



## Roofing Maintenance and Inspectors

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If you do not currently have a roof system maintenance program, one should be initiated. For a roof system maintenance program to be successful, it has to be comprehensive enough to accomplish its intended purpose. The maintenance program should be implemented by knowledgeable personnel during inspection, maintenance and repair procedures.

A roof system maintenance program should have four components:

1. A historical record (contract documents, photographs, invoices, repair documentation) that will allow a roofing professional to see into the roof, rather than only its surface
2. Inspections that are regularly scheduled, such as semi-annual, and documentation of those inspections
3. Solutions and recommendations for deficiencies found on inspection.
4. Repair and maintenance with documentation that should be monitored and kept up throughout the roof's life.

Roof system inspections should be performed at least twice a year by a qualified architect, engineer, roof consultant, or roofing contractor who understands the design and basic components of the roof system. Inspections should be performed in spring so that the inspector can check the condition of the roof system after exposure to the winter elements. Fall inspections will determine the roof condition prior to winter and allow the appropriate repairs to be made expeditiously.

Additional inspections should be made after any severe weather, including hail, high winds or heavy rain. Roof systems also should be inspected before and after roof repairs, installation of rooftop equipment, parapet or chimney work, or other times when components impinging on the roof are altered; those performing such work often cause damage. Following the repair to building components, the roof system should be inspected for integrity.

During these roof inspections, photo documentation showing areas of concern or areas that require monitoring also should be obtained.

Prior to an inspection, it is beneficial to have a checklist of items to be inspected while on the roof system, as well as key roof plans for referencing items of concern. These checklists should be customized to the roof system being inspected. Maintenance inspection checklists should include the item being inspected, whether it is in good condition or a problem has been found, and the extent of the concern. In addition, a determination as to whether corrective action is required should be documented. Although checklists should be customized to the roof system in question, they generally include the following items for inspection:

- Exterior and interior walls, and the interior and exterior roof deck
- Roof system condition, including general appearance, surface condition and membrane condition
- Flashing conditions, including base flashing, counterflashing, copings and wall flashing
- Roof edge and fascia conditions
- Roof penetrations, including equipment base flashing, equipment housing and equipment operation
- Roof expansion joint covers

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- Pitch pans
- Photographs of all conditions of concern.

This checklist will document the roof system's condition, while providing the basis of a synthesized report for upper management.

If roof leaks occur between inspections, facility executives should carefully note conditions at the time of leakage. Heavy or light rain, wind direction, temperature, and the time of year that the leak occurred are important clues to tracing the roof leak. A roofing professional should note whether the leak stopped shortly after each rain or if it continued to drip after the roof was dry.

This information paves the way for diagnosis and correction of roof problems. It can also be used to prepare upper management with facts about the roof condition, which may help speed approval of funds for repair.

Roof access is another concern between roof inspections. Roof traffic during very cold or hot weather should not be permitted, as damage can result more easily during these times.

Any modification to the roof system such as installation of television and radio antennas or mechanical equipment, should not be performed without notifying the roofing contractor or roof system manufacturer as to the methods and details of these installations. Modifying warranted roof systems without prior manufacturer approval may void the warranty. Complete documentation of all personnel with access to the roof should be kept.