	30	#7	11"	Option 14	39'		30	W21x55	30'	21'		#7's @12in O.C. T&B		30	#7	11"	Option 14	39'
ļĘ		W24x76		22'	2' 3"		s @12in O.C. T&B	5'	30	#7	11"	Option 16	44'		35	W21x62	30'	22'		#8's @12in O.C. T&B		30	#7	11"	Option 14	44'
L	40'	W21x101	30'	22'	2.9"	#10)'s @12in O.C. T&B	5'	30	#7	11"	Option 15	49'		40'	W24x76	30'	22	23"	#9's @12in O.C. T&B	5	30	#7	11"	Option 16	49'
A	1. If th 2. All in above § 3. Wind 30 feet 4. Wind closely direction 5. **Plo	nstalla grade. d loadi . This d loadi space on for a ease se	ay heig tions v See 24 ng figu catego ng figu d obstra ee DWC	vill be 1-041 ared at bry inc- ared at ruction nce of 3-0818	brace 6 for 1 Expo ludes Expo as hav 2600 to de	ed will later osure flat osure ving feet	ral sizes. The "C" - Open to open country, open country, the "B" - Urban at the size of sing to or 20 times the mine base plate.	errain v grassla and sub gle-famil e struct and ar	o' incre with sca nds, an urban y dwell cure he	emen attero d all area ings ight,	ed observates on the state of t	front and betructions her surfaces in oded areas, ger. These never is gre	naving n hur or oth areas ater.	the column starting heights generally les ricane prone areas. Her terrain with nume prevail in the upwin bove.	s than erous	Drawi	Foo	oting I 4 Co Multi-	Scorel nstall olumn Section	ation	Drawin	ng No.	Ne nville	vco, Ine, Illino	ois 62246	
							isted is PER PI					•				Draw	n Cu	JS L	ale	1/11/2017	Sheet	6 ^{of} 8				
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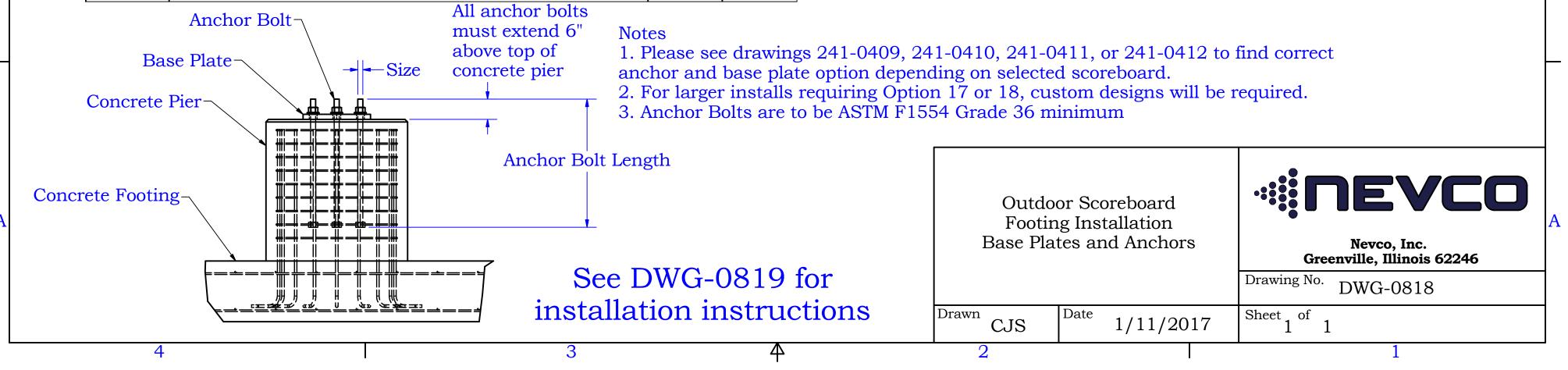
_			4								3		₩		2						1			
												150	MPH WIND ZONE	S								Rev		
					Е	XPOSURE C (S	ee Not	e 3)									E	XPOSURE B (Se	e Note	4)				
lΓ				Col		Foundation Requiremen			7-10)							Calı	umn and l	Foundation Requirements	s (Based o	on ASCE 7-1	0)			
					Spread			nd Pier Re	inforce	ment	Anchors and	Column		.			Spread Fo	poting		and Pier Reir		Anchors and	Column	
	Display	Braced Column		Footing Width			Pier	r Ougotitu	Ciro	Hook	Base Plates**		Disp Heid	1		Footing Width	Footing Depth	Steel Reinforcement	Pier Diameter	r Quantity S	Hook Size length	Base Plates*	Length	
ŀ	Height 10'	W12x30	Length 32'	13'	Depth 1'6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'	r Quantity 18	#5	8"	Option 5	19'	10			11'	1'6"	#4's @12in O.C. T&B	3		#5 8"	Option 3	19'	
t	12'	W14x34	32'	15'	1' 6"	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	21'	12	_		12'	1' 6"	#4's @12in O.C. T&B	3'		#5 8"	Option 5	21'	
L	14'	W16x36	32'	16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	23'	14			13'	1' 6"	#5's @12in O.C. T&B	3'		#5 8" #5 8"	Option 5	23'	
F	16' 18'	W14x43 W16x50	32' 32'	17' 19'	1' 6" 1' 6"	#6's @12in O.C. T&B #6's @12in O.C. T&B	4' 4'	24 24	#6 #6	9"	Option 9 Option 10	25' 27'	30 FEET LONG 18		_	15' 16'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	3 4'		#5 8" #6 9"	Option 8 Option 10	25' 27'	
F	20'	W18x50	32'	20'	1'6"	#7's @12in O.C. T&B	4'	24	#6	9"	Option 11	29'	INSTALLATIONS 2		_	17'	1' 6"	#6's @12in O.C. T&B	4'		#6 9"	Option 10	29'	
ľ	22'	W21x55	32'	22'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	31'	22	_	_	18'	1' 6"	#6's @12in O.C. T&B	5'		#7 11"	Option 14	31'	
ļ	25' 30'	W21x62 W24x68	32' 32'	22' 22'	1' 9" 2' 6"	#8's @12in O.C. T&B #9's @12in O.C. T&B	5' 5'	30	#7 #7	11" 11"	Option 14	34' 39'	<u></u>		_	20' 22'	1' 6" 1' 9"	#7's @12in O.C. T&B #8's @12in O.C. T&B	4' 5'		#6 9" #7 11"	Option 11 Option 14	34' 39'	
ŀ	35'	W24x94	32	22'	3'	#10's @12in O.C. T&B		30	#7	11"	Option 16 Option 16	44'	35		_	22'	2'3"	#9's @12in O.C. T&B	5'		#7 11"	Option 16	44'	
Į	40'	W24x104	32'	22'	3' 9"	#11's @12in O.C. T&B	5'	30	#7	11"	Option 17	49'	40	W24x8	1 32	22'	2' 9"	#10's @12in O.C. T&B	5'	30	#7 11"	Option 16	49'	
-																		- 10 5		1005 7				
ŀ				Col	umn and Spread	Foundation Requirement		l on ASCE nd Pier Re		mont	1			$\overline{}$	T		umn and i Spread Fo	Foundation Requirements	_ `	on ASCE 7-1 and Pier Reir	,	1	1	
	Display	Braced	Footing	Footina			Pier ar	ina i iei rie	ii iiOi CE	Hook	Anchors and Base Plates**		Disp	lay Braced	Footing		Footing	3	Pier		Hook	 Anchors and Base Plates** 		
L	Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter					Ŭ	Heig			Width	Depth	Steel Reinforcement		r Quantity S			Ŭ	
F	8'	W12x26 W14x30	34' 34'	11'	1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18	#5 #5	8" 8"	Option 5	17'	<u>8</u> 10	W10x2		9' 6" 11'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'		#5 8" #5 8"	Option 3 Option 5	17' 19'	
ŀ	10' 12'	W18x35	34'	13' 15'	1' 6" 1' 6"	#5's @12in O.C. T&B	3 4'	18 24	#6	9"	Option 8 Option 11	19' 21'	12			12'	1'6"	#4's @12in O.C. T&B	3'		#5 8"	Option 5	21'	
ľ	14'	W16x40	34'	16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	23'	14			13'	1' 6"	#5's @12in O.C. T&B	3'		#5 8"	Option 8	23'	
Ļ	16'	W21x44	34'	17'	1' 6"	#6's @12in O.C. T&B	5'	30	#7	11"	Option 14	25'	32 FEET LONG 18			15' 16'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	4' 4'		#6 9" #6 9"	Option 11 Option 10	25' 27'	
ŀ	18' 20'	W18x50 W18x55	34' 34'	19' 20'	1' 6" 1' 6"	#6's @12in O.C. T&B #7's @12in O.C. T&B	4' 4'	24 24	#6 #6	9"	Option 11 Option 11	27' 29'	INSTALLATIONS 2			17'	1'6"	#6's @12in O.C. T&B	5'		#0 9 #7 11"	Option 14	29'	
t	22'	W21x62	34'	22'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	31'	22	W16x50	_	18'	1' 6"	#6's @12in O.C. T&B	4'	24	#6 9"	Option 10	31'	
Ļ	25'	W21x68	34'	22'	1' 9"	#8's @12in O.C. T&B	5'	30	#7	11"	Option 14	34'	25		_	20' 22'	1' 6"	#7's @12in O.C. T&B #8's @12in O.C. T&B	4' 5'		#6 9" #7 11"	Option 11 Option 14	34' 39'	
ŀ	30' 35'	W24x76 W21x101	34' 34'	22' 22'	2' 6" 3'	#9's @12in O.C. T&B #10's @12in O.C. T&B	5' 5'	30	#7 #7	11" 11"	Option 16 Option 15	39' 44'		35' V	_	_	22	1' 9" 2' 3"	#8's @12in O.C. T&B	5 5'		#7 11"	Option 16	39 44'
Ţ	40'	W24x117		22'		#11's @12in O.C. T&B		30	#7	11"	Option 17	49'		W24x9	1 34'	22'	2'9"	#10's @12in O.C. T&B	5'	30	#7 11"	Option 16	49'	
Ļ																C-1		To sadation Door increases	, (Deced o	ACCE 7.4	0)			
ŀ				Col	umn and Spread	Foundation Requirement		on ASCE nd Pier Re		ement					1		amn and i Spread Fo	Foundation Requirements poting	_ `	and Pier Reir	-	Τ	l.,	
	Display	Braced	Footing	Footing			Pier	1		Hook	Anchors and Base Plates**		Disp	lay Braced	Footing	_	Footing		Pier		Hook	 Anchors and Base Plates** 		
-	Height	Column	Length	Width	Depth		Diameter	,		Length		Ŭ	Heiç O	tht Column W10x2		Width 9'6"	Depth 1' 6"	Steel Reinforcement #4's @12in O.C. T&B	Diameter 3'		Size length #5 8"		Ľ	
	8' 10'	W12x26 W14x30	38' 38'	11' 13'	1' 6" 1' 6"	#4's @12in O.C. T&B #4's @12in O.C. T&B	3'	18 18	#5 #5	8" 8"	Option 5 Option 8	17' 19'	8 10	_		11'	1'6"	#4's @12in O.C. T&B	3'		#5 8" #5 8"	Option 3 Option 5	17' 19'	
t	12'	W18x35	38'	15'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 11	21'	12	W12x3	38'	12'	1' 6"	#4's @12in O.C. T&B	3'	18	#5 8"	Option 5	21'	
F	14'	W16x40	38'	16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6	9"	Option 10	23'	14			13'	1' 6"	#5's @12in O.C. T&B	3'		#5 8"	Option 8	23'	
ŀ	16' 18'	W21x44 W18x50	38' 38'	18' 19'	1' 6" 1' 6"	#6's @12in O.C. T&B #6's @12in O.C. T&B	5' 4'	30 24	#7 #6	11" 9"	Option 14 Option 11	25' 27'	36 FEET LONG 18			15' 16'	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	4' 4'		#6 9" #6 9"	Option 10 Option 10	25' 27'	
ŀ	20'	W21x55	38'	21'	1'6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	29'	INSTALLATIONS 20			17'	1' 6"	#6's @12in O.C. T&B	5'		#7 11"	Option 14	29'	
Ţ	22'	W21x62	38'	22'	1' 6"	#7's @12in O.C. T&B	5'	30	#7	11"	Option 14	31'	22		_	19'	1' 6"	#6's @12in O.C. T&B	4'	-	#6 9"	Option 11	31'	
ŀ	25' 30'	W21x68 W24x84	38' 38'	22' 22'	1' 9" 2' 6"	#8's @12in O.C. T&B #9's @12in O.C. T&B		30	#7 #7	11" 11"	Option 14 Option 16	34' 39'	<u>25</u>			21' 22'	1' 6" 1' 9"	#7's @12in O.C. T&B #8's @12in O.C. T&B	4' 5'		#6 9" #7 11"	Option 11 Option 14	34' 39'	
ŀ	35'	W21x101	38	22'	3'	#10's @12in O.C. T&B		30	#7	11"	Option 15	39 44'	35	_		22'	2'3"	#9's @12in O.C. T&B	5'		#7 11"	Option 16	44'	
	30			22'	3' 9"	#11's @12in O.C. T&B		30	#7	11"	Option 17	49'	40	W24x9	1 38'	22'	2' 9"	#10's @12in O.C. T&B	5'	30	#7 11"	Option 16	49'	
E	40'	W24x117	38'		00																			
1 2 2 2 3 3 3 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Chart 1. If th 2. All i above 3. Win 30 fee 4. Win closely directi	Notes: ne displinstalla grade. d loadi t. This d loadi y space	lay hei tions y See 24 ing fig catego ing figo d obst a dista	ght is will be 41-041 ured a ory inc ured a ruction	betwee brace 6 for t Expo cludes t Expo ns have 2600	lateral sizes. osure "C" - Open flat open country osure "B" - Urbar ving the size of six feet or 20 times	terrain terrain y, grass n and single-far the stru	n with salands, uburba mily dw ucture l	crem scatte and n ar elling neigh	ents o ered o all wa eas, w gs or l nt, who	on front and obstruction ter surface vooded area larger. The ichever is a	d back s havin es in h as, or o ese are greater		than		Footin 4	g Inst Colur ti-Sec			Green	Nevco, I	ois 62246	0	
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Chart 1. If th 2. All i above 3. Win 30 fee 4. Win closely directi 5. **Pl	Notes: ne displinstalla grade. Id loadit. This id loadity space on for a ease se	lay hei lay hei see 24 ing figr categoring figr d obst a distate ee DWG	ght is will be 41-041 ured a ory inc ured a ruction ince of G-081	betwee brace 6 for t Expo cludes t Expo ns have 2600 8 to do	ed with laterals plateral sizes. osure "C" - Open flat open country osure "B" - Urbar ving the size of si	shown a laced at terrain y, grass n and single-far the stru	n with salands, uburba mily dw ucture l	crem scatte and n ar elling neigh	ents o ered o all wa eas, w gs or l nt, who	on front and obstruction ter surface vooded area larger. The ichever is a	d back s havin es in h as, or o ese are greater	ng heights generally less urricane prone areas. other terrain with numer as prevail in the upwind	than	rawn	Footin 4	g Inst Colur	allation nn	Draw Sheet	Green	Nevco, I ville, Illir	nc. iois 62246	0	

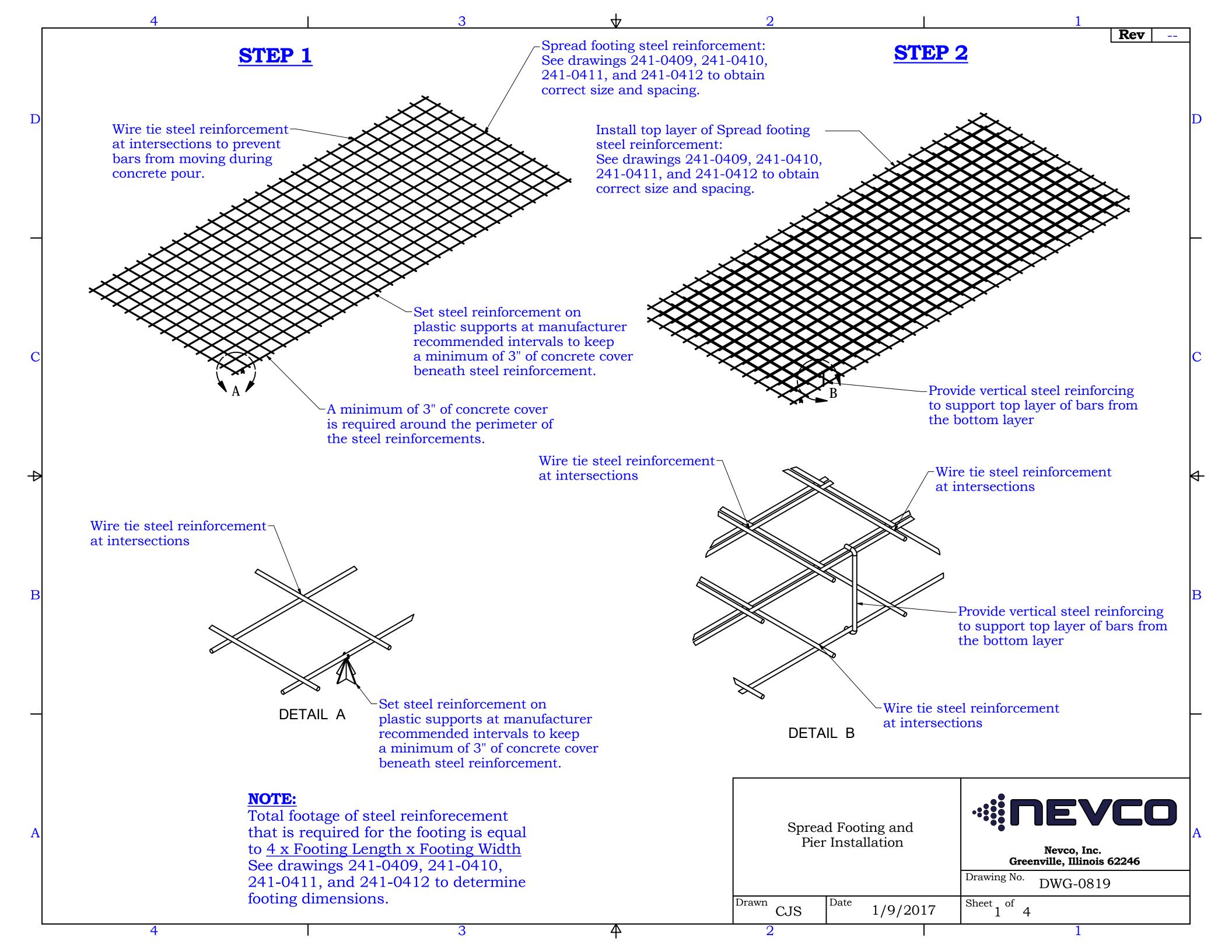
Column a Spreading Footing Foo	Steel Reinforcement #5's @12in O.C. T&B #6's @12in O.C. T&B #6's @12in O.C. T&B #7's @12in O.C. T&B #7's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&B	nts (Based of Pier and Pier and Pier Diameter A' A' A' A' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5'	on ASCE 7: d Pier Rein Quantity 24 24 24 24 30 30 30 30	Size I #6 #6 #6 #7 #7 #7	Hook	Anchors and Base Plates** Option 11 Option 10 Option 11 Option 14 Option 14	19' 21' 23' 25' 27'	30 FEET LONG	Display Height 10' 12' 14' 16' 18'	Colum W12x30 W14x34 W16x36 W14x43	Length 22 22 22 22 22			Ŭ	s (Based or Pier ar Pier	Quantity 18 18 24	nforcemen Ho	Anchors ar k th Base Plates Option 5 Option 8	19 21' 23'
Spreading Footing Foot	Footing	Pier and Pier and Pier Diameter 4' 4' 4' 4' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5'	Quantity 3 24 24 24 24 30 30 30 30	Size I #6 #6 #6 #7 #7 #7	Hook Length 9" 9" 9" 9" 11"	Option 11 Option 10 Option 10 Option 10 Option 11 Option 11	19' 21' 23' 25' 27'		Height 10' 12' 14' 16'	Colum W12x30 W14x34 W16x36 W14x43	Length 22 22 22 22 22	Footing Width 13 15 16	Footing Depth 1' 6" 1' 6"	Steel Reinforcement #4's @12in O.C. T&B #5's @12in O.C. T&B #5's @12in O.C. T&B	Pier ar Pier Diameter 3' 3' 4'	Quantity 18 18 24	nforcemen Ho Size len #5 8 #5 8 #6 9	Anchors ar k th Base Plates Option 5 Option 8	19 21' 23'
ng Footing Footing the Width Dep 16' 11' 11' 11' 16' 11' 11' 16' 12' 11' 16' 12' 11' 16' 12' 11' 16' 12' 11' 16' 12' 12' 11' 16' 12' 12' 12' 12' 12' 12' 12' 12' 12' 12	9 Steel Reinforcement #5's @12in O.C. T&B #6's @12in O.C. T&B #6's @12in O.C. T&B #7's @12in O.C. T&B #7's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&B	Pier Diameter 4' 4' 4' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5' 5'	Quantity 3 24 24 24 24 24 30 30 30 30	Size I #6 #6 #6 #7 #7 #7	Hook Length 9" 9" 9" 9" 11"	Option 11 Option 10 Option 10 Option 10 Option 11 Option 11	19' 21' 23' 25' 27'		Height 10' 12' 14' 16'	Colum W12x30 W14x34 W16x36 W14x43	Length 22 22 22 22 22	Footing Width 13' 15'	Footing Depth 1' 6" 1' 6"	Steel Reinforcement #4's @12'n O.C. T&B #5's @12'n O.C. T&B #5's @12'n O.C. T&B	Pier Diameter 3' 3' 4'	Quantity 18 18 24	Ho Size leno #5 8 #5 8 #6 9	Anchors ar k th Base Plates Option 5 Option 8	19 21' 23'
th Width Dep 16 16 1'6 17 1'6 19 1'6 21' 1'6 22' 1'6 22' 2' 22' 3'6 22' 4'3 22' 5'3	Steel Reinforcement #5's @12in O.C. T&B #6's @12in O.C. T&B #6's @12in O.C. T&B #7's @12in O.C. T&B #7's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&B	Diameter 4' 4' 4' 4' 5' 5' 5' 5' 5' 5' 5'	24 24 24 24 30 30 30 30	Size 1 #6 #6 #6 #7 #7 #7	Dength 9" 9" 9" 9" 11" 11"	Option 11 Option 10 Option 10 Option 10 Option 11 Option 11	19' 21' 23' 25' 27'		Height 10' 12' 14' 16'	Colum W12x30 W14x34 W16x36 W14x43	Length 22 22 22 22 22	Width 13' 15' 16'	Depth 1' 6" 1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B #5's @12in O.C. T&B	Diameter 3' 3' 4'	18 18 24	Size len; #5 8 #5 8 #6 9	Base Plates Option 5 Option 8	19 21' 23'
16' 1'6' 1'6' 19' 1'6' 22' 1'6' 22' 2'2' 2'2 2'3'6' 22' 2'3'6' 22' 4'3' 22' 5'3	#5's @12in O.C. T&B #6's @12in O.C. T&B #6's @12in O.C. T&B #7's @12in O.C. T&B #7's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&B	4' 4' 4' 5' 5' 5' 5' 5' 5'	24 24 24 24 30 30 30 30	#6 #6 #6 #7 #7 #7	9" 9" 9" 9" 11" 11"	Option 11 Option 10 Option 10 Option 11 Option 14	19' 21' 23' 25' 27'		10 12 14 16	W12x30 W14x34 W16x36 W14x43	22 22 22 22 22	13' 15' 16'	1' 6" 1' 6" 1' 6"	#4's @12in O.C. T&B #5's @12in O.C. T&B #5's @12in O.C. T&B	3 3 4	18 18 24	#5 8 #5 8 #6 9	th Option 5 Option 8 Option 10	19 21' 23'
17 1'6 19 1'6 21' 1'6 22' 1'6 22' 2' 22' 2'3 22' 2'3 22' 2'3 22' 2'3 22' 2'3 22' 3'6 22' 4'3 22' 5'3	#6's @12in O.C. T&B #6's @12in O.C. T&B #7's @12in O.C. T&B #7's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&B #12's @12in O.C. T&B	4' 4' 5' 5' 5' 5' 5' 5'	24 24 24 30 30 30 30 30	#6 #6 #6 #7 #7	9" 9" 9" 11"	Option 10 Option 10 Option 11 Option 14	21' 23' 25' 27'		12' 14' 16'	W14x34 W16x36 W14x43	22 22 22	15 16	1' 6" 1' 6"	#5's @12in O.C. T&B #5's @12in O.C. T&B	3' 4'	18 24	#5 8 #6 9	Option 8 Option 10	21' 23'
19 1'6 21' 1'6 22 1'6 22 2' 22 2' 22 2'3 22 2'3 22 2'3 22 2'3 36 22 4'3 22 5'3	#6's @12in O.C. T&B #7's @12in O.C. T&B #7's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&B #12's @12in O.C. T&B	4' 4' 5' 5' 5' 5' 5' 5'	24 24 30 30 30 30 30	#6 #6 #7 #7 #7	9" 9" 11" 11"	Option 10 Option 11 Option 14	23' 25' 27'		14' 16'	W16x36 W14x43	22 22	16'	1' 6"	#5's @12in O.C. T&B	4'	24	#6 9	Option 10	23'
21' 1'6' 22' 1'6' 22' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2' 2	#7's @12in O.C. T&B #7's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&B #12's @12in O.C. T&B	4' 5' 5' 5' 5' 5' 5'	24 30 30 30 30 30	#6 #7 #7 #7	9" 11" 11"	Option 11 Option 14	25' 27'		16'	W14x43	22'						_		_
22 1'6 22 2' 2' 22 2' 3'6 22 3'6 22 4'3 22 5'3	#7's @12in O.C. T&B #8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&B #12's @12in O.C. T&B	5' 5' 5' 5' 5' 5'	30 30 30 30	#7 #7 #7	11" 11"	Option 14	27'					18'	1'6"	#6's@12'nO.C. I&B	4	24	#6 9	Dotton 9	
22 2 22 23 22 26 22 36 22 43 22 53	#8's @12in O.C. T&B #8's @12in O.C. T&B #9's @12in O.C. T&B #11's @12in O.C. T&E #12's @12in O.C. T&E	5' 5' 5' 5 5'	30 30 30	#7 #7	11"				18'										25
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22' 3' 6' 22' 4' 3 22' 5' 3	#11's @12in O.C. T&E #12's @12in O.C. T&E	3 5'			11"	Option 14	31' 34'		<u>22'</u> 25'	W21x55	22 22	22' 22'	1' 6" 2'	#7's @12in O.C. T&B #8's @12in O.C. T&B	5 5		#7 11 #7 11		_
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22' 5'3				#7	11"	Option 16	44'		30 35	W18x76 W24x94		22	2 6" 3' 3"	#9's @12in O.C. T&B #10's @12in O.C. T&B	46" 5		#6 9 #7 11		_
	#123 @1211 O.C. 101			#7	11"	Option 17 Option 17	49'		40	W24x104		22	4	#12's @12in O.C. T&B			#7 11	_	_
Column a		7 7	30	#1	- ' '	Option 17	40			V VZ-4X 10-4	22	22	-	#123 @1211 O.C. 100	3	3.0	πι Ι	- CPIOT II	40
Column a																			
	d Foundation Requirement	_``								1	1			oundation Requirements				-	
	l Footing		d Pier Rein			Anchors and	Column		Diam'r.	Dwassi	Footies		Spread Fo	uiig		nd Pier Rei		Anchors ar	id Colum
ing Footing Footi	-	Pier	Oussett, I	_	Hook Length	Base Plates**	Length		Display Height	Braced		Footing Width	Footing	Steel Painforcement	Pier Diameter	Opptitu	Ho Sive Jen	I Base Plate	** Lengtl
			,	_	_	Ontion 8	17'				U								17'
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									18'	W18x50	26		1' 6"	#6's @12in O.C. T&B	4'				27'
				#7	11"	Option 14	29'	INSTALLATIONS	20'	W18x55	26'	21'	1' 6"	#7's @12in O.C. T&B	4'	24	#6 9	Option 11	29
22' 2'3	#8's @12in O.C. T&B	4'6"	27	#6	9"	Option 12	31'		22	W21x62	26'	22	1' 6"	#7's @12in O.C. T&B	5	30	#7 11	" Option 14	31'
22' 2' 6	#9's @12in O.C. T&B	5'	30	#7	11"	Option 16	34'		25'	W21x68	26'	22	2	#8's @12in O.C. T&B	5	30	#7 11	" Option 14	34'
22' 3'6	#11's @12in O.C. T&E	3 5'	30	#7	11"	Option 16	39'	<u>'</u>	30'	W24x84	26	22	2'6"	#9's @12in O.C. T&B	5	30	#7 11	" Option 16	39
22' 4'3	#12's @12in O.C. T&E	3 5'	30	#7	11"	Option 17	44'		35'	W21x101	26	22	3,3,	#10's @12in O.C. T&B	5	30	#7 11	" Option 15	44'
22' 5'3	#12's @12in O.C. T&E	3 5'	30	#7	11"	Option 18	49'		40'	W24x117	26	22	4'	#12's @12in O.C. T&B	5	30	#7 11	" Option 17	49'
Column a	d Foundation Requireme	nts (Based	on ASCE 7	-10)								Col	umn and f	oundation Requirements	(Based or	n ASCE 7-	10)	•	
Sprea	Footing	Pier an	d Pier Rein	nforcen	nent	Anaham and	Column						Spread Fo	oating	Pier ar	nd Pier Rei	nforcemen	Anchore or	d Cdum
ng Footing Footi	g	Pier			Hook				Display	Braced	Footing	Footing	Footing		Pier		Но	√ I	
th Width Dep	Steel Reinforcement	Diameter	Quantity	Size I	Length	Dase Flates	Leigin		Height	Column	Length	Width	Depth	Steel Reinforcement	Diameter	Quantity	Size len	th Daser late.	S LEA IGU
' 14' 1'6	#5's @12in O.C. T&B	3'	18	#5	8"	Option 8	17'		8'	W12x26	30'	11'	1'6"	#4's @12in O.C. T&B	3	18	#5 8	Option 5	17'
				#6	9"	Option 10	19'		10'	W14x30	30'	13'	1' 6"	#4's @12in O.C. T&B	3'				19
		5'		#7	11"	Option 14	21'			W18x35			1' 6"	#5's @12in O.C. T&B	4'				21'
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in	14' 1'6" 16' 1'6" 17' 1'6" 19' 1'6" 21' 1'6" 22' 2'3" 22' 2'3" 22' 2'6" 22' 3'6" 22' 4'3" 22' 5'3" Column an Spread g Footing Footing 1 Width Depth 14' 1'6" 16' 1'6" 17' 1'6" 19' 1'6" 22' 1'6" 22' 2'3" 22' 2'3" 22' 2'3"	14' 1' 6' #5's @12in O.C. T&B 16' 1' 6' #5's @12in O.C. T&B 17' 1' 6'' #6's @12in O.C. T&B 19' 1' 6'' #6's @12in O.C. T&B 21' 1' 6'' #6's @12in O.C. T&B 21' 1' 6'' #7's @12in O.C. T&B 22' 1' 6'' #7's @12in O.C. T&B 22' 2' #8's @12in O.C. T&B 22' 2' #8's @12in O.C. T&B 22' 2' 6'' #9's @12in O.C. T&B 22' 2' 6'' #9's @12in O.C. T&B 22' 3' 6'' #11's @12in O.C. T&B 22' 4' 3'' #12's @12in O.C. T&B 22' 5' 3'' #12's @12in O.C. T&B 22' 5' 3'' #12's @12in O.C. T&B 22' 5' 3'' #12's @12in O.C. T&B 21' 1' 6'' #5's @12in O.C. T&B 16' 1' 6'' #5's @12in O.C. T&B 17' 1' 6'' #6's @12in O.C. T&B 21' 1' 6'' #7's @12in O.C. T&B 22' 1' 6'' #7's @12in O.C. T&B 22' 1' 6'' #7's @12in O.C. T&B 22' 2' #8's @12in O.C. T&B 22' 2' #8's @12in O.C. T&B 22' 2' #8's @12in O.C. T&B 22' 2' "#8's @12in O.C. T&B 22' 2' #8's @12in O.C. T&B 22' 2' 9'' #9's @12in O.C. T&B 22' 2' 9'' #9's @12in O.C. T&B 22' 3' #8's @12in O.C. T&B	14' 1' 6' #5's @12in O.C. T&B 3' 16' 1' 6'' #5's @12in O.C. T&B 4' 17' 1' 6'' #6's @12in O.C. T&B 5' 19' 1' 6'' #6's @12in O.C. T&B 5' 21' 1' 6'' #7's @12in O.C. T&B 5' 22' 1' 6'' #7's @12in O.C. T&B 5' 22' 2' #8's @12in O.C. T&B 5' 22' 2' #8's @12in O.C. T&B 5' 22' 2' 8'' #8's @12in O.C. T&B 5' 22' 2' 6'' #9's @12in O.C. T&B 5' 22' 2' 6'' #9's @12in O.C. T&B 5' 22' 3' 6'' #11's @12in O.C. T&B 5' 22' 4' 3'' #12's @12in O.C. T&B 5' 22' 5' 3'' #12's @12in O.C. T&B 5' 21' 1' 6'' #5's @12in O.C. T&B 3' 21' 1' 6'' #5's @12in O.C. T&B 5' 22' 1' 6'' #7's @12in O.C. T&B 5' 22' 1' 6'' #7's @12in O.C. T&B 5' 22' 1' 6'' #7's @12in O.C. T&B 5' 22' 2' #8's @12in O.C. T&B 5'	14' 1'6' #5s @12in O.C. T&B 3' 18 16' 1'6' #5s @12in O.C. T&B 4' 24 17' 1'6' #6s @12in O.C. T&B 5' 30 19' 1'6' #6s @12in O.C. T&B 5' 30 19' 1'6' #7s @12in O.C. T&B 5' 30 22' 1'6' #7s @12in O.C. T&B 5' 30 22' 2' #8s @12in O.C. T&B 5' 30 22' 2' #9s @12in O.C. T&B 5' 30 22' 2' 6' #9s @12in O.C. T&B 5' 30 22' 3' #12s @12in O.C. T&B 5' 30 22' 3' #12s @12in O.C. T&B 5' 30 22' 3' #12s @12in O.C. T&B 5' 30 22' 5' #12s @12in O.C. T&B 5' 30 21' 1'6' #5s @12in O.C. T&B 3' 18 22' 1'6' #7s @12in O.C. T&B 5' 30 22' 2' #8s @12in O.C. T&B 5' 30	14' 1'6" #5s @12in O.C. T&B 3' 18 #5 16' 1'6" #5s @12in O.C. T&B 4' 24 #6 17' 1'6" #6s @12in O.C. T&B 5' 30 #7 19 1'6" #6s @12in O.C. T&B 5' 30 #7 21' 1'6" #7s @12in O.C. T&B 5' 30 #7 22 1'6" #7s @12in O.C. T&B 5' 30 #7 22 1'6" #7s @12in O.C. T&B 5' 30 #7 22 2' #8s @12in O.C. T&B 5' 30 #7 22' 2'8" #8s @12in O.C. T&B 5' 30 #7 22' 2'6" #9s @12in O.C. T&B 5' 30 #7 22' 2'6" #9s @12in O.C. T&B 5' 30 #7 22' 3'6" #11's @12in O.C. T&B 5' 30 #7 22' 3'6" #12s @12in O.C. T&B 5' 30 #7 22' 5'3" #12s @12in O.C. T&B 5' 30 #7	14' 1'6" #5s @12in O.C. T&B 3' 18 #5 8" 16' 1'6" #5s @12in O.C. T&B 4' 24 #6 9" 17 1'6" #6s @12in O.C. T&B 5' 30 #7 11" 19 1'6" #6s @12in O.C. T&B 5' 30 #7 11" 21' 1'6" #7s @12in O.C. T&B 5' 30 #7 11" 22 1'6" #7s @12in O.C. T&B 5' 30 #7 11" 22 2' #8s @12in O.C. T&B 5' 30 #7 11" 22 2' #8s @12in O.C. T&B 5' 30 #7 11" 22 2' #9s @12in O.C. T&B 5' 30 #7 11" 22 2' #9s @12in O.C. T&B 5' 30 #7 11" 22 1' 3'' #12s @12in O.C. T&B 5' 30 #7 11" 22 1' 3'' #12s @12in O.C. T&B 5' 30 #7 11" 22	Myorth Depth Steel Reinforcement Diameter Quantity Size Length 14' 1'6' #5's @12in O.C. T&B 3' 18 #5 8'' Option 8 16' 1'6' #5's @12in O.C. T&B 4' 24 #6 9'' Option 10 17' 1'6' #6's @12in O.C. T&B 5' 30 #7 11'' Option 14 19	1	Width Depth Steel Reinforcement Diameter Quantity Size Length 14	Width Depth Steel Reinforcement Diameter Quantity Size Length	Width Depth Steel Reinforcement Diameter Quantity Size Length	Width Depth Steel Reinforcement Dameter Quantity Size Length 14	Width Depth Steel Reinforcement Danneter (Quantity Size Length 14" 11 6" #5\$ @12a O.C. T&B 3	Width Depth Steel Reinforcement Diameter Quantity Size Length	Windson Depth Steel Reinforcement Dameter Cuentity Size Length	Width Depth Steel Reinforcement Dameter Quantity Size Length 14 1° 4° 5° 5° 10° 10° 18° 18° 18° 18° 18° 10° 19° 16° 46° 18° 12° 10° 18° 18° 18° 10° 10° 19° 10° 18° 18° 12° 10° 18° 18° 12° 10° 18° 18° 12° 10° 18° 18° 12° 10° 18° 18° 12° 10° 18° 18° 12° 12° 12° 12° 10° 18° 18° 12	With Depth Steel Reinforcement Dameter Quantity Size Length 14 16 45 58 210 CC. T8B 3 18 45 8 Option 10 19	Width Depth Steel Reinforcement Dameter Quantity Size Length	Width Depth Steel Rentrocement Dameter Cuentity Size Length

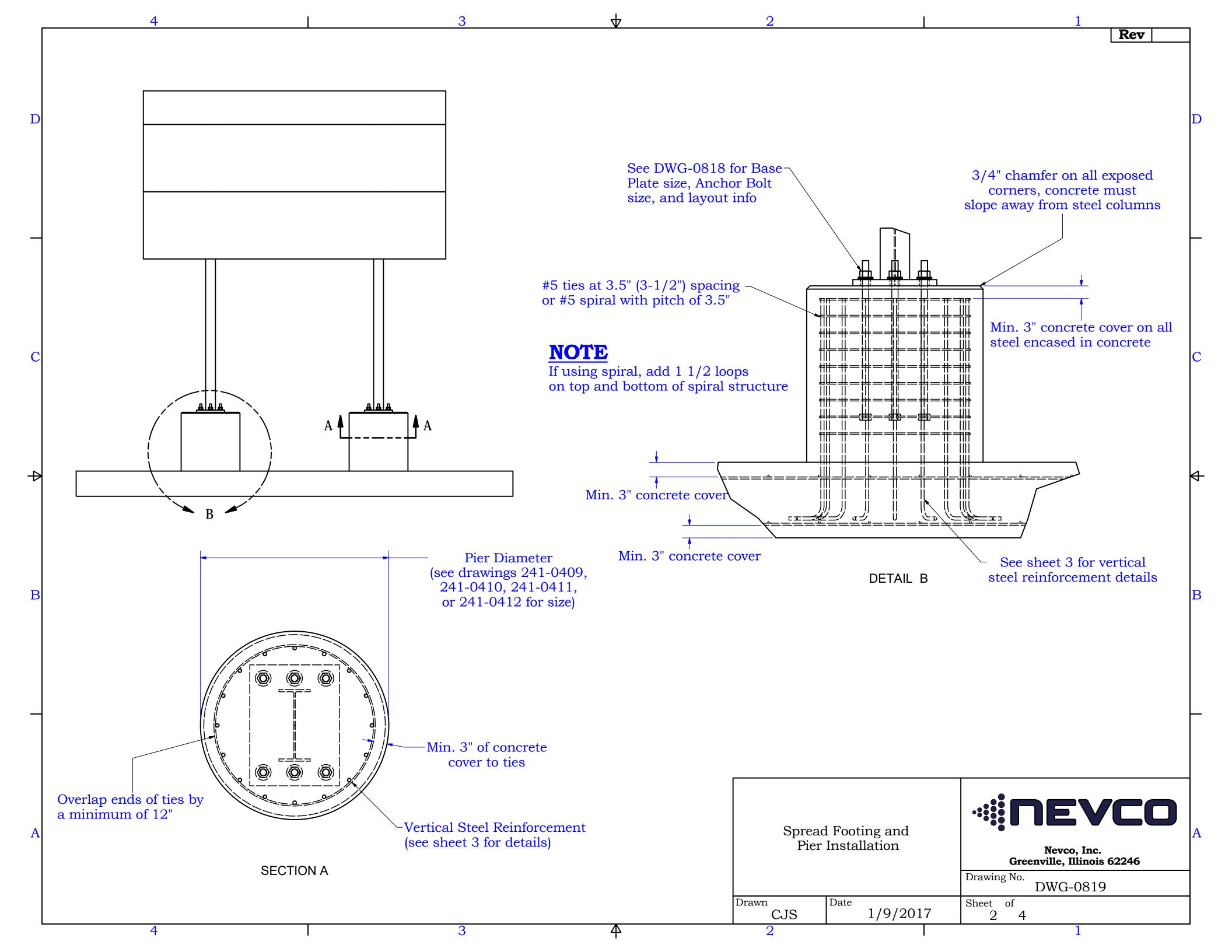


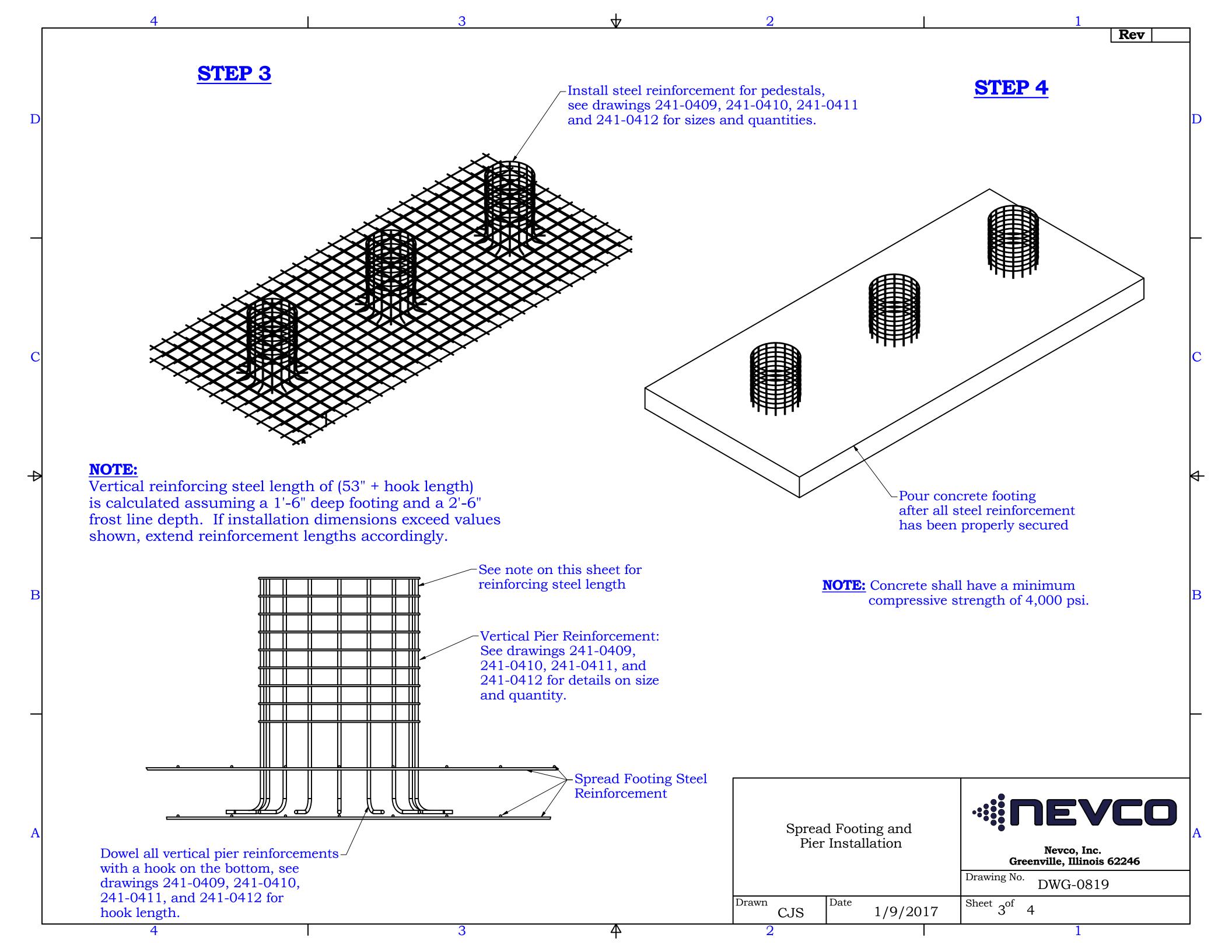
			Base P		Fillet Weld Size			
					Hole S	pacing		
Option #	Length	Width	Thickness	Hole Dia.	Dim "A"	Dim "B"	Flange	Web
Option 1	16"	12"	1 1/2"	2 1/16"	2"	12"	0.188"	0.188"
Option 2	19"	15"	1 3/4"	2 5/16"	3"	13"	0.25"	0.188"
Option 3	19"	15"	1 1/2"	2 1/16"	3"	13"	0.188"	0.188"
Option 4	26"	20"	2 1/4"	2 3/4"	4"	18"	0.313"	0.25"
Option 5	20"	16"	1 3/4"	2 5/16"	2.5"	15"	0.188"	0.188"
Option 6	24"	22"	2"	2 3/4"	4"	16"	0.25"	0.188"
Option 7	29"	27"	2 3/4"	3 1/4"	4.5"	9"	0.313"	0.25"
Option 8	20"	16"	1 1/2"	2 1/16"	2"	16"	0.25"	0.188"
Option 9	25"	21"	2 1/4"	2 3/4"	3"	7.5"	0.313"	0.25"
Option 10	28"	20"	2 1/4"	2 5/16"	3"	7"	0.25"	0.188"
Option 11	31"	24"	2 1/2"	3 1/4"	3.5"	17"	0.25"	0.188"
Option 12	34"	28"	3"	3 1/4"	4"	10"	0.25"	0.188"
Option 13	36"	33"	3 3/4"	3 1/4"	4.5"	8"	0.313"	0.313"
Option 14	36"	28"	2 3/4"	3 1/4"	4"	20"	0.25"	0.188"
Option 15	38"	32"	3 1/2"	3 1/4"	4"	8"	0.313"	0.313"
Option 16	38"	31"	3 1/2"	3 1/4"	3.5"	8"	0.313"	0.25"
Option 17		Cuctom	Base Plate	Decian De	cuired.		0.313"	0.25"
Option 18		Custonii	Dast Fialt	Design Ne	quiicu		0.313"	0.313"

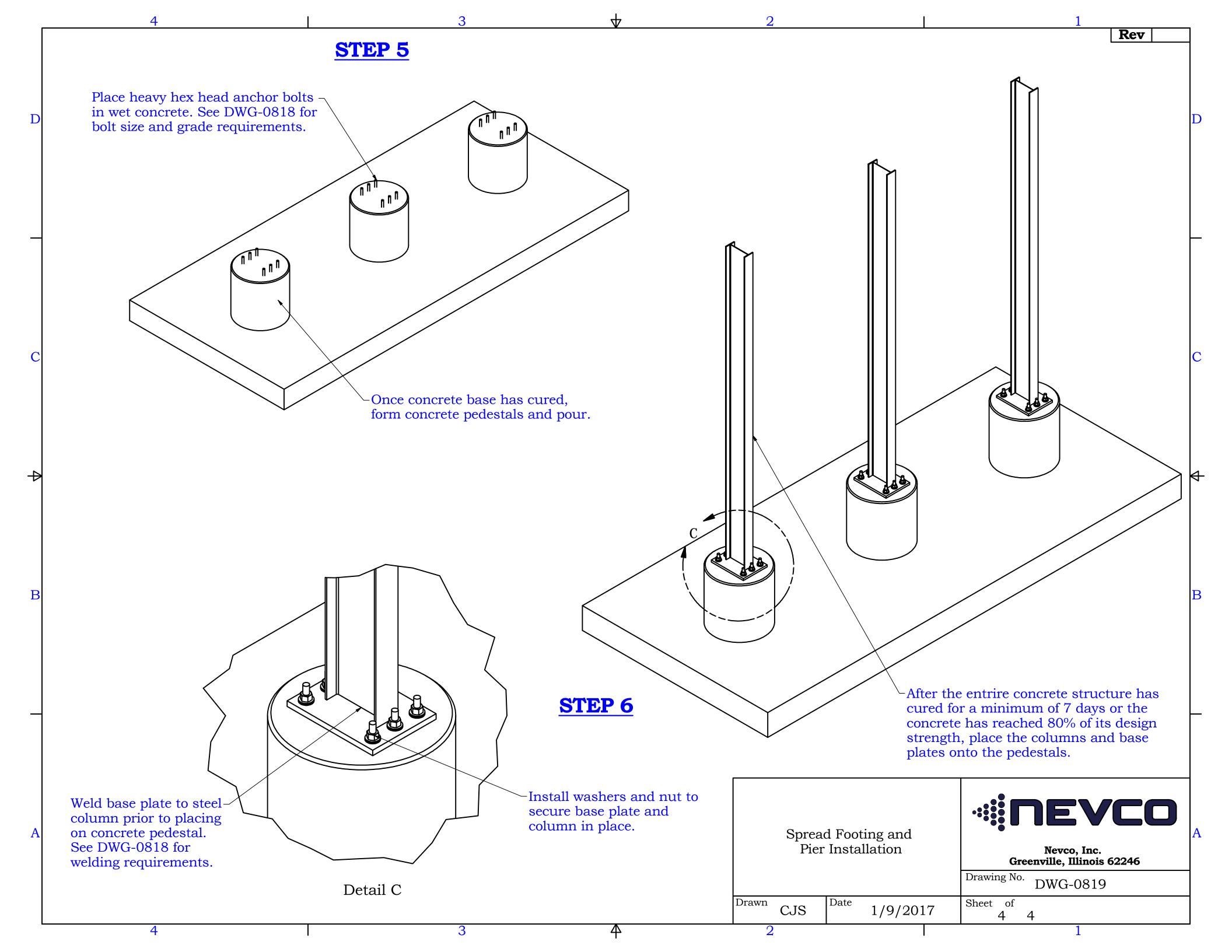
	Hea	vy Hex He	ad Anchor B	olt (Nut and W	asher)
Option #	Quantity (per pier)	Size	Anchor Bolt Length	Min. Washer Dimension (Diameter)	Min. Washer Thickness (Stacked)
Option 1	4	1 1/8"	28.5*	3"	1/2"
Option 2	4	1 1/2"	36"	3 1/2"	1/2"
Option 3	4	1 1/4"	31"	3"	1/2"
Option 4	4	1 3/4"	41"	4"	5/8"
Option 5	4	1 3/8"	33.5"	3 1/2"	1/2"
Option 6	4	1 3/4"	41"	4"	5/8"
Option 7	6	2**	46"	5"	3/4"
Option 8	4	1 1/8"	34.5"	3"	1/2"
Option 9	6	1 3/4"	41"	4"	5/8"
Option 10	6	1 1/2"	36"	3 1/2"	1/2"
Option 11	4	2**	46"	5"	3/4"
Option 12	6	2**	46"	5*	3/4"
Option 13	8	2**	46"	5"	3/4"
Option 14	4	2**	46"	5"	3/4"
Option 15	8	2**	46"	5"	3/4"
Option 16	8	2"	46"	5"	3/4"
Option 17 Option 18		Custo	om Anchor Des	ign Required	

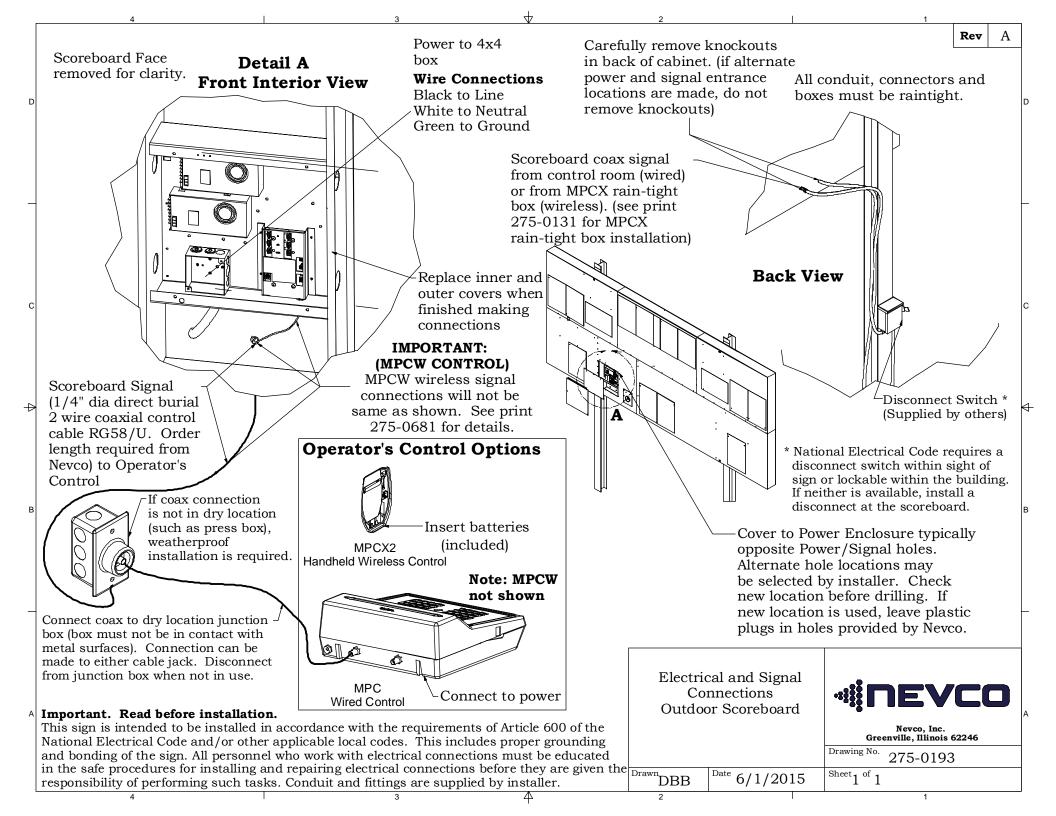


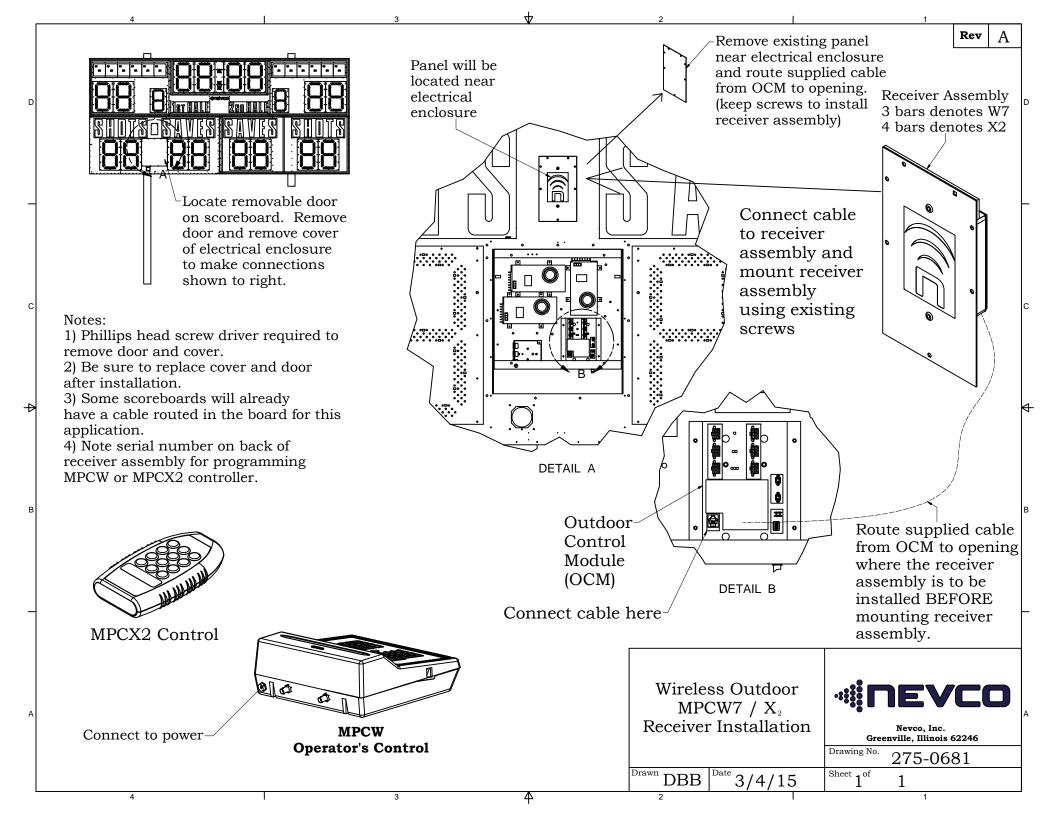


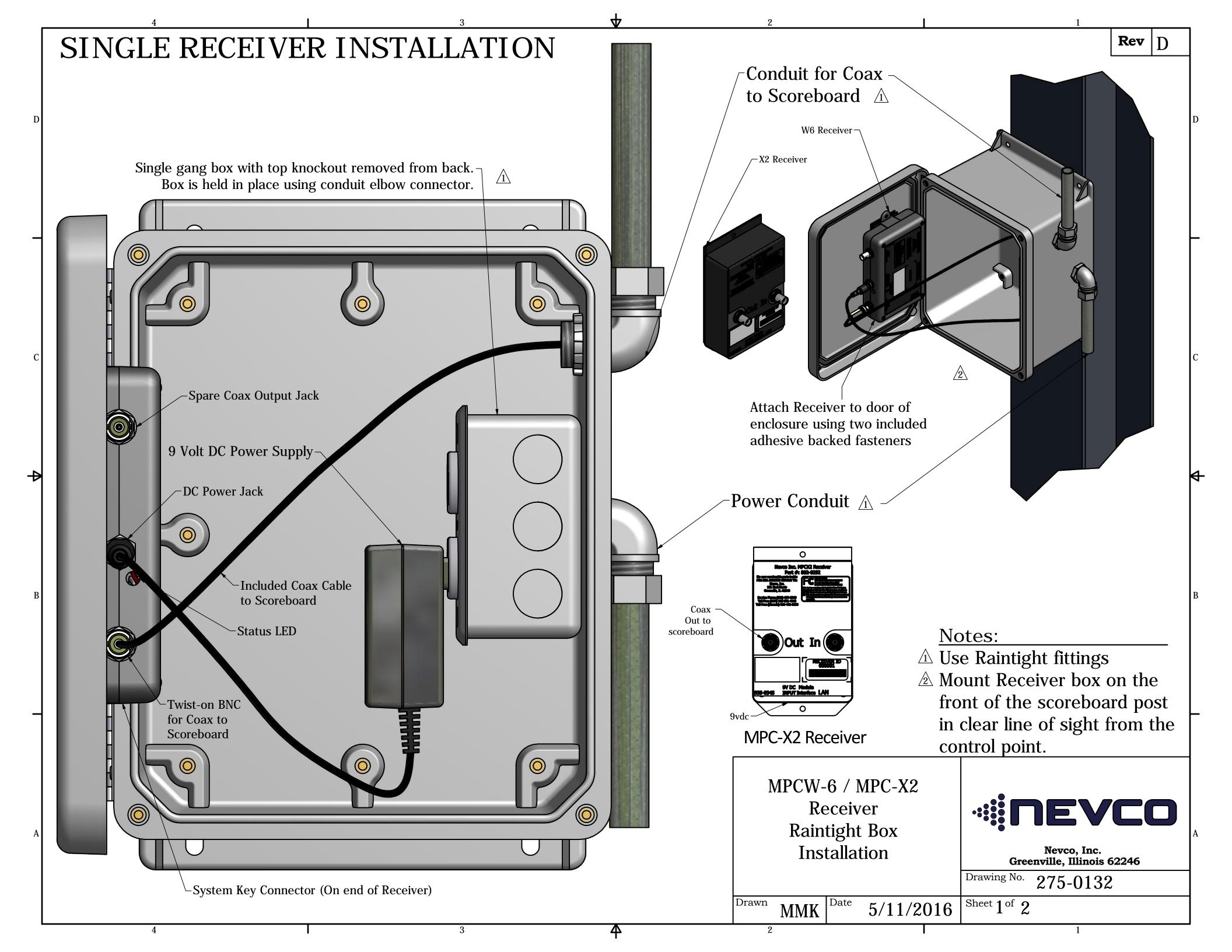


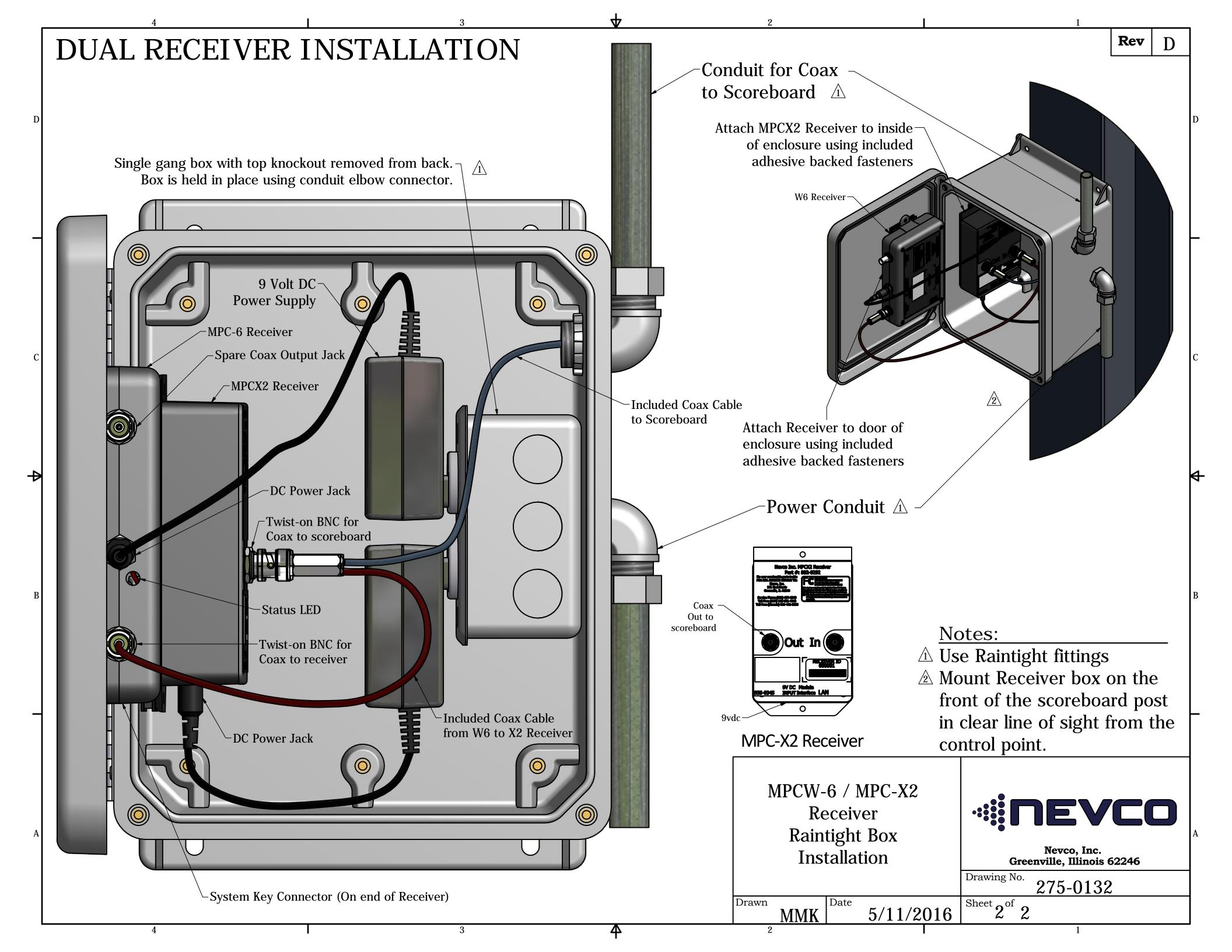


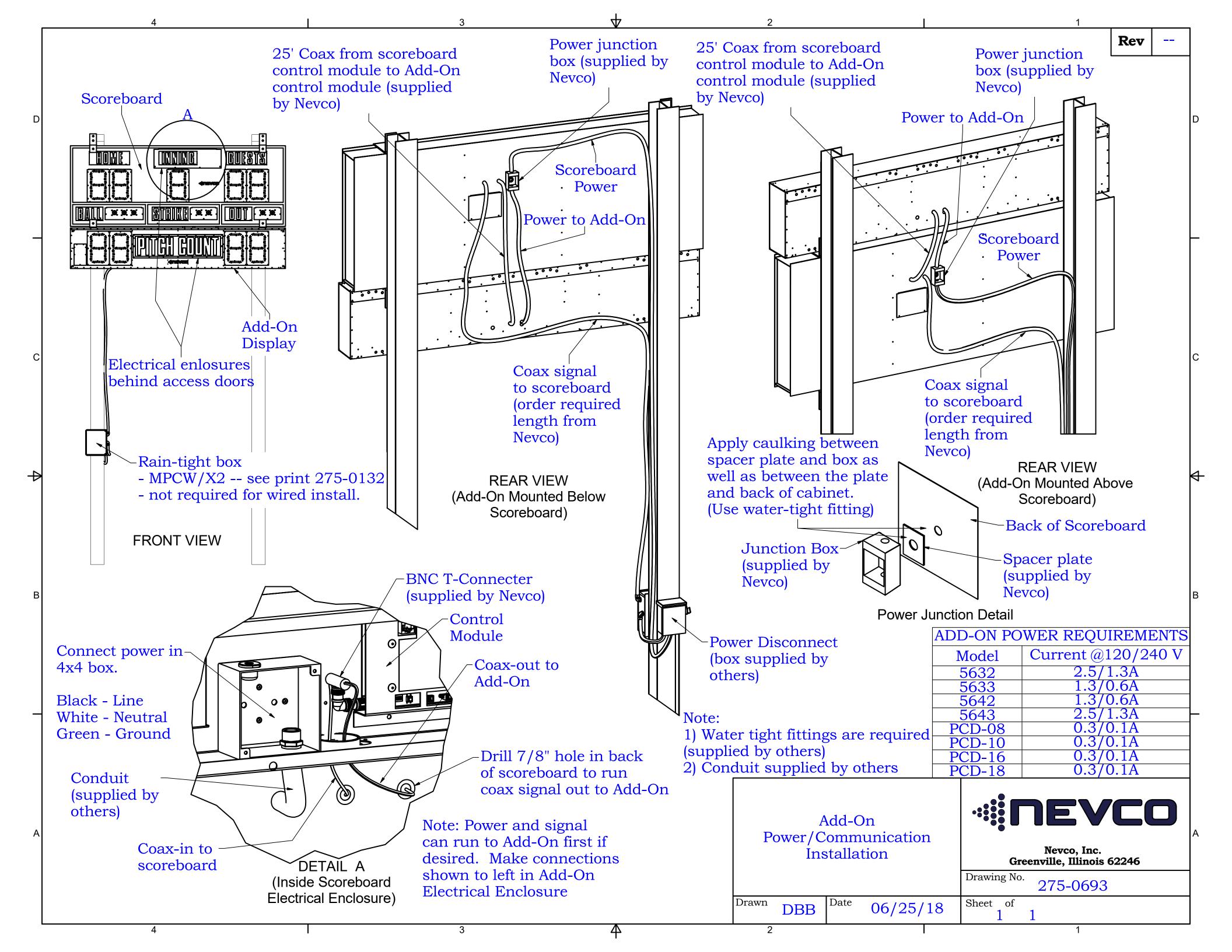








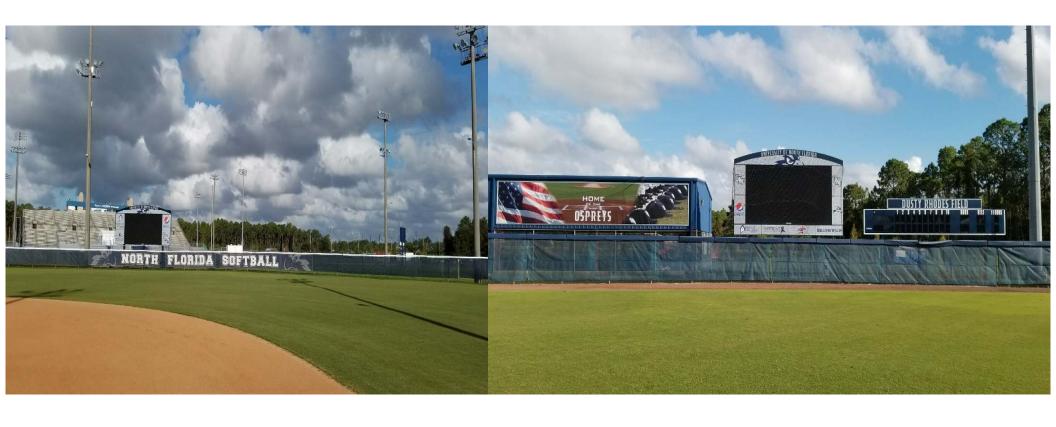




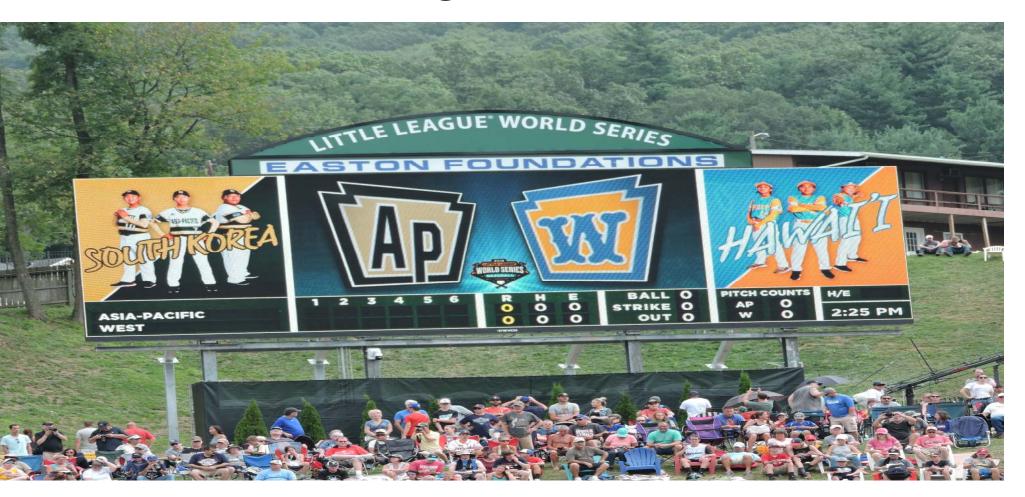
University of North Florida



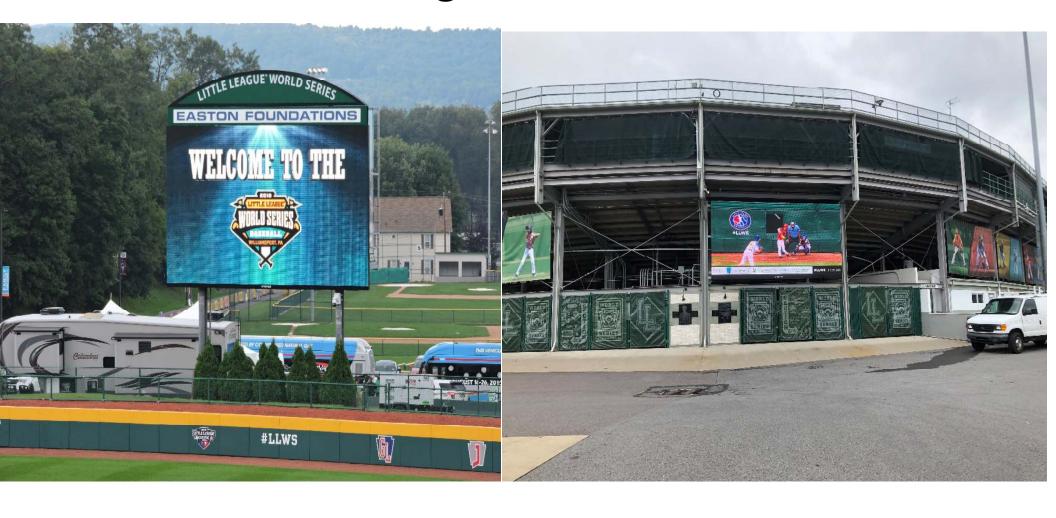
University of North Florida



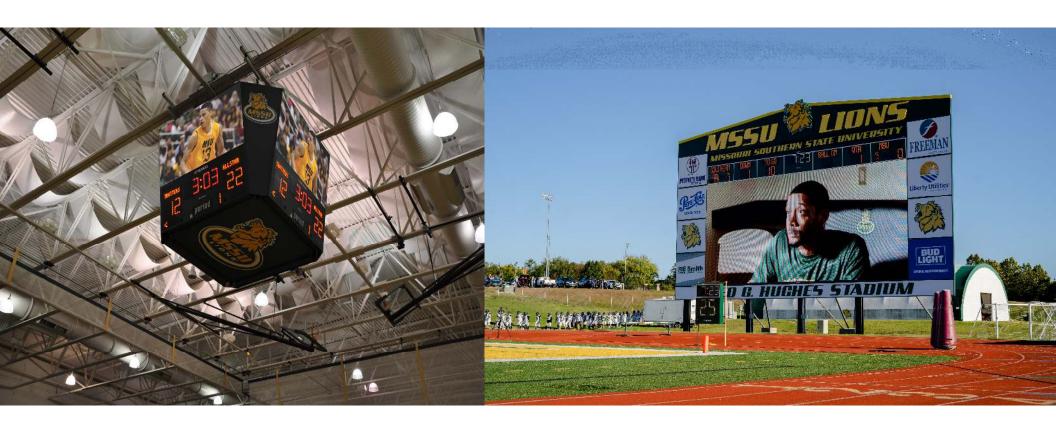
Little League World Series



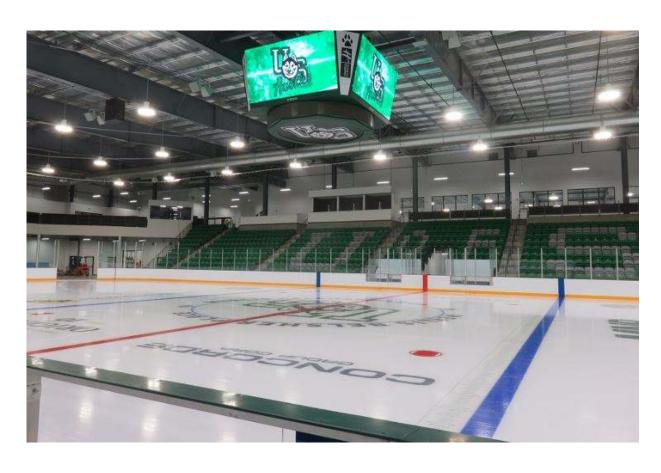
Little League World Series



Missouri Southern State University



University of Saskatchewan



Effingham High School





ATTACHMENT C: REQUIRED BIDDER INFORMATION & CERTIFICATIONS EQUALIS GROUP: SCOREBOARDS, DIGITAL DISPLAYS, AND AUDIO SYSTEMS WITH RELATED SERVICES & SOLUTIONS PROGRAM

Purpose of this <u>Attachment C</u>: CCOG requires the following information about Bidders who submit proposals in response to any CCOG request for proposal ("RFP") in order to facilitate the execution of the master group purchasing agreement ("Master Agreement") with the winning supplier ("Winning Supplier"). CCOG reserves the right to reject a Bidder's proposal if a Bidder fails to provide this information fully, accurately, and by the deadline set by CCOG in <u>RFP Section 1.3 – Anticipated Procurement Timetable</u>. Further, some of this information (as identified below) must be provided in order for CCOG to accept and consider a Bidder's proposal. Failure to provide such required information may result in a Bidder's proposal being deemed nonresponsive to this RFP.

Instructions: provide the following information about the Bidder. Bidders may a) complete this document in Microsoft Word by completing the form fields, print this attachment, and sign it in the designated signature areas, b) complete this document using the form fields, print to .pdf, and provide certified electronic signatures in the designated signature areas, or c) print this attachment, complete it, and sign it in the designated signature areas. It is mandatory that the information provided is certified with an original signature (in blue ink, please) or signed using a certified electronic signature by a person with sufficient authority and/or authorization to represent Bidder. Bidders are to provide the completed and signed information and certifications in **Tab** 1 of the Technical Proposal submitted to CCOG as described in **RFP Section 4.2 – Format for Organization of the Proposal**.

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Bidders must provide all the information outlined below

1. Equalis Group RFP Name:	2. Proposal Due Date:
<u>RFP # COG-2103</u>	September 3, 2020
3. Bidder Name:	4. Bidder Federal Tax ID # or Social Security #:
Nevco Sports, LLC (legal name of the entity responding to RFP)	<u>82-2233879</u>
5. Bidder Corporate Address:	6. Bidder Remittance Address (or "same" if same as Item #5):
301 East Harris Ave.	Same
Greenville, IL 62246	Canc

7. Print or type information about the Bidder representative/contact person <u>authorized to answer questions</u> regarding the proposal submitted by your company:

Bidder Representative: <u>Eric Light</u>

Representative's Title: VP Sales and Marketing

Address 1: <u>301 East Harris Ave.</u>

Address 2:

City, State Zip: Greenville, IL 62246

Phone #: <u>618-699-1750</u> Fax #: <u>618-664-0398</u>

E-Mail Address: <u>elight@nevco.com</u>

8. Print or type the name of the Bidder representative <u>authorized to address contractual issues, including the authority to execute a contract on behalf of Bidder, and to whom legal notices regarding contract termination or breach, should be sent (if not the same individual as in #7, provide the following information on each such representative and specify their function):</u>

Bidder Representative: Eric Light

Representative's Title: VP Sales and Marketing

Address 1: 301 East Harris Ave.

Address 2:

City, State Zip: Greenville, IL 62246

Phone #: <u>618-699-1750</u> Fax #: 618-664-0398

E-Mail Address: elight@nevco.com



9.	Is this Bidder an Ohio certified Minority Business Enterprise ("MBE")? Yes No X
<u>الد</u>	
іт у	es, attach a copy of current certification to your proposal as an appendix in the third section of your proposal.
10.	Mandatory Supplier Certifications:
	DG may not enter into contracts with any suppliers who have been found to be ineligible for state contracts under specific
	eral or Ohio statutes or regulations. Bidders responding to any CCOG RFP MUST certify that they are NOT ineligible by
	ing each of the four statements below. Failure to provide proper affirming signature on any of these statements will alt in a Bidder's proposal being deemed nonresponsive to this RFP.
	· ·
	Ein Sight
	U
l, _ affi	(insert <u>signature</u> of representative shown in Item #7 above), hereby certify and rm that Bidder Name (insert Bidder <u>name</u> as shown in Item #3 above), has not been debarred, suspended, proposed
	debarment, declared ineligible, or voluntarily excluded from participation in transactions by the Unites States
Dep	partment of Labor, the United States Department of Health and Human Services, or any other federal department
or a	gency as set forth in 29 CFR Part 98, or 45 CFR Part 76, or other applicable statutes.
^	<u>AND</u>
	is Light
Ш	
l, _	(insert <u>signature</u> of representative shown in Item #7 above), hereby certify and
	I'm that Bidder Name (insert Bidder <u>name</u> as shown in Item #3 above), is in compliance with all federal, state, and all laws, rules, and regulations, including but not limited to the Occupational Safety and Health Act and the Ohio
	eau of Employment Services and the following:
	• Not penalized or debarred from any public contracts or falsified certified payroll records or any other violation of the Fair Labor Standards Act in the last three (3) years;
	Not found to have violated any worker's compensation law within the last three (3) years;
	 Not violated any employee discrimination law within the last three (3) years;
	• Not have been found to have committed more than one (1) willful or repeated OSHA violation of a safety standard (as opposed to a record keeping or administrative standard) in the last three (3) years;
	• Not have an Experience Modification Rating of greater than 1.5 (a penalty-rated employer) with respect to the Bureau of Workers' Compensation risk assessment rating; and
	• Not have failed to file any required tax returns or failed to pay any required taxes to any governmental entity within the past three (3) years.
	<u>AND</u>
Cu	i Light
ı	(insert <u>signature</u> of representative shown in Item #7 above) hereby certify and affirm
tha	: Bidder Name (insert Bidder name as shown in Item #3 above), is not on the list established by the Ohio Secretary
	state, pursuant to ORC Section 121.23, which identifies persons and businesses with more than one unfair labor ctice contempt of court finding against them.
	<u>AND</u>
	G Ly
I	(insert <u>signature</u> of representative shown in Item #7 above) hereby certify and affirm
tha	Bidder Name (insert Bidder name as shown in Item #3 above), either is not subject to a finding for recovery under



ORC Section 9.24, or has taken appropriate remedial steps required under that statute to resolve any findings for recovery, or otherwise qualifies under that section to enter into contracts with CCOG. 11. Supplemental Bidder Contract and Equal Employment Opportunity Information: Α. Provide data on Bidder employees both nationwide (inclusive of Ohio staff) and the number of Ohio employees: Nationwide: Ohio Offices: **Total Number of Employees:** 200 108 % of those who are Women: 15% 210% 5 % % of those who are Minorities: 0% B. If you are selected as the Winning Supplier and this RFP involves the provision of services to Equalis Group Members, will you subcontract any part of the work? NO -or-X YES, but for less than 50% of the work -or- Only Installation If Required YES, for 50% or more of the work C. If any part of your proposal would be performed by any subcontractors, provide the following **information on each subcontractor** (additional pages may be added as needed): **Subcontractor Name:** We use hundreds of installers to complete our installations. There are too many to fill this information out for. Street Address 1: Street Address 1 Street Address 2: Street Address 2 City, State Zip: City, State Zip Work to be Performed: Description of Work Estimated percentage of total proposal to be performed by subcontractors: 5 % (Do NOT show dollar amounts here; show % of WORK sub-contractors will perform/provide). Define the part of the work that will be performed by each subcontractor. **Subcontractor's employee information** (attach additional pages if needed): Nationwide: Ohio Offices: **Total Number of Employees:** % of those who are Women: % of those who are Minorities: 12. Bidder has reviewed the Model Master Agreement attached to the RFP as Attachment E, and if awarded a

contract, X Bidder will not (or) Bidder will request changes to the standard language and has marked the requested changes and returned the model document with this proposal for consideration by CCOG and Equalis Group, LLC. (All requested changes to Model Master Agreement contract language are subject to negotiation and CCOG and Equalis Group, LLC approval.)

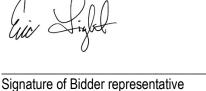
13. Bidder has reviewed the Model Administration Agreement attached to the RFP as Attachment E, and if awarded a contract, X Bidder will not (or) Bidder will request changes to the standard language and has marked the



	requested changes and returned the model document with this proposal for consideration by Equalis Group, LLC. (All requested changes to Model Administration Agreement contract language are subject to negotiation and Equalis Group, LLC approval.)
	above) hereby affirm that this proposal accurately represents the capabilities and qualifications of Bidder Name (insert Bidder name as shown in item #3, above), and I hereby affirm that the cost(s) proposed to CCOG for the performance of services and/or provision of goods covered in this proposal in response to this CCOG RFP is a firm fixed price structure as described in the Cost Proposal, inclusive of all incidental as well as primary costs. (Failure to provide the proper affirming signature on this item may result in the disqualification of your proposal.)
15.	Additional Documents:
inclu	OG makes every attempt to meet the varying legal requirements of public agencies across the country. The documents ided in this section are intended to give our contracts the broadest geographic reach by meeting the procurement irements of other states outside of Ohio.
	15.1. Lobbying Certification
Subi Title was	mission of this certification is a prerequisite for making or entering into this transaction and is imposed by Section 1352, 31, U.S. Code. This certification is a material representation of fact upon which reliance was placed when this transaction made or entered into. Any person who fails to file the required certification shall be subject to civil penalty of not less ten thousand dollars (\$10,000) and not more than one hundred thousand dollars (\$100,000) for each such failure.
The	undersigned certifies, to the best of his/her knowledge and belief, on behalf of Bidder that:
or at or a gran	lo Federal appropriated funds have been paid or will be paid on behalf of the undersigned, to any person for influencing tempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, n employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal t, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, ndment, or modification of a Federal contract, grant, loan, or cooperative agreement.
to in emp	f any funds other than Federal appropriated funds have been or will be paid to any person for influencing or attempting ifluence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an loyee of a Member of Congress in connection with this Federal contract or cooperative agreement, the undersigned shall plete and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
sub- recip	The undersigned shall require that the language of this certification be included in the award documents for all covered awards exceeding one hundred thousand dollars (\$100,000) in Federal funds at all appropriate tiers and that all subsients shall certify and disclose accordingly.
Sign	ature of Bidder representative
	15.2. Boycott Certification
	er must certify that during the term of any Agreement, it does not boycott Israel and will not boycott Israel, "Boycott"

Bidder must certify that during the term of any Agreement, it does not boycott Israel and will not boycott Israel. "Boycott" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.





15.3. Federal Funds Certification Form (EDGAR)

When a participating agency seeks to procure goods and services using funds under a federal grant or contract, specific federal laws, regulations, and requirements may apply in addition to those under state law. This includes, but is not limited to, the procurement standards of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, 2 CFR 200 (sometimes referred to as the "Uniform Guidance" or "EDGAR" requirements). All bidders submitting proposals must complete this Federal Funds Certification Form regarding bidder's willingness and ability to comply with certain requirements which may be applicable to specific participating agency purchases using federal grant funds. This completed form will be made available to Members for their use while considering their purchasing options when using federal grant funds. Members may also require Supplier Partners to enter into ancillary agreements, in addition to the contract's general terms and conditions, to address the member's specific contractual needs, including contract requirements for a procurement using federal grants or contracts.

For each of the items below, respondent should certify bidder's agreement and ability to comply, where applicable, by having respondents authorized representative complete and initial the applicable lines after each section and sign the acknowledgment at the end of this form. If a respondent fails to complete any item in this form, CCOG will consider the respondent's response to be that they are unable or unwilling to comply. A negative response to any of the items may, if applicable, impact the ability of a participating agency to purchase from the Supplier Partner using federal funds.

15.3.1. Supplier Partner Violation or Breach of Contract Terms

Contracts for more than the simplified acquisition threshold currently set at one hundred fifty thousand dollars (\$150,000), which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 USC 1908, must address administrative, contractual, or legal remedies in instances where Supplier Partners violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Any contract award will be subject to Terms and Conditions of the Master Agreement, as well as any additional terms and conditions in any purchase order, participating agency ancillary contract, or Member construction contract agreed upon by Supplier Partner and the participating agency which mut be consistent with and protect the participating agency at least to the same extent as the CCOG Terms and Conditions.

The remedies under the contract are in addition to any other remedies that may be available under law or in equity. By submitting a proposal, you agree to these Supplier Partner violation and breach of contract terms.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.2. Termination for Cause or Convenience

When a participating agency expends federal funds, the participating agency reserves the right to immediately terminate any agreement in excess of ten thousand dollars (\$10,000) resulting from this procurement process in the event of a breach or default of the agreement by Offeror in the event Offeror fails to: (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. Participating agency also reserves the right to terminate the contract immediately, with written notice to offeror, for convenience, if participating agency believes, in its sole discretion that it is in the best interest of participating agency to do so. Bidder will be compensated for work performed and accepted and goods accepted by participating agency as of the termination date if the contract is terminated for



convenience of participating agency. Any award under this procurement process is not exclusive and participating agency reserves the right to purchase goods and services from other offerors when it is in participating agency's best interest.

Does Supplier Partner agree? <u>EL</u>
(Initials of Authorized Representative)

15.3.3. Equal Employment Opportunity

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR Part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

The equal opportunity clause provided under 41 CFR 60-1.4(b) is hereby incorporated by reference. Supplier Partner agrees that such provision applies to any participating agency purchase or contract that meets the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 and Supplier Partner agrees that it shall comply with such provision.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.4. Davis-Bacon Act

When required by Federal program legislation, Supplier Partner agrees that, for all participating agency prime construction contracts/purchases in excess of two thousand dollars (\$2,000), Supplier Partner shall comply with the Davis-Bacon Act (40 USC 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, Supplier Partner is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determinate made by the Secretary of Labor. In addition, Supplier Partner shall pay wages not less than once a week.

Current prevailing wage determinations issued by the Department of Labor are available at www.wdol.gov. Supplier Partner agrees that, for any purchase to which this requirement applies, the award of the purchase to the Supplier Partner is conditioned upon Supplier Partner's acceptance of the wage determination.

Supplier Partner further agrees that it shall also comply with the Copeland "Anti-Kickback" Act (40 USC 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States". The Act provides that each Supplier Partner or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.5. Contract Work Hours and Safety Standards Act

Where applicable, for all participating agency contracts or purchases in excess of one hundred thousand dollars (\$100,000) that involve the employment of mechanics or laborers, Supplier Partner agrees to comply with 40 USC 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 USC 3702 of the Act, Supplier Partner is required to compute the wages of every mechanic and laborer on the basis of a standard work week of forty (40) hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of forty (40) hours in the work week. The requirements of 40 USC 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply



to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.6. Right to Inventions Made Under a Contract or Agreement

If the participating agency's Federal award meets the definition of "funding agreement" under 37 CFR 401.2(a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

Supplier Partner agrees to comply with the above requirements when applicable.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.7. Clean Air Act and Federal Water Pollution Control Act

Clean Air Act (42 USC 7401-7671q.) and the Federal Water Pollution Control Act (33 USC 1251-1387), as amended – Contracts and subgrants of amounts in excess of one hundred fifty thousand dollars (\$150,000) must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 USC 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 USC 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

When required, Supplier Partner agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act and the Federal Water Pollution Control Act.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.8. Debarment and Suspension

Debarment and Suspension (Executive Orders 12549 and 12689) – A contract award (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3CFR Part 1989 Comp. p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Supplier Partner certifies that Supplier Partner is not currently listed on the government-wide exclusions in SAM, is not debarred, suspended, or otherwise excluded by agencies or declared ineligible under statutory or regulatory authority other than Executive Order 12549. Supplier Partner further agrees to immediately notify the Cooperative and all Members with pending purchases or seeking to purchase from Supplier Partner if Supplier Partner is later listed on the government-wide exclusions in SAM, or is debarred, suspended, or otherwise excluded by agencies or declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.9. Byrd Anti-Lobbying Amendment



Byrd Anti-Lobbying Amendment (31 USC 1352) – Supplier Partners that apply or bid for an award exceeding one hundred thousand dollars (\$100,000) must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 USC 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. As applicable, Supplier Partner agrees to file all certifications and disclosures required by, and otherwise comply with, the Byrd Anti-Lobbying Amendment (31 USC 1352).

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.10. Procurement of Recovered Materials

For participating agency purchases utilizing Federal funds, Supplier Partner agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency may require to confirm estimates and otherwise comply. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds ten thousand dollars (\$10,000) or the value of the quantity acquired during the preceding fiscal year exceeded ten thousand dollars (\$10,000); procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.11. Profit as a Separate Element of Price

For purchases using federal funds in excess of one hundred fifty thousand dollars (\$150,000), a participating agency may be required to negotiate profit as a separate element of the price. See, 2 CFR 200.323(b). When required by a participating agency, Supplier Partner agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, Supplier Partner agrees that the total price, including profit, charged by Supplier Partner to the participating agency shall not exceed the awarded pricing, including any applicable discount, under Supplier Partner's Group Purchasing Agreement.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.12. General Compliance and Cooperation with Members

In addition to the foregoing specific requirements, Supplier Partner agrees, in accepting any purchase order from a Member, it shall make a good faith effort to work with Members to provide such information and to satisfy such requirements as may apply to a particular participating agency purchase or purchases including, but not limited to, applicable recordkeeping and record retention requirements.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)

15.3.13. Applicability to Subcontractors

Offeror agrees that all contracts it awards pursuant to the Contract shall be bound by the foregoing terms and conditions.

Does Supplier Partner agree? EL

(Initials of Authorized Representative)



By signature below, I certify that the information in this form is true, complete, and accurate and that I am authorized by my company to make this certification and all consents and agreements contained herein.

Eric Light Bidder Name

Signature of Authorized Company Official

Eric Light Printed Name

VP Sales and Marketing

Title

September 3, 2020

Date

16. Required Documents for Supplier Partners Intending to Do Business in New Jersey

16.1. Ownership Disclosure Form

Pursuant to the requirements of P.L. 1999, Chapter 440 effective April 17, 2000 (Local Public Contracts Law), Bidder shall complete the form attached to these specifications listing the persons owning 10 percent (10%) or more of the firm presenting the proposal.

Bidder Name: Nevco Sports, LLC

Street Address: 301 East Harris Ave.

City, State Zip: <u>Greenville, IL 62246</u>

Complete as appropriate:

I <u>Click or tap here to enter text.</u>, certify that I am the sole owner of <u>Click or tap here to enter text.</u>, that there are no partners and the business is not incorporated, and the provisions of N.J.S. 52:25-24.2 do not apply.

OR:

I <u>Click or tap here to enter text.</u>, a partner in <u>Click or tap here to enter text.</u>, do hereby certify that the following is a list of all individual partners who own a 10 percent (10%) or greater interest therein. I further certify that if one (1) or more of the partners is itself a corporation or partnership, there is also set forth the names and addresses of the stockholders holding 10 percent (10%) or more of that corporation's stock or the individual partners owning 10% or greater interest in that partnership.

OR:

I <u>Eric Light</u>, an authorized representative of <u>Nevco Sports, LLC</u>, a corporation, do hereby certify that the following is a list of the names and addresses of all stockholders in the corporation who own 10% or more of its stock of any class. I further certify that if one (1) or more of such stockholders is itself a corporation or partnership, that there is also set forth the names and addresses of the stockholders holding 10 percent (10%) or more of the corporation's stock or the individual partners owning a 10 percent (10%) or greater interest in that partnership.



(Note: If there are no partners or stockholders owning 10% or more interest, indicate none.)

NAME	ADDRESS	% INTEREST
Dominus Capital, LLC	1325 Avenues of the America 26 th Floor, New York, NY 10019	75 %
Scott and Gayla Moore	1111 Ritz Carleton Drive, Sarasota, FL 34236	15 %
Click or tap here to enter text.	Click or tap here to enter text.	
Click or tap here to enter text.	Click or tap here to enter text.	
Click or tap here to enter text.	Click or tap here to enter text.	

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

Authorized Signature and Title	Sept 3, 2020 Date
	Sept 3, 2020
0	

16.2. Non-Collusion Affidavit (to be completed and included with each proposal submitted to Members in NJ)

Date

Bidder Name: Nevco Sports, LLC

Street Address: 301 East Harris Ave.

City, State Zip: Greenville, IL 62246

State of New Jersey

County of Customer County

I, Eric Light of the City of Greenville in the County of Bond, State of Illinois of full age, being duly sworn according to law on my oath depose and say that:

I am the VP of Sales and Marketing of the firm of Nevco Sports, LLC, the Bidder making the proposal for the goods, services, or public work specified under the attached proposal, and that I executed the said proposal with full authority to do so; that said respondent has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above proposal, and that all statements contained in said bid proposal and in this affidavit are true and correct, and made with full knowledge that the Customer Name relies upon the truth of the statements contained in said bid proposal and in the statements contained in this affidavit in awarding the contract for the said goods, services, or public work.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by:

Nevco Sports, LLC



Authorized Signature			
<u>Title</u>			
Subscribed and sworn bef	ore me		
this day of	, 20		
Notary Public of New Jers My commission expires	ey , 20		
SEAL			
16.3. Affirmative Ac (P.L. 1975, C.127)	tion Affidavit		
Bidder Name:	Nevco Sports, LLC		
Street Address:	301 East Harris Ave.		
City, State Zip:	Greenville, IL 62246		
	o <u>n:</u> liance with New Jersey Affirmative this time. No contract and/or purch		
Required Affirmative Act Procurement, Professional	tion Evidence: Il & Service Contracts (Exhibit A)		
Supplier Partners must su	bmit with proposal:		
1. A photocopy of their <u>F</u>	ederal Letter of Affirmative Action	Plan Approval	
OR			
2. A photocopy of their C	Certificate of Employee Information	<u>Report</u>	
OR			
3. A complete <u>Affirmative</u>	e Action Employee Information Rep	ort (AA302 <u>)</u>	
Public Work – Over Fifty	Thousand Dollars (\$50,000) Tota	ıl Project Cost:	
Check One –			
	or New Jersey Affirmative Action P	an. We will complete Report Form	AA201-A upon receipt from
∏∆nnroved Federal or Na	ew Jersev Plan – certificate enclose	ad	



I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

Nevco Sports, LLC

A (' ' 10' (

Authorized Signature

VP Sales and Marketing

September 3, 2020

P.L. 1995, c. 127 (N.J.A.C. 17:27)
MANDATORY AFFIRMATIVE ACTION LANGUAGE

PROCUREMENT, PROFESSIONAL & SERVICE CONTRACTS

During the performance of this contract, the Supplier Partner agrees as follows:

The Supplier Partner or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. The Supplier Partner will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Supplier Partner agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this non-discrimination clause.

The Supplier Partner or subcontractor, where applicable will, in all solicitations or advertisement for employees placed by or on behalf of the Supplier Partner, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation.

The Supplier Partner or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the Supplier Partner's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The Supplier Partner or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to P.L. 1975, c. 127, as amended and supplemented from time to time and the Americans with Disabilities Act.

The Supplier Partner or subcontractor agrees to attempt in good faith to employ minority and female workers trade consistent with the applicable county employment goal prescribed by N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, C.127, as amended and supplemented from time to time or in accordance with a binding determination of the applicable county employment goals determined by the Affirmative Action Office pursuant to N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, C.127, as amended and supplemented from time to time.



The Supplier Partner or subcontractor agrees to inform in writing appropriate recruitment agencies in the area, including employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The Supplier Partner or subcontractor agrees to revise any of it testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the state of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

The Supplier Partner or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, sex,
affectional or sexual orientation, and conform with the applicable employment goals, consistent with the statutes and court
decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The Supplier Partner and its subcontractors shall furnish such reports or other documents to the Affirmative Action Office as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Affirmative Action Office for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code (NJAC 17:27).

Signature of Procurement Agent	

16.4. Political Contribution Disclosure Form

Public Agency Instructions

This page provides guidance to public agencies entering into contracts with business entities that are required to file Political Contribution Disclosure forms with the agency. **It is not intended to be provided to Supplier Partners.** What follows are instructions on the use of form local units can provide to Supplier Partners that are required to disclose political contributions pursuant to <u>N.J.S.A.</u> 19:44A-20.26 (P.L. 2005, c. 271, s.2). Additional information on the process is available in Local Finance Notice 2006-1 (www.nj.gov/dca/lgs/lfns/lfnmenu.shtml).

- 1. The disclosure is required for all contracts in excess of seventeen thousand five hundred dollars (\$17,500) that are **not awarded** pursuant to a "fair and open" process (N.J.S.A. 19:44A-20.7).
- 2. Due to the potential length of some Supplier Partner submissions, the public agency should consider allowing data to be submitted in electronic form (i.e., spreadsheet, pdf file, etc.). Submissions must be kept with the contract documents or in an appropriate computer file and be available for public access. **The form is worded to accept this alternate submission.** The text should be amended if electronic submission will not be allowed.
- 3. The submission must be **received from the Supplier Partner and** on file at least ten (10) days prior to award of the contract. Resolutions of award should reflect that the disclosure has been received and is on file.
- 4. The Supplier Partner must disclose contributions made to candidate and party committees covering a wide range of public agencies, including all public agencies that have elected officials in the county of the public agency, state legislative positions, and various state entities. The Division of Local Government Services recommends that Supplier Partners be provided a list of the affected agencies. This will assist Supplier Partners in determining the campaign and political committees of the officials and candidates affected by the disclosure.
 - a) The Division has prepared model disclosure forms for each county. They can be downloaded from the "County PCD Forms" link on the Pay-to-Play web site at www.nj.gov/dca/lgs/p2p. They will be updated from time-to-time, as necessary.



- b) A public agency using these forms should edit them to properly reflect the correct legislative district(s). As the forms are county-based, they list all legislative districts in each county. Districts that do not represent the public agency should be removed from the lists.
- c) Some Supplier Partners may find it easier to provide a single list that covers all contributions, regardless of the county. These submissions are appropriate and should be accepted.
- d) The form may be used "as-is", subject to edits as described herein.
- e) The "Supplier Partner Instructions" sheet is intended to be provided with the form. It is recommended that the Instructions and the form be printed on the same piece of paper. The form notes that the Instructions are printed on the back of the form; where that is not the case, the text should be edited accordingly.
- f) The form is a Word document and can be edited to meet local needs, and posted for download on web sites, used as an e-mail attachment, or provided as a printed document.
- 5. It is recommended that the Supplier Partner also complete a "Stockholder Disclosure Certification." This will assist the local unit in its obligation to ensure that Supplier Partner did not make any prohibited contributions to the committees listed on the Business Entity Disclosure Certification in the twelve (12) months prior to the contract. (See Local Finance Notice 2006-7 for additional information on this obligation) A sample Certification form is part of this package and the instruction to complete it is included in the Supplier Partner Instructions. **NOTE: This section is not applicable to Boards of Education.**

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM Supplier Partner Instructions

Supplier Partners receiving contracts from a public agency that are NOT awarded pursuant to a "fair and open" process (defined at N.J.S.A. 19:44A-20.7) are subject to the provisions of P.L. 2005, c. 271, s.2 (N.J.S.A. 19:44A-20.26). This law provides that ten (10) days prior to the award of such a contract, the Supplier Partner shall disclose contributions to:

- 1) any State, county, or municipal committee of a political party,
- 2) any legislative leadership committee*,
- 3) any continuing political committee (a.k.a., political action committee),
- 4) any candidate committee of a candidate for, or holder of, an elective office:
 - a) of the public entity awarding the contract.
 - b) of that county in which that public entity is located,
 - c) of another public entity within that county,
 - d) or of a legislative district in which that public entity is located or, when the public entity is a county, of any legislative district which includes all or part of the county. The disclosure must list reportable contributions to any of the committees that exceed three hundred dollars (\$300) per election cycle that were made during the twelve (12) months prior to award of the contract. See N.J.S.A. 19:44A-8 and 19:44A-16 for more details on reportable contributions.

N.J.S.A. 19:44A-20.26 itemizes the parties from whom contributions must be disclosed when a business entity is not a natural person. This includes the following:

- 1) individuals with an "interest" ownership or control of more than ten percent (10%) of the profits or assets of a business entity or 10% of the stock in the case of a business entity that is a corporation for profit,
- 2) all principals, partners, officers, or directors of the business entity or their spouses,
- 3) any subsidiaries directly or indirectly controlled by the business entity,
- 4) IRS Code Section 527 New Jersey based organizations, directly or indirectly controlled by the business entity and filing as continuing political committees, (PACs). When the business entity is a natural person, "a contribution by that person's spouse or child, residing therewith, shall be deemed to be a contribution by the business entity." [N.J.S.A. 19:44A-20.26(b)] The contributor must be listed on the disclosure. Any business entity that fails to comply with the disclosure provisions shall be subject to a fine imposed by ELEC in an amount to be determined by the Commission which may be based upon the amount that the business entity failed to report. The enclosed list of agencies is provided to assist the Supplier Partner in identifying those public agencies whose elected official and/or candidate campaign committees are affected by the disclosure requirement. It is the Supplier Partner's responsibility to identify the specific committees to which contributions may have been made and need to be disclosed. The disclosed information may exceed the minimum requirement. The enclosed form, a content-consistent facsimile, or an electronic data file containing the required details



(along with a signed cover sheet) may be used as the Supplier Partner's submission and is disclosable to the public under the Open Public Records Act. The Supplier Partner must also complete the attached Stockholder Disclosure Certification. This will assist the agency in meeting its obligations under the law.

NOTE: This section does not apply to Board of Education contracts.

¹ <u>N.J.S.A.</u> 19:44A-3(s): "The term "legislative leadership committee" means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly or the Minority Leader of the General Assembly pursuant to section 16 of P.L.1993, c.65 (C.19:44A-10.1) for the purpose of receiving contributions and making expenditures."

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Required Pursuant to N.J.S.A. 19:44A-20.26

This form or its permitted facsimile must be submitted to the local unit no later than ten (10) days prior to the award of the contract.

Part I – Supplier Partner Information

Bidde	r Name	e :	Nevco Sports, LLC				
Addre	SS:	301 Ea	ast Harris Ave.				
City:	Gree	enville		State:	IL	Zip: 62246	

The undersigned being authorized to certify, hereby certifies that the submission provided herein represents compliance with the provisions of N.J.S.A. 19:44A-20.26 and as represented by the Instructions accompanying this form.

Authorized Signature

Eric Light

VP Sales and Marketing

Part II - Contribution Disclosure

Disclosure requirement: Pursuant to N.J.S.A. 19:44A-20.26 this disclosure must include all reportable political contributions (more than three hundred dollars (\$300) per election cycle) over the twelve (12) months prior to submission to the committees of the government entities listed on the form provided by the local unit.

Check here if disclosure is provided in electronic form.

Contributor Name	Recipient Name	Date	Dollar Amount
None	None	None	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
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Contributor Name	Recipient Name	Date	\$Amount
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Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount
Contributor Name	Recipient Name	Date	\$Amount

[☐] Check here if the information is continued on subsequent page(s)

List of Agencies with Elected Officials Required for Political Contribution Disclosure N.J.S.A. 19:44A-20.26

County Name:

State: Governor, and Legislative Leadership Committees

Legislative District #s:

State Senator and two members of the General Assembly per district.

County:

Freeholders County Clerk Sheriff

{County Executive} Surrogate

Municipalities (Mayor and members of governing body, regardless of title):

USERS SHOULD CREATE THEIR OWN FORM, OR DOWNLOAD FROM <u>WWW.NJ.GOV/DCA/LGS/P2P</u> A COUNTY-BASED, CUSTOMIZABLE FORM.

16.5. Stockholder Disclosure Form

Name of Business:

☑ I certify that the list below contains the names and home addresses of all stockholders holding ten percent (10%) or more of the issued and outstanding stock of the undersigned.



☐ I certify that no one stockholder owns ten percent (10%)	%) or more of the issued and outstanding stock of the undersigned.
Check the box that represents the type of business or Partnership Corporation Sole Proprietorship Limited Partnership Limited Liability Corporation Limited Liability Partnership Subchapter S Corporation Sign and notarize the form below, and, if necessary, comp	
Stockholders:	
Name: Dominus Capital. LLC	Name: Scott and Gayla Moore
Home Address: 1325 Avenue of the Americas 26th Floor New York, NY 10019	Home Address: 1111 Ritz Carleton Dr., Sarasota, FL 34236
Name: Stockholder Name	Name: Stockholder Name
Home Address: Home Address	Home Address: Home Address
Name: Stockholder Name	Name: Stockholder Name
Home Address: Home Address	Home Address: Home Address
Subscribed and sworn before me this day of, 2	(Affiant)
(Notary Public) My Commission expires:	(Print name & title of affiant) (Corporate Seal)

17. Required Documents for Supplier Partners Intending to Do Business in Arizona

17.1. Arizona Supplier Partner Requirements

AZ Compliance with Federal and state requirements. Supplier Partner agrees when working on any federally assisted projects with more than two thousand dollars (\$2,000.00) in labor costs, to comply with all federal and state requirements, as well as Equal Opportunity Employment requirements and all other federal and state laws, statutes, etc. Supplier Partner agrees to post wage rates at the work site and submit a copy of their payroll to the member for their files. Supplier Partner must retain



records for three years to allow the federal grantor agency access to these records, upon demand. Supplier Partner also agrees to comply with the Arizona Executive Order 75-5, as amended by Executive Order 99-4.

When working on contracts funded with Federal Grant monies, Supplier Partner additionally agrees to comply with the administrative requirements for grants, and cooperative agreements to state, local and federally recognized Indian Tribal Governments.

AZ Compliance with workforce requirements. Pursuant to ARS 41-4401, Supplier Partner and subcontractor(s) warrant their compliance with all federal and state immigration laws and regulations that relate to their employees, and compliance with ARS 23-214 subsection A, which states, ... "every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program".

CCOG reserves the right to cancel or suspend the use of any contract for violations of immigration laws and regulations. CCOG and its members reserve the right to inspect the papers of any Supplier Partner or subcontract employee who works under this contract to ensure compliance with the warranty above.

AZ Supplier Partner Employee Work Eligibility. By entering into this contract, Supplier Partner agrees and warrants compliance with A.R.S. 41-4401, A.R.S. 23-214, the Federal Immigration and Nationality Act (FINA), and all other Federal immigration laws and regulations. CCOG and/or Equalis Group members may request verification of compliance from any Supplier Partner or subcontractor performing work under this contract. CCOG and Equalis Group members reserve the right to confirm compliance. In the event that CCOG or Equalis Group members suspect or find that any Supplier Partner or subcontractor is not in compliance, CCOG may pursue any and all remedies allowed by law, including but not limited to suspension of work, termination of contract, suspension and/or debarment of the Supplier Partner. All cost associated with any legal action will be the responsibility of the Supplier Partner.

AZ Non-Compliance. All federally assisted contracts to members that exceed ten thousand dollars (\$10,000.00) may be terminated by the federal grantee for noncompliance by Supplier Partner. In projects that are not federally funded, respondent must agree to meet any federal, state or local requirements as necessary. In addition, if compliance with the federal regulations increases the contract costs beyond the agreed on costs in this solicitation, the additional costs may only apply to the portion of the work paid by the federal grantee.

Registered Sex Offender Restrictions (Arizona). For work to be performed at an Arizona school, Supplier Partner agrees that no employee or employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are present, or reasonably expected to be present. Supplier Partner agrees that a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at the Equalis Group member's discretion. Supplier Partner must identify any additional costs associated with compliance to this term. If no costs are specified, compliance with this term will be provided at no additional charge.

Offshore Performance of Work Prohibited. Due to security and identity protection concerns, direct services under this contract shall be performed within the borders of the United States.

Terrorism Country Divestments. In accordance with A.R.S. 35-392, CCOG and Equalis Group members are prohibited from purchasing from a company that is in violation of the Export Administration Act. By entering into the contract, Supplier Partner warrants compliance with the Export Administration Act.

The undersigned hereby accepts and agrees to comply with all statutory compliance and notice requirements listed in this document.

a styl



Signature of Authorized Representative
September 3, 2020

Form (Rev. October 2018) Department of the Treasury Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

	Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.											
	Nevco Sports, LLC											
	2 Business name/disregarded entity name, if different from above											
Print or type. Specific Instructions on page 3.	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.				certa	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):						
	☐ Individual/sole proprietor or ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate single-member LLC					Exempt payee code (if any)						
	☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ►											
	Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.				Exemption from FATCA reporting code (if any)							
eci	☐ Other (see instructions) ▶					s to accour	its mair	ntained	outside	the U.S.)		
Š	5 Address (number, street, and apt. or suite no.) See instructions. Requester's name a					nd address (optional)						
See	301 East Harris Avenue											
0,	6 City, state, and ZIP code											
	Greenville, IL 62246											
	7 List account number(s) here (optional)											
Par	Taxpayer Identification Number (TIN)											
					curity number							
	o withholding. For individuals, this is generally your social security number				7		7					
resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a</i>							1					
TIN, la		imber, see now to get a	or		_,		-		-			
	If the account is in more than one name, see the instructions for line 1.	Also see What Name and	Em	ployer	ident	fication	num	ber				
Number To Give the Requester for guidelines on whose number to enter.												
			8	2 -	- 2	2 3	3	8	7	9		
Part	II Certification						_	_	-			
	penalties of perjury, I certify that:											
1. The	number shown on this form is my correct taxpayer identification number	er (or I am waiting for a num	ber to	be iss	ued t	o me);	and					
Service (IRS) that I am subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and												
3. I am	a U.S. citizen or other U.S. person (defined below); and											
	FATCA code(s) entered on this form (if any) indicating that I am exempt	t from FATCA reporting is c	orrect.									
	,	, ,			ect to	backu	o wit	hhol	dina l	pecause		
Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.												
Sign Here	Signature of U.S. person > Man Malin	Date ▶	2	-14	1/	20	2	~				
Ger	neral Instructions	Form 1099-DIV (dividend funds)	ds, inc	luding	those	from s	stock	s or	muti	ual		
Section noted.	n references are to the Internal Revenue Code unless otherwise	Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)										
related	developments. For the latest information about developments to Form W-9 and its instructions, such as legislation enacted	Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)										
arter tr	ney were published, go to www.irs.gov/FormW9.	Form 1099-S (proceeds from real estate transactions)										
Purp	oose of Form	Form 1099-K (merchant card and third party network transactions)										
inform	ividual or entity (Form W-9 requester) who is required to file an ation return with the IRS must obtain your correct taxpayer	 Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition) 										
	cation number (TIN) which may be your social security number	• Form 1099-C (canceled debt)										
	individual taxpayer identification number (ITIN), adoption er identification number (ATIN), or employer identification number	• Form 1099-A (acquisition or abandonment of secured property)										
(EIN), i	o report on an information return the amount paid to you, or other t reportable on an information return. Examples of information	Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.										
	: include, but are not limited to, the following. : 1099-INT (interest earned or paid)	If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding,										

later.

This Agreement entered into as of the date of Month in the year of year.

MASTER AGREEMENT

between

Cooperative Council of Governments

6001 Cochran Road, Suite 333 Cleveland, Ohio 44139

and

Winning Supplier

Street Address 1
Street Address 2
City, State Zip

and

Equalis Group LLC

5550 Granite Parkway, Suite 298 Plano, Texas 75024

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	▼	

THIS MASTER GROUP PURCHASING AGREEMENT (this "Master Agreement"), effective as of Month Day, Year (the "Effective Date"), is entered into by and between The Cooperative Council of Governments, Inc., an Ohio non-profit corporation organized as a regional council of governments under Chapter 167 of the Ohio Revised Code, with its principal place of business at 6001 Cochran Road, Suite 333, Cleveland, Ohio 44139 ("CCOG"), Winning Supplier, a State corporation with its principal place of business at street address, City, State Zip ("Winning Supplier"), and Equalis Group LLC, a Delaware limited liability company with its principal place of business at 5550 Granite Parkway, Suite 298, Plano, Texas 75024 ("Equalis"). Throughout this Master Agreement, CCOG, Winning Supplier, and Equalis are referred to interchangeably as in the singular "Party" or in the plural "Parties."

SECTION 1. RECITALS

- **A.** CCOG is a Council of Governments formed under Chapter 167 of the Ohio Revised Code and established for the purpose of (a) developing and implementing certain sound business practices and processes as shared services to be made available to its members, and (b) serving as a lead public agency (a "**Lead Public Agency**") for Equalis Group ("**Equalis Group**"), a national cooperative purchasing organization, by publicly procuring master group purchasing agreements ("**Group Purchasing Agreements**") for products and services to be made available to current and prospective Equalis Group members ("**Equalis Group Member**").
- **B.** Equalis is the third-party procurement administrator for and duly authorized agent of CCOG, and in that role manages the procurement, marketing, sales, reporting, and financial activities of, for, and on behalf of CCOG at the direction and with the authorization of the CCOG Board of Directors.
- **C.** To the extent that the laws of a state, region, territory, and/or country permit, any public sector entity may join Equalis Group as a Member. The term "**Public Sector Entities**" includes, but is not limited to, political subdivisions, municipal corporations, counties, townships, villages, school districts, special districts, public institutions of higher education or training, units of government, state/regional/territorial agencies, state/regional/territorial governments, federal/national agencies, federal/national governments, and other entities receiving financial support from tax monies and/or public funds.
- **D.** Any organization that is exempt from federal income tax under <u>Section 501(c)(3)</u> of the IRS Code, and any other entity if permitted under the IRS Code and other applicable law, including for-profit companies, may also join Equalis Group as a Member.
- **E.** Equalis Group makes its Group Purchasing Agreements available through groups and associations ("**Association Partners**") that contract with Equalis for the purpose of providing additional benefits to the members of such Association Partners.
- **F.** Members, Association Partners, and Association Partners' members are referred to throughout this Master Agreement as Equalis Group participants ("**Equalis Group Participants**").
- **G.** CCOG issued request for proposal ("RFP") #Number dated Month Day, Year for contracting on behalf of Equalis Group Participants for definition of products and services solicited in the RFP ("Products & Services") and awarded a contract to Winning Supplier as the lowest responsive and responsible bidder.
- **H.** Winning Supplier desires to promote and expand its operations and increase the sales of its Products & Services to public sector, private sector, and non-profit organizations through Equalis Group.
- I. CCOG and Equalis agree to make the Products & Services from Winning Supplier available to Equalis Group Participants and Winning Supplier agrees to provide the same to Equalis Group Participants who purchase Products & Services ("Program Participants") subject to the terms of this Master Agreement.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the Parties agree to the following terms and conditions:

SECTION 2. BUSINESS TERMS

- **2.1.** Appendices. Winning Supplier agrees to provide Products & Services to Program Participants as may be agreed to by the Parties in accordance with the specific terms and conditions set forth in this Master Agreement and the appendices attached hereto and made a part of this Master Agreement (if one, an "Appendix" or more, "Appendices").
 - (i) Appendix A defines the Term of this Master Agreement and Addresses for Notices.
 - (ii) Appendix B sets forth the Products & Services and pricing available to Program Participants under this Master Agreement.
- **2.2.** <u>Terms in Appendices</u>. In all cases where the terms of this Master Agreement and any Appendices disagree, the terms in the Appendix shall control.
- **2.3.** <u>Utilization of Products & Services</u>. Purchases of the Products & Services from Winning Supplier may only be made by any Equalis Group Participant upon execution of such credit applications, forms, agreements, appendices, or other documentation ("**Customer Agreements**") as mutually agreed upon by Winning Supplier and Equalis.
- **2.4.** Personnel & Equipment. The Parties agree that the number and types of any subcontractors, personnel, or specialized equipment which may be required to furnish Products & Services to Program Participants will be determined by Winning Supplier. Winning Supplier agrees to engage the number and types of subcontractors, personnel, and/or specialized equipment necessary to furnish the types of Products & Services as specified in **Appendix B** to all Program Participants throughout the Term, as defined in **Appendix A**, of this Master Agreement and any Customer Agreement.
- **2.5.** Rates & Charges. The rates, fees, and charges to be charged to and paid by Program Participants for Products & Services are set forth in Appendix B. Winning Supplier agrees that there are no other applicable rates, fees, charges, or other monetary incentives for Products & Services except those set forth in Appendix B.

SECTION 3. TERMS & CONDITIONS

3.1. <u>Independent Contractors</u>. In the performance of this Master Agreement, Winning Supplier shall be an independent contractor to CCOG and Equalis, and shall not be or act as, or be deemed to otherwise be an agent, employee, or representative of CCOG, Equalis, or any Equalis Group Participant. CCOG and Equalis shall be independent contractors to Winning Supplier, and shall not be or act as, or be deemed to be agents, employees, or representatives of Winning Supplier. Winning Supplier's employees will not be deemed to be CCOG's and/or Equalis's employees or employees of any Equalis Group Participant, and CCOG's and Equalis's employees will not be deemed to be Winning Supplier's employees. Nothing contained in an Appendix or this Master Agreement may be construed to be inconsistent with that relationship or status. No Party exercises direct control or supervision over the employees of the other Parties and, in fact, each Party disavows any right to do so, and no Party in any way directs the operations of the other Parties or the manner of the other Parties' performance. No partnership, joint venture, or other relationship between the Parties or any Equalis Group Participant is created hereby.

3.2. Operational Control.

(a) <u>Winning Supplier Control</u>. As between the Parties, Winning Supplier shall have sole and exclusive control over the manner in which Winning Supplier and its employees, agents, subcontractors, and suppliers perform its responsibilities under this Agreement. Winning Supplier shall engage, employ, or

subcontract with such individuals or other entities as it may deem necessary in connection therewith, provided, however, that Winning Supplier furnishes the types and quantities of Products & Services specified in **Appendix B** to all Program Participants purchasing Products & Services throughout the Term of this Master Agreement and Winning Supplier executes its roles and responsibilities in accordance with any Customer Agreements. Such individuals shall not be considered employees or subcontractors of CCOG, Equalis, or any Equalis Group Participant, and shall be subject to employment or engagement, and discharge, discipline, and control solely and exclusively by Winning Supplier.

- (b) <u>Equalis Control</u>. As between the Parties, Equalis shall have sole and exclusive control over the manner in which Equalis and its parent company, employees, agents, subcontractors, and suppliers perform its responsibilities under this Master Agreement. Equalis shall engage, employ, or subcontract with such individuals or other entities as it may deem necessary in connection therewith. Such individuals shall not be considered employees or subcontractors of CCOG, Winning Supplier, or any Equalis Group Participant, and shall be subject to employment or engagement, and discharge, discipline, and control solely and exclusively by Equalis.
- (c) <u>Taxes</u>. Except as otherwise specified herein, each Party shall be solely responsible for the payment of any and all wages and fringe benefits, local, state, and federal payroll taxes or contribution of taxes for unemployment insurance, pensions, workers' compensation, and other Social Security and related protection with respect to those employees engaged by that Party pursuant to the performance of this Master Agreement. Each Party will make and submit, in its name, all reports and payments required by federal, state, or local laws related to its employees, agents, subcontractors, and suppliers.
- **3.3.** Technical Systems; Intellectual Property. Winning Supplier shall retain title to its proprietary systems and methodologies used in connection with the delivery of Products & Services during the course of this Master Agreement, including, but not limited to, descriptions of the systems or methodologies, document templates, and/or project tools and software, whether owned by Winning Supplier or licensed to Winning Supplier by a third Party and incorporated into any sale of Products & Services ("Winning Supplier Systems and Methods"). As needed, Winning Supplier shall grant a limited license to all Program Participants subject to this Master Agreement to use Winning Supplier's Systems & Methods during the Term of this Master Agreement and for the duration of any Customer Agreements established between Winning Supplier and a Participant to purchase Products & Services subject to the terms of this Master Agreement until such Customer Agreements expire or are terminated.

3.4. Confidentiality.

- Agreement, and the business information regarding the other Party(ies) (the "Disclosing Party") to which a Party(ies) (the "Receiving Party") may become privy during the Term of this Master Agreement (collectively, the "Information") constitute confidential and proprietary information, the disclosure, copying, or distribution of which could result in competitive harm to the Disclosing Party. Each Party agrees to maintain the other Parties' Information in the strictest confidence and agrees not to disclose, copy, or distribute the other Parties' Information, whether orally or in writing, directly or indirectly, in whole or in part, except to those of the Receiving Party's employees, agents, subcontractors, and suppliers with a need to know the Information. The foregoing will not limit a Receiving Party, for purposes of marketing, from informing actual or potential Equalis Group Participants of the existence of a contractual relationship between the Parties. The Parties further agree that they will require that all of their employees, agents, subcontractors, and suppliers abide by the terms of these confidentiality obligations. The confidentiality obligations set forth in this section will continue in effect for the Term of this Master Agreement and for a period of two (2) years after the date this Master Agreement is terminated or expires.
- (b) **Exceptions**. Nothing herein will apply to any information (a) which is or becomes generally available to the public other than as a result of a disclosure by a Receiving Party or its representatives, (b) which was available on a non-confidential basis prior to its disclosure by the Disclosing Party or its

representatives, (c) which becomes available to a Receiving Party on a non-confidential basis from a source other than the Disclosing Party or its representatives, provided that such source is not known to be subject to any prohibition against transmitting the information, (d) which is disclosed pursuant to an order of court; provided that in the event that proprietary information is disclosed or threatened to be disclosed pursuant to this clause (d), the Receiving Party will give the original Disclosing Party prompt, written Notice, as hereinafter defined, of such threatened disclosure and the right to defend against such disclosure, at Disclosing Party's expense, and provided further that the original Receiving Party will cooperate reasonably in such defense, or (e) which is subject to a Freedom of Information Act Request or other public records request to which a Party is, or may be, required to respond by applicable law.

3.5. Indemnification.

- Winning Supplier Indemnification. Except as otherwise provided herein and to the extent permitted by law, Winning Supplier shall indemnify, defend, and hold harmless ("Indemnifying Party") CCOG and Equalis, and their respective officers, directors, employees, agents, subcontractors, suppliers, and all Equalis Group Participants subject to this Master Agreement (the "Indemnified Party") from and against any and all liabilities, damages, fines, penalties, costs, claims, interest, and expenses (including costs of defense, settlement, and reasonable attorneys' fees), including any claim arising from environmental health and safety laws or regulations, which are generated by claims, allegations, actions, causes of action, demands, assertions, adjudications, or suits which arise out of damage to or destruction of any property, or bodily injury (including death) suffered by any person including the Indemnified Party ("Losses") to the extent they are caused by gross negligence, willful misconduct, noncompliance with applicable laws, or strict products liability of the Indemnifying Party is limited to the extent of such Indemnifying Party's gross negligence, willful misconduct, noncompliance with applicable laws, or strict products liability.
- (b) <u>CCOG Indemnification</u>. Except as otherwise provided herein and to the extent permitted by law, CCOG shall indemnify, defend, and hold harmless ("Indemnifying Party") Winning Supplier, its officers, directors, employees, agents, subcontractors, and suppliers subject to this Master Agreement (the "Indemnified Party") from and against any and all liabilities, damages, fines, penalties, costs, claims, interest, and expenses (including costs of defense, settlement, and reasonable attorneys' fees), including any claim arising from environmental health and safety laws or regulations, which are generated by claims, allegations, actions, causes of action, demands, assertions, adjudications, or suits which arise out of damage to or destruction of any property, or bodily injury (including death) suffered by any person including the Indemnified Party ("Losses") to the extent they are caused by gross negligence, willful misconduct, or noncompliance with applicable laws of the Indemnifying Party or its employees, agents, subcontractors, and suppliers. With respect to a claim under this Master Agreement, the liability of the Indemnifying Party is limited to the extent of such Indemnifying Party's gross negligence, willful misconduct, or noncompliance with applicable laws.
- (c) Equalis Indemnification. Except as otherwise provided herein and to the extent permitted by law, Equalis shall indemnify, defend, and hold harmless ("Indemnifying Party") Winning Supplier, its officers, directors, employees, agents, subcontractors, and suppliers subject to this Master Agreement (the "Indemnified Party") from and against any and all liabilities, damages, fines, penalties, costs, claims, interest, and expenses (including costs of defense, settlement and reasonable attorneys' fees), including any claim arising from environmental health and safety laws or regulations, which are generated by claims, allegations, actions, causes of action, demands, assertions, adjudications, or suits which arise out of damage to or destruction of any property, or bodily injury (including death) suffered by any person including the Indemnified Party ("Losses") to the extent they are caused by gross negligence, willful misconduct, or noncompliance with applicable laws of the Indemnifying Party or its employees, agents, subcontractors, and suppliers. With respect to a claim under this Master Agreement, the liability of the Indemnifying Party is limited to the extent of such Indemnifying Party's gross negligence, willful misconduct, or noncompliance with applicable laws.

3.6. Notice & Opportunity to Defend; Limitations & Thresholds.

- (a) Notice: Opportunity. If any Losses are asserted against an Indemnified Party, such Indemnified Party shall notify the Indemnifying Party as promptly as practicable and give it an opportunity to defend the same. The Indemnified Party shall reasonably cooperate with the Indemnifying Party in connection with such claim fails to defend against the claim within thirty (30) days after Notice of such claim, the Indemnified Party shall be entitled to assume the defense thereof, and the Indemnifying Party shall be liable to repay the Indemnified Party entitled to indemnification for all its expenses reasonably incurred in connection with said defense (including reasonable attorneys' fees and settlement payments) until the Indemnifying Party assumes such defense. The attorneys prosecuting such defense on behalf of a Party must be acceptable to the Indemnified Party, which acceptance shall not be unreasonably withheld.
- (b) <u>Liability</u>. Notwithstanding any other provision of this Master Agreement, indemnity obligations entered into hereunder shall be due only to the extent of the Losses actually suffered by an Indemnified Party (i.e., reduced by any offsetting or related asset or service received and any recovery from any third Party). The Indemnifying Party shall be subrogated to all rights of the Indemnified Party against any third party with respect to any claim for which indemnity was paid.
- **3.7.** Winning Supplier Insurance. During the Term of this Master Agreement, and for two (2) years following expiration or termination of this Master Agreement, Winning Supplier, at its own expense, shall maintain and shall require that its agents, subcontractors, and suppliers engaged in Winning Supplier's performance of its duties under this Master Agreement maintain general liability insurance, property insurance, and automobile insurance (at a minimum, in the amount of \$1,000,000 per occurrence/\$5,000,000 annual aggregate) applicable to any claims, liabilities, damages, costs, or expenses arising out of its performance under this Master Agreement, or any Appendix, and with respect to, or arising out of, Winning Supplier's provision of Products & Services to Program Participants. CCOG, Equalis, and their respective officers, directors, employees, and agents will be named as additional insureds on Winning Supplier's related insurance policies. All such insurance policies shall incorporate a provision requiring the giving of written Notice to CCOG and Equalis at least thirty (30) days prior to the cancellation, nonrenewal, and/or material modification of any such policies. Winning Supplier shall submit to Equalis within ten (10) calendar days after the Effective Date of this Master Agreement, and prior to furnishing Products & Services to any Program Participants, valid certificates evidencing the effectiveness of the foregoing insurance policies. Winning Supplier shall provide such valid certificates on an annual basis until the terms of this section are no longer applicable.

3.8. Termination Rights. The Parties shall have the termination rights set forth below.

- (a) <u>Insolvency</u>. If a petition in bankruptcy is filed by any Party, or if any Party is adjudicated as bankrupt, or if any Party makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of the insolvency of any Party, then the other Parties, without prejudice to any other right or remedy, may terminate this Master Agreement upon giving at least five (5) business days prior written Notice of such termination.
- (b) <u>Mutual Consent</u>. This Master Agreement, or any Appendix, may be terminated at any time by the mutual written consent of the Parties.
- (c) <u>Breach</u>. In the event that any Party commits a material breach of its obligations under this Master Agreement, except for a payment obligation, the non-breaching Party(ies) may provide written Notice describing the material breach to the breaching Party. The breaching Party will have thirty (30) calendar days to cure such breach or provide acceptable reassurance to the non-breaching Party(ies), or, if the Parties agree that a cure or reassurance is not feasible within thirty calendar (30) days, such period of time for cure or satisfactory reassurance as the Parties may agree in writing. If the breach is not cured within such period or if satisfactory reassurance is not accepted by the non-breaching Party(ies) in such period, then the Party(ies)

not in breach may terminate this Master Agreement upon ten (10) business days written Notice at the Addresses for Notices set forth in **Appendix A**.

- **3.9.** Effects of Termination. Upon termination of this Agreement for any reason, all Customer Agreements entered into with Program Participants shall immediately terminate. Winning Supplier shall immediately cease any sales of Products & Services to any Program Participant under and through the terms of this Master Agreement. Following the date of termination, Winning Supplier shall not be precluded from selling its products and services to individuals, businesses, and entities that were Program Participants when this Master Agreement was in effect either directly or through some other contract vehicle. Following the date of termination, CCOG and Equalis shall not be precluded from transitioning individuals, businesses, and entities that were Program Participants when this Master Agreement was in effect to another master group purchasing agreement or Equalis Group supplier partner.
- **3.10.** <u>Audit of Winning Supplier</u>. CCOG and Equalis, whether directly or through an independent auditor or accounting firm, shall have the right to perform audits, including inspection of books, records, and computer data relevant to Winning Supplier's provision of Products & Services to Program Participants, to ensure that pricing, inventory, quality, process, and business controls are maintained; provided, however, that such inspections and audits will be conducted upon reasonable notice to Winning Supplier and so as not to unreasonably interfere with Winning Supplier's business or operations.
- **3.11.** Force Majeure. This Master Agreement will be temporarily suspended during any period to the extent that any Party during that period is unable to carry out its obligations under this Master Agreement or the Appendices by reason of an Act of God or the public enemy, act of terrorism, fire, flood, labor disorder not caused by Winning Supplier, civil commotion, closing of the public highways not caused by Winning Supplier, government interference, government regulations, or any other event or occurrence beyond the reasonable control of the affected Party ("Event of Force Majeure"). No Party will have any liability to the other Party(ies) for a delay in performance nor failure to perform to the extent this Master Agreement or any Appendix is so temporarily suspended; provided that nothing contained herein shall apply to payment obligations with respect to obligations which have already been performed under this Master Agreement. If the provision of Products & Services are impeded due to an Event of Force Majeure, then Winning Supplier may apportion the provision of Products & Services among its present and future customers on a fair and reasonable basis after consulting with Equalis and the Program Participants potentially affected and in a manner that would not reasonably be expected to disproportionately affect Program Participants.
- **3.12.** <u>Notices</u>. All notices, claims, certificates, requests, demands, and other communications required or permitted hereunder ("Notice") must be in writing and will be deemed given to the Addresses for Notices (a) when delivered personally to the recipient, (b) upon delivery by reputable overnight courier service (charges prepaid), or (c) upon delivery or refusal of delivery by certified or registered mail, return receipt requested, and addressed to the intended recipient. The Parties agree that the day-to-day business communications, including notification of a change of address, pricing updates, or revisions to any Appendix, may be made via electronic communication.
- **3.13.** <u>Waiver</u>. Other than the rights and obligations with respect to payment provided by this Master Agreement, waiver by any Party(ies) of or the failure of any Party(ies) hereto to enforce at any time its rights with regard to any breach or failure to comply with any provision of this Master Agreement by the other Party(ies) may not be construed as, or constitute, a continuing waiver of such provision, or a waiver of any other future breach of or failure to comply with the same provision or any other provision of this Master Agreement.
- **3.14.** Governing Law; Invalidity. This Master Agreement shall be construed and enforced in accordance with, and governed by, the laws of the State of Ohio without regard to rules of conflict of laws. If any provision of this Master Agreement is declared unlawful or unenforceable by judicial determination or performance, then the remainder of this Master Agreement shall continue in force as if the invalidated provision did not exist. Any suits filed by any Party pursuant to this Master Agreement shall be brought in a court of competent jurisdiction located in Cuyahoga County, Ohio. In the event any Party initiates a suit and that suit is adjudicated by a court of competent jurisdiction, the prevailing Party shall be entitled to reasonable attorney's fees and costs from the non-prevailing Party in addition to any other relief to which the court determines the prevailing Party is entitled or awarded.

- **3.15.** <u>Modification</u>. No release, discharge, abandonment, waiver, alteration, or modification of any of the provisions of this Master Agreement, or any of the Appendices incorporated herein, shall be binding upon any Party unless set forth in a writing signed by authorized representatives of the Parties.
- **3.16.** Assignment. This Master Agreement and the rights and obligations hereunder may not be assignable by any Party hereto without the prior written consent of the other Parties, which consent shall not be unreasonably withheld, conditioned, or delayed, provided, however, that Winning Supplier and Equalis may assign their respective rights and obligations under this Master Agreement without the consent of the other Parties in the event either Winning Supplier or Equalis shall hereafter effect a corporate reorganization, consolidation, merger, merge into, sale to, or a transfer of all or substantially all of its properties or assets to another entity. Subject to the preceding sentence, this Master Agreement will be binding upon, inure to the benefit of, and be enforceable by the Parties and their respective successors and assigns. Any instrument purporting to make an assignment in violation of this section shall be null and void. This Master Agreement may be extended to additional entities affiliated with the Parties upon the mutual agreement of the Parties. No such extension will relieve the extending Party of its rights and obligations under this Master Agreement.
- **3.17.** No Third-Party Beneficiaries; Survival of Representations. This Master Agreement is made solely for the benefit of the Parties to it, and no other persons will acquire or have any right under or by virtue of this Master Agreement. Except as otherwise provided herein, all representations, warranties, covenants, and agreements of the Parties shall remain in full force and effect regardless of any termination of this Master Agreement, in whole or in part.
- **3.18.** Entire Agreement. This Master Agreement, together with all attachments, appendices, and exhibits hereto, constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior oral or written representations and agreements with regard to the same subject matter. The Parties acknowledge that this Master Agreement has been negotiated and incorporates their collective agreement as to the provisions to be contained herein. Therefore, no presumption will arise giving benefit of interpretation by virtue of authorship of any provision of this Master Agreement, and any ambiguity may not be construed for or against any Party. Winning Supplier's complete and final RFP response is hereby incorporated into and made part of this Master Agreement.
- **3.19.** Execution in Counterparts. This Master Agreement may be executed in one or more counterparts, each of which will be deemed an original. For purposes of this Master Agreement, a facsimile, scanned, or electronic signature will be deemed an original signature.
- **3.20.** <u>Titles, Headings & Recitals</u>. The Preamble to this Master Agreement is hereby incorporated herein and made part of this Master Agreement. The Recitals stated within this Master Agreement are deemed to be a part of this Master Agreement. The titles and headings of the sections and paragraphs of this Master Agreement are inserted for convenience only and shall not constitute a part hereof or affect in any way the meaning or interpretation of this Master Agreement.

3.21. Nondiscrimination & Intimidation.

- (a) Winning Supplier expressly agrees that in the hiring of employees for the performance of work or services under this Master Agreement or any subcontract, Winning Supplier, its subcontractors, or any person acting on a Winning Supplier's or its subcontractor's behalf shall not discriminate in the hiring of employees by reason of race, creed, sex, disability as defined in <u>Section 4112.01</u> of the Ohio Revised Code nor shall it discriminate against any citizen of the State of Ohio in the employment of labor or workers who are qualified and available to perform the Work to which the employment relates.
- (b) Winning Supplier expressly agrees that Winning Supplier, any of its subcontractors, or any person on behalf of Winning Supplier or its subcontractors in any manner shall not discriminate against or intimidate any employee hired for the performance of work or services under this Master Agreement on account of race, creed, sex, disability as defined in **Section 4112.01** of the Ohio Revised Code, or color.

(c) Winning Supplier expressly agrees to include the provisions of this section in each of its written subcontractor agreements for the Products & Services subject to this Master Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Master Agreement to be executed by their duly authorized representatives as of the Effective Date.

GOVERNMENTS, INC.		WINNING SUPPLIER	
Ву:		Ву:	
Name:	Scott A. Morgan	Name:	
As:	CCOG Board President	As:	
Date:		Date:	
EQUALIS	GROUP, LTD.		
Ву:			
Name:	Stephen M. Hull	<u></u>	
As:	CEO	<u></u>	
Date:		<u></u>	

APPENDIX A: TERM OF AGREEMENT; NOTICES

This Appendix may be modified at any time with the mutual written consent of the Parties.

1. The Term.

This Master Agreement and the Appendices attached hereto will become effective as of the Effective Date. This Master Agreement will remain in effect for approximately five (5) years and expire on Month day, year (the "Termination Date") unless extended or unless otherwise terminated or cancelled as set forth in the Master Agreement (the "Initial Term"). This Master Agreement may be renewed at any time by the mutual written consent of the Parties (each a "Renewal Term") unless this Master Agreement is terminated as set forth herein. The Initial Term together with all Renewal Terms exercised are hereinafter collectively referred to as the "Term."

2. Addresses for Notices.

a. If to **CCOG**:

The Cooperative Council of Governments, Inc. Attn: Board President 6001 Cochran Road, Suite 333 Cleveland, Ohio 44139 Facsimile: 440.337.0002

b. If to Winning Supplier:

Winning Supplier Attn: Name, Title Street Address 1 Street Address 2 City, State Zip

and with copy to:

Company Name Attn: Name, Title Street Address 1 Street Address 2 City, State Zip

c. If to **EQUALIS**:

Equalis Group, Ltd. Attn: Eric Merkle, SVP 5550 Granite Parkway, Suite 298 Plano, Texas 75024

APPENDIX B: PRODUCTS & SERVICES; PRICING

The following terms and conditions will apply to any purchase or utilization of the Products & Services from Winning Supplier. This Appendix may be modified at any time with the mutual written consent of Winning Supplier and Equalis.

1. Products & Services

To be completed following contract award to Winning Supplier based on Winning Supplier's RFP response and subsequent negotiations.

The definition of Products & Services may be amended from time to time upon the mutual written agreement of Winning Supplier and Equalis.

2. Pricing for Products & Services

To be completed following contract award to Winning Supplier based on Winning Supplier's RFP response and subsequent negotiations.

3. Price Adjustments

To be completed following contract award to Winning Supplier based on Winning Supplier's RFP response and subsequent negotiations, if applicable.

THIS ADMINISTRATION AGREEMENT (this "Agreement"), effective as of Month Day, Year (the "Effective Date"), is entered into by and between Winning Supplier, a State corporation with its principal place of business at street address, City, State Zip ("Winning Supplier") and Equalis Group LLC, a Delaware limited liability company with its principal place of business at 5550 Granite Parkway, Suite 298, Plano, Texas 75024 ("Equalis"). Throughout this Agreement, Winning Supplier and Equalis are referred to interchangeably as in the singular "Party" or in the plural "Parties."

SECTION 1. RECITALS

- **A.** The Cooperative Council of Governments, Inc. ("CCOG") serves as a lead public agency (a "Lead Public Agency") for Equalis Group ("Equalis Group"), a national cooperative purchasing organization, by publicly procuring master group purchasing agreements for products and services to be made available to Equalis Group members ("Equalis Group Member").
- **B.** CCOG issued request for proposal ("RFP") #Number dated Month Day, Year for contracting on behalf of Equalis Group Members for definition of products and services solicited in the RFP ("Products & Services") and awarded a contract to Winning Supplier.
- **C.** CCOG, Equalis, and Winning Supplier entered into that certain master group purchasing agreement (the "**Master Agreement**") #contract number effective as of Month Day, Year to provide Products & Services to Equalis Group Members.
- **D.** Equalis serves as the Contract Administrator of the Master Agreement on behalf of CCOG.
- **E.** Equalis actively promotes Master Agreements to current and prospective Equalis Group Members (collectively "**Prospective Participants**") through a range of marketing, prospecting, and sales strategies, including, but not limited to, marketing and sales collateral development, direct mail, web marketing, electronic communications, attendance at events, Winning Supplier sales representative training, and Winning Supplier field sales support (collectively, "**Equalis Services**") as more fully defined in **Appendix B**.
- **F.** Any Prospective Participant who purchases Products & Services from Winning Supplier subject to the Master Agreement shall be considered a "**Program Participant**".
- **G.** Winning Supplier desires to promote and expand its operations and increase the sales of its Products & Services to public sector, private sector, and non-profit organizations through Equalis Group.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the Parties agree to the following terms and conditions:

SECTION 2. BUSINESS TERMS

- **2.1.** <u>Defined Terms</u>. Any capitalized terms contained herein not defined in this Agreement shall have the same meaning as defined in the Master Agreement.
- **2.2.** <u>Appendices</u>. Winning Supplier agrees to provide Products & Services to Program Participants as may be agreed to by the Parties in accordance with the specific terms and conditions set forth in the Master Agreement, this Agreement, and the appendices attached hereto and made a part of this Agreement (if one, an "Appendix" or more, "Appendices").
 - (i) **Appendix A** defines Winning Supplier's reporting requirements.
 - (ii) **Appendix B** sets forth the roles and responsibilities of the Parties.
 - (iii) **Appendix C** defines the financial terms between the Parties.

2.3. <u>Terms in Appendices</u>. In all cases where the terms of this Agreement and any Appendices disagree, the terms in the Appendix shall control.

2.4. Publicity & Joint Marketing.

- (a) <u>Publicity</u>. A Party may only issue press releases or other public announcements with respect to this Agreement with the prior, written consent of the other Party.
- (b) <u>Joint Marketing / Logo & Name Use.</u> Winning Supplier authorizes Equalis to use Winning Supplier's trademarks, names, and logos as provided by Winning Supplier to Equalis. Equalis authorizes Winning Supplier to use Equalis' trademarks, names, and logos as provided by Equalis to Winning Supplier. Each Party's use of the other Party's trademarks, names, and logos will be limited to standard communication, including correspondence, newsletters, and website material, and joint marketing efforts, including, but not limited to, utilizing the same on correspondence, collateral, agreements, websites, newsletters, or other marketing materials promoting the Products & Services pursuant to the Master Agreement and this Agreement. Notwithstanding the foregoing, the Parties understand and agree that except as provided herein, neither Party shall have any right, title, or interest in the other Party's trademarks, names, and logos. Upon termination of this Agreement, each Party shall immediately cease use of the other Party's trademarks, names, and logos.

SECTION 3. TERMS & CONDITIONS

- **3.1.** Independent Contractors. In the performance of this Agreement, Winning Supplier shall be an independent contractor to Equalis, and shall not be or act as, or be deemed to otherwise be an agent, employee, or representative of Equalis or any Member. Equalis shall be independent contractor to Winning Supplier, and shall not be or act as, or be deemed to be an agent, employee, or representative of Winning Supplier. Winning Supplier's employees will not be deemed to be Equalis employees or employees of any Member. Equalis employees will not be deemed to be Winning Supplier's employees. Nothing contained in this Agreement or an Appendix may be construed to be inconsistent with that relationship or status. Neither Party exercises direct control or supervision over the employees of the other Party and, in fact, each Party disavows any right to do so, and no Party in any way directs the operations of the other Party or the manner of the other Party's performance. No partnership, joint venture, or other relationship between the Parties or any Member is created hereby.
- **3.2.** Express Limitation of Equalis Liability. With respect to any purchases of Products & Services by CCOG or any Program Participant pursuant to the Master Agreement, Equalis shall not be: (i) construed as a dealer, re-marketer, representative, partner, or agent of any type of the Winning Supplier, CCOG, or any Program Participant; (ii) obligated by, liable for, or in any way responsible for any order of Products & Services made by CCOG or any Program Participant or any employee thereof under the Master Agreement or for any payment required to be made with respect to such order for Products & Services; and (iii) obligated by, liable for, or in any way responsible for any failure by CCOG or any Program Participant to comply with procedures or requirements of applicable law or the Master Agreement or to obtain the due authorization and approval necessary to purchase Products & Services under the Master Agreement. Equalis makes no representation or guaranty with respect to any minimum purchases by CCOG or any Program Participant, whether individually or collectively, or any employee thereof under this Agreement or the Master Agreement. The terms of this section shall survive the termination of this Agreement.
- **3.3.** Term & Termination. The Term of this Agreement is the same as the Term of the Master Agreement. This Agreement shall only be terminated, and shall be terminated, if and when the Master Agreement is terminated. Upon termination of the Master Agreement for any reason, Winning Supplier shall continue making Administrative Fee and other payments, as set forth in **Appendix C**, to Equalis that are generated by individual Program Participant's purchase of Products & Services for a period of either i) one (1) year from the date of termination, or ii) through the then current expiration date of the Master Agreement, whichever is shorter, to the extent that Winning Supplier continues to generate

revenue from each Program Participant's purchase of Products & Services following the termination of the Master Agreement.

- **3.4.** Audit of Winning Supplier. Equalis, whether directly or through an independent auditor or accounting firm, shall have the right to perform audits, including inspection of books, records, and computer data relevant to Winning Supplier's provision of Products & Services to Program Participants and payment of Administrative Fees to Equalis, to ensure that pricing, inventory, quality, process, and business controls are maintained; provided, however, that such inspections and audits will be conducted upon reasonable notice to Winning Supplier and so as not to unreasonably interfere with Winning Supplier's business or operations.
- **3.5.** Force Majeure. This Agreement will be temporarily suspended during any period to the extent that either Party during that period is unable to carry out its obligations under this Agreement or the Appendices by reason of an Act of God or the public enemy, act of terrorism, fire, flood, labor disorder not caused by Winning Supplier, civil commotion, closing of the public highways not caused by Winning Supplier, government interference, government regulations, or any other event or occurrence beyond the reasonable control of the affected Party ("Event of Force Majeure"). Neither Party will have any liability to the other Party for a delay in performance nor failure to perform to the extent this Agreement or any Appendix is so temporarily suspended; provided that nothing contained herein shall apply to payment obligations with respect to obligations which have already been performed under this Agreement.
- **3.6.** Notices. All notices, claims, certificates, requests, demands, and other communications required or permitted hereunder ("Notice") must be in writing and will be deemed given to the addresses set forth herein (a) when delivered personally to the recipient, (b) upon delivery by reputable overnight courier service (charges prepaid), or (c) upon delivery or refusal of delivery by certified or registered mail, return receipt requested, and addressed to the intended recipient. The Parties agree that day-to-day business communications, including notification of a change of address or revisions to any Appendix, may be made via electronic communication, including email.
- **3.7.** Addresses for Notices. This section may be modified at any time by either Party providing the other Party with written Notice, including via email, of a change of address or addition or deletion to the individuals who will be copied on all Notices.

a. If to Winning Supplier:

Winning Supplier Attn: Name, Title Street Address 1 Street Address 2 City, State Zip and with copy to:

Company Name Attn: Name, Title Street Address 1 Street Address 2 City, State Zip

b. If to EQUALIS:

Equalis Group LLC Attn: Eric Merkle, SVP 5550 Granite Parkway, Suite 298 Plano, Texas 75024

- **3.8.** <u>Waiver</u>. Other than the rights and obligations with respect to payment provided by this Agreement, waiver by either Party of or the failure of either Party hereto to enforce at any time its rights with regard to any breach or failure to comply with any provision of this Agreement by the other Party may not be construed as, or constitute, a continuing waiver of such provision, or a waiver of any other future breach of or failure to comply with the same provision or any other provision of this Agreement.
- **3.9.** Governing Law; Invalidity. This Agreement shall be construed and enforced in accordance with, and governed by, the laws of the State of Ohio without regard to rules of conflict of laws. If any provision of this Agreement

is declared unlawful or unenforceable by judicial determination or performance, then the remainder of this Agreement shall continue in force as if the invalidated provision did not exist. Any suits filed by either Party pursuant to this Agreement shall be brought in a court of competent jurisdiction located in Cuyahoga County, Ohio. In the event either Party initiates a suit and that suit is adjudicated by a court of competent jurisdiction, the prevailing Party shall be entitled to reasonable attorney's fees and costs from the non-prevailing Party in addition to any other relief to which the court determines the prevailing Party is entitled or awarded.

- **3.10.** <u>Modification</u>. No release, discharge, abandonment, waiver, alteration, or modification of any of the provisions of this Agreement, or any of the Appendices incorporated herein, shall be binding upon either Party unless set forth in a writing signed by authorized representatives of the Parties.
- **3.11.** <u>Assignment</u>. This Agreement and the rights and obligations hereunder may not be assignable by either Party hereto without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned, or delayed, provided, however, that either Party may assign its respective rights and obligations under this Agreement without the consent of the other Party in the event either Party shall hereafter effect a corporate reorganization, consolidation, merger, merge into, sale to, or a transfer of all or substantially all of its properties or assets to another entity. Subject to the preceding sentence, this Agreement will be binding upon, inure to the benefit of, and be enforceable by the Parties and their respective successors and assigns. Any instrument purporting to make an assignment in violation of this section shall be null and void. This Agreement may be extended to additional entities affiliated with either Party upon the agreement of the other Party. No such extension will relieve the extending Party of its rights and obligations under this Agreement.
- **3.12.** No Third-Party Beneficiaries; Survival of Representations. This Agreement is made solely for the benefit of the Parties to it, and no other persons will acquire or have any right under or by virtue of this Agreement. Except as otherwise provided herein, all representations, warranties, covenants, and agreements of the Parties shall remain in full force and effect regardless of any termination of this Agreement, in whole or in part.
- **3.13.** Entire Agreement. The Master Agreement and this Agreement, together with all attachments, appendices, and exhibits hereto, constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior oral or written representations and agreements with regard to the same subject matter. The Parties acknowledge that this Agreement has been negotiated and incorporates their collective agreement as to the provisions to be contained herein. Therefore, no presumption will arise giving benefit of interpretation by virtue of authorship of any provision of this Agreement, and any ambiguity may not be construed for or against any Party.
- **3.14.** Execution in Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed an original. For purposes of this Agreement, a facsimile, scanned, or electronic signature will be deemed an original signature.
- **3.15.** <u>Titles, Headings & Recitals</u>. The Preamble to this Agreement is hereby incorporated herein and made part of this Agreement. The Recitals stated within this Agreement are deemed to be a part of this Agreement. The titles and headings of the sections and paragraphs of this Agreement are inserted for convenience only and shall not constitute a part hereof or affect in any way the meaning or interpretation of this Agreement.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

WINNING SUPPLIER	EQUALIS GROUP LLC	
Ву:	Ву:	
Name:	Name:	Stephen M. Hull
As:	As:	CEO
Date:	Date:	

APPENDIX A: WINNING SUPPLIER REPORTING REQUIREMENTS

This Appendix may be modified at any time with the mutual written consent of the Parties, including via email.

Winning Supplier shall electronically provide Equalis with a detailed line item monthly report showing the dollar volume of all member Products & Services sales under the contract for the previous month. Reports shall be sent via e-mail to Equalis offices at Reporting@EqualisGroup.org. Reports are due on the fifteenth (15th) day after the end of the previous month. It is the responsibility of Winning Supplier to collect and compile all sales under the Master Agreement from Program Participants and submit one (1) monthly report. Fields below marked as *required indicate a required field. All other fields are preferred, but not required:

	Equalis Member ID
o o	Vendor Customer Number *required (or Equalis Member ID)
Member Data	Customer Name *required
ber	Customer Street Address *required
em	Customer City *required
>	Customer Zip Code *required
	Customer State *required
σ	Distributor Name
Dat	Distributor ID
tor	Distributor Street Address
ngį	Distributor City
Distributor Data	Distributor Zip Code
	Distributor State
	Product Category level 1
	Product Category level 2 (Where available or applicable)
	Product Category level 3 (Where available or applicable)
Product Data	Distributor Product Number
	Manufacturer Product Number
npo	Product Description
Pre	Product Brand Name
	Product packaging Unit of Measure level 1
	Product packaging Unit of Measure level 2
	Product packaging Unit of Measure level 3
	Purchase Unit of Measure
<i>a</i>	Purchase Quantity
Dat	Distributor Landed Cost Total \$ (without deviations)
2	Distributor Landed Cost Total \$ (with mfr deviations)
Spend Data	Customer Purchase Total \$ *required
	Admin Fee % *required
	Admin Fee \$ *required

APPENDIX B: ROLES & RESPONSIBILITIES

This Appendix defines the roles and responsibilities of Equalis and Winning Supplier under this Agreement. This Appendix may be modified at any time with the mutual written consent of the Parties, including via email.

1. Equalis Services.

- 1.1. Winning Supplier Sales Representative Training. Equalis will develop, as appropriate and subject to Winning Supplier approval, various sales training materials, sales tools, and marketing collateral to promote the Master Agreement and Winning Supplier's Products & Services. Equalis, as appropriate, will i) conduct periodic sales trainings with Winning Supplier sales representatives assigned to sell Products & Services, ii) provide sales representatives with marketing collateral and sales tools to utilize with sales prospects, with particular focus on the procurement process that led to the establishment of the Master Agreement, the legal ability for sales prospects in any state to purchase Products & Services through the Master Agreement without having to conduct their own bid or RFP process, and the key differentiators in the design of this program with Winning Supplier, and iii) attend at least one Winning Supplier company-wide sales and/or leadership meeting per year.
- 1.2. <u>Sales Support</u>. Equalis will engage in Winning Supplier sales efforts as agreed by the Parties through participating in i) individual sales calls, ii) joint sales calls, iii) communications and customer service, iv) discussions and communication with sales prospects during the sales process to address questions relating to the procurement process, legal authority to purchase through the Master Agreement, and program design, v) trainings for Equalis Members' teams, vi) regular busines reviews to monitor Program success, and vii) general contract administration.
- 1.3. <u>Marketing</u>. Equalis will incorporate information about the Products & Services into Equalis Group's website and general collateral materials. Equalis and Winning Supplier will jointly develop and approve marketing materials to promote Products & Services, such as website content, brochures and collateral, talking points, press releases, and correspondence. Equalis will market the Products & Services to Prospective Participants as part of Equalis' ongoing marketing activities through Equalis Group; these marketing efforts may consist of a combination of i) general marketing of all of Equalis Group's master group purchasing agreements, including the Master Agreement and Winning Supplier's Products & Services, ii) marketing of Winning Supplier's Products & Services specifically and/or as part of a package of selected master group purchasing agreements to targeted Prospective Participants, and iii) attending trade shows, conferences, and meetings.

2. Winning Supplier Roles & Responsibilities.

As a condition to Winning Supplier entering into the Master Agreement, which is available to all Public Sector Entities, Winning Supplier must make certain representations, warranties, and covenants to Equalis designed to ensure the success of the Master Agreement for all Prospective Participants, sales prospects, and Winning Supplier.

2.1. Equalis Group Membership Agreement. In conjunction with the provision of Customer Agreements to Prospective Participants and/or initiating the sale of Products & Services to Prospective Participants not required to enter into Customer Agreements, Winning Supplier will provide the Equalis Group Master Intergovernmental Cooperative Purchasing Agreement (whether in hard copy, electronically, or via www.EqualisGroup.org) and encourage any Prospective Participants subject to the Master Agreement who have not already joined Equalis Group to join Equalis Group in conjunction with executing Winning Supplier's Customer Agreements and/or beginning to purchase Products & Services from Winning Supplier to ensure that Winning Supplier and each Program Participant are in full compliance with applicable state procurement statutes.

- 2.2. <u>Corporate Commitment</u>. Winning Supplier commits that i) the Master Agreement has received all necessary corporate authorizations and support of Winning Supplier's executive management, ii) the Master Agreement will be promoted to Public Sector Entities in the geographies defined in the Master Agreement, including any existing customers, and Winning Supplier will transition existing customers, upon their request, to the Master Agreement, and iii) Winning Supplier will identify an executive corporate sponsor and a separate national account manager that will be responsible for the overall management of the Master Agreement and this Agreement.
- 2.3. Sales Commitment. Winning Supplier commits to aggressively market the Master Agreement as a market strategy in the public sector and that its sales force will be trained, engaged, and committed to offering the Master Agreement to Public Sector Entities through Equalis Group in the geographies defined in the Master Agreement. Winning Supplier commits that all sales under the Master Agreement will be accurately and timely reported to Equalis. Winning Supplier also commits that its sales force will be compensated, including sales incentives, for sales to Program Participants under the Master Agreement in a consistent or better manner compared to sales to Public Sector Entities if Winning Supplier were not awarded the Master Agreement. Supplier will make available to interested Prospective Participants such price lists or quotes as may be necessary for such Prospective Participants to evaluate potential purchases of Products & Services under the Master Agreement.
- **2.4.** Marketing Commitment. Winning Supplier commits to work with Equalis to develop a sales and marketing plan ("Plan") within the first ninety (90) days of the Master Agreement Effective Date. The Plan may include, but is not limited to, the following:
 - **2.4.1.** Issuing co-branded press release
 - **2.4.2.** Publishing Master Agreement details and contact information on both Equalis Group and Winning Supplier's websites
 - **2.4.3.** Scheduling and holding training on the Master Agreement for the sales teams of both Equalis Group and Winning Supplier
 - **2.4.4.** Jointly participating in national and regional conferences
 - **2.4.5.** Jointly attending national and regional Equalis Group Member networking events
 - 2.4.6. Designing, publishing, and distributing co-branded marketing materials
 - **2.4.7.** Engaging in ongoing marketing and promotion of the Master Agreement for the entire Term of the Master Agreement (e.g., developing and presenting case studies, collateral pieces, and presentations)

APPENDIX C: FINANCIAL TERMS

This Appendix may be modified at any time with the mutual written consent of the Parties.

1. Administrative Fee.

On or before the fifteenth (15th) of each month, Winning Supplier shall remit to Equalis an administrative fee payment (the "Administrative Fee") of written number percent (number%) of the total Winning Supplier revenue (the "Equalis Group Spend" or "Spend") invoiced to Program Participants during the prior calendar month. "Spend" shall mean the cumulative purchases of Products & Services by Program Participants under the Master Agreement net of taxes, shipping costs, returns, and credits. All Administrative Fees not paid when due shall bear interest at a rate equal to the lesser of one- and one-half percent (1.5%) per month or the maximum rate permitted by law until paid in full.

2. Case-by-Case Administrative Fee Adjustments.

The Parties understand and acknowledge that Wining Supplier may have to provide aggressive deviated pricing on a case-by-case basis to win certain opportunities with Prospective Participants when those opportunities represent a sufficiently large Spend and/or are highly competitive. In such situations, Winning Supplier may request Equalis accept a reduced Administrative Fee. The Parties agree to evaluate each such situation as it arises and utilize best efforts to establish an adjusted Administrative Fee rate upon mutual written agreement (including via email) of the Parties.

3. Rebates or Other Payments.

Insert rebate or other payment language as agreed.