



The National Roofing Contractors Association (NRCA) performed a study comparing three roof maintenance philosophies and their impact on roof life. Their findings showed the following:

| Maintenance Type | Average Life Span |
|------------------|-------------------|
| Unmaintained | 10 to 14 years |
| Maintained | 14 to 20 years |
| Managed | 20 to 35 years |

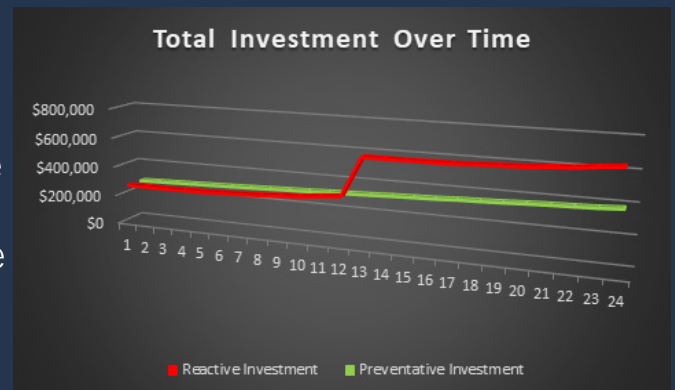
ROOFING TOTAL COST OF OWNERSHIP REACTIVE VS. PREVENTATIVE MAINTENANCE

IN GENERAL, MAINTENANCE FALLS INTO TWO CATEGORIES: REACTIVE OR PREVENTATIVE.

REACTIVE MAINTENANCE focuses on repairing an asset once failure occurs. **PREVENTATIVE MAINTENANCE**, however, focuses on avoiding repairs and asset failure through preventative and predictive methods.

THE BENEFITS OF PREVENTATIVE MAINTENANCE

Preventative maintenance is a management strategy to provide and maintain serviceable roofing assets. It is a multi-year planned strategy to select most effective treatments to preserve your roof, to impede their future deterioration and to maintain or to improve their functional condition while maintaining a safe and dry building interior.



A study on repair costs was performed by the country's largest roofing manufacturer. They found the average cost to maintain a roof as part of an asset management program to be \$0.04 per square foot. The average cost of repairs performed on a reactive basis was four times as much at \$0.16 per square foot! While these studies can provide an idea of the costs associated with reactive repairs, they did not include the hidden costs resulting from the need for roof repair. These include damage to insulation (loss of energy efficiency), deck degradation (structural concerns), damage to ceiling tiles, business disruptions, product loss, and slip & fall litigation.

TOTAL COST OF OWNERSHIP

Choosing to pursue a preventative maintenance plan can save you money and extend the life of your roof. In the example in Figure 2, a case study was performed, comparing total cost of ownership when a preventative maintenance plan is enacted versus the cost of maintaining your roof asset reactively.

THE PREVENTATIVE MAINTENANCE PLAN NOT ONLY EXTENDS THE LIFE OF YOUR ROOF BUT SAVES YOU 43% OF THE TOTAL COST PER YEAR!

| REACTIVE MAINTENANCE | | PREVENTATIVE MAINTENANCE | |
|------------------------------------|--------------------|---|--------------------|
| Roof Installation Cost | \$265,000.00 | Roof Installation Cost | \$265,000.00 |
| Leak Service Repair Cost | \$48,000.00 | PM Cost (annual inspection/maintenance) | \$85,000.00 |
| <u>Repair Cost</u> | <u>\$15,000.00</u> | Leak Service | \$10,000.00 |
| Total Cost Roof #1 | \$328,000.00 | <u>Repair Cost</u> | <u>\$15,000.00</u> |
| Life of Roof (years) | 12 | Total Cost | \$375,000.00 |
| Re-roof Installation Cost | \$265,000.00 | Life of Roof (years) | 24 |
| Leak Service | \$48,000.00 | | |
| <u>Repair Cost</u> | <u>\$15,000.00</u> | | |
| Total Cost of Roof #2 | \$328,000.00 | | |
| Total Cost Over 24 Years | \$656,000.00 | Total Cost Over 24 Years | \$375,000.00 |
| Total Cost of Ownership (per year) | \$23,333.00 | Total Cost of Ownership (per year) | \$15,625.00 |