



DIOCESE OF TUCSON RISK MANAGEMENT ADVISORY

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A routine roof preventive maintenance program can save you thousands of dollars in unnecessary roof repairs. However, most church and school's maintenance programs are reactive – that is roof repairs are made **after the damage is done**.

We are encouraging parishes to take a proactive approach to roof maintenance.

Tremco, an Ohio-based manufacturer of commercial roofing products and provider of roofing services, suggests that parish maintenance budgets include 1 percent of the *total roof replacement* cost per year to maintain a properly designed and installed roof. For example, if the average roof cost is between \$4 and \$8 per square foot, the annual budget for a 20,000-square-foot roof's maintenance should be \$800-\$1,600. At that rate, a roof can be maintained for 100 years before it needs replacement. According to the manufacturer, maintenance programs vary greatly, but, at the very minimum, the following should be considered:

- Roof should be inspected quarterly by maintenance staff
- Abnormalities in the roof surface should be investigated promptly. Blisters and ridges of the roof membrane can be an indication of moisture in the roof system.
- Debris such as leaves, small branches, and dirt should be removed.
- The roof should be examined for damage from vandalism, severe environmental exposure, and interior catastrophes such as fire or burst pipes.
- Gutters, down spouts, drains, and surrounding areas should be cleaned, and positive drainage should be assured.
- All metal flashings and gutters should be examined for rust damage, and they should be well-attached and sealed.
- Areas that abut the roof should be checked, and items such as damaged masonry, poorly mounted counter flashings, loose caulking, and bad mortar joints should be repaired.
- The edges of the roof should be examined for wind damage. Materials that have been lifted or displaced by the wind should be corrected.
- Roof-top equipment such as air conditioners, evaporative coolers and antennas should be checked to ensure that the supporting members do not move excessively, causing wear. Equipment should not leak materials onto the roof.
- The building exterior should be checked for settlement and movement since structural movement can cause cracks.
- Protective coatings and surfaces should be examined for thinning, cracking, flaking or blistering.
- Plumbing components should be investigated, cracked fittings re-sealed and loose components replaced or tightened.
- Adjacent landscaping should not allow build-up of debris or damage from movement of branches overhanging the roof.
- Ice damage and hidden damage from excessive snow drifting or snow loading should be monitored and repaired.

A poorly maintained roof can be costly. Simple, consistent inspection of a facility's roof can help save money over the long term, and a preventive maintenance program can be a critical factor in extending roof life.