

The Role of the

MANUFACTURER'S INSPECTOR

in the Roofing Process

By George Furman

A manufacturer's inspector is an integral member in the roofing process. Roof inspections are performed to assure that the materials and workmanship of the contractor meet or exceed the expectations presented to the buyer. These inspections can fall under three categories:

- (1) interim inspections,
- (2) final inspections to determine warranty issuance, and
- (3) warranty claim investigations.

Interim inspections usually occur at specified times during the progress of a project and are intended to ensure that the contractor's personnel are installing the materials to the manufacturer's specifications. This type of inspection should catch installation

errors before the repair costs are incurred. The interim inspection is generally limited to smaller areas of roofing membrane and to questionable details. Areas inspected as well as subjects discussed during an interim inspection should be well documented on a roof plan. Manufacturers and contractors also view this visit as an excellent opportunity for roofing crew training; however, interim inspections should not be construed as a substitute for the contractor's quality control and designer's project quality assurance. The manufacturer is not a substitute for those functions.

A common misconception is that the manufacturer also inspects for compliance with building codes or other specifications, but this is not the case. Given the complexities of local code issues as well as requirements in contract specifications, it would be impossible for a manufacturer to be knowledgeable enough to perform inspections of such issues. A manufacturer provides final inspections only to determine if the installation meets that manufacturer's warranty criteria. Typically, contractors already approved by the manufacturer are involved with projects in which a manufacturer's warranty is required. Also, many contractors have developed a track record with their primary membrane manufacturer through repetitive, successful installations such that inspections for warranty find "No Repairs Required."

Inspections for warranty usually follow a well-defined procedure prescribed by the manufacturer. For all roof systems, details such as the perimeter flashing, penetration flashing, drains, and terminations are carefully examined to ensure correct installation. Many inspectors develop a routine wherein they inspect the entire perimeter of the roof system first and then begin to inspect the interior penetrations and other details. The field of the roof is left for the end of the inspection.



Seams on full-adhered EPDM system.



Ballasted EPDM roof.

With exposed systems, such as fully adhered and mechanically attached single-ply, and smooth or granular-surfaced asphalt systems, inspection of the field of the roof means checking the integrity of the laps. This can be done carefully with a probe in the case of thermoplastic membranes, or visually in the case of others.

With ballasted, single-ply systems, inspection of field seams is usually performed at random locations with the inspector removing small areas of ballast to expose and determine the quality of the seam installation. With gravel-surfaced asphalt systems, visual inspection of the membrane is all but impossible. As with the rest of the roof details, deficiencies in the field are marked and repaired with a properly installed patch or other approved repair. Many times, the installing contractor will provide workers to accompany the inspector on these inspections, so that any deficiencies found are repaired before the inspector leaves the job site.

The goal of an inspection due to a warranty claim is to identify the cause of the roof leak or other problem. If the repair is covered by the written manufacturer's warranty, an outline for the proper repair is derived, and the repairs are executed to keep the warranty in force. Contractor personnel can perform these types of inspections when authorized by the manufacturer to respond to warranty claims. The manufacturer can also send a representative for this type of inspection if the problem is complicated, hidden, or large in scope. This inspection generally starts on the interior of the building to plot the location of the roof leaks. Those loca-

tions are found on the roof, and possible causes of water penetration are identified through visual investigation, probing, destructive testing, water testing, or other means. This work can be done by the inspector or in conjunction with a contractor's workers.

Once the cause of the problem is discovered, the inspector then determines why the problem occurred so that the issue of warranty coverage can be resolved. Manufacturers' warranties are limited in scope and are not repair contracts for any active building leaks. Warranties typically cover the repair of roof leaks only and then only if the leak was caused by the manufacturer's supplied materials or the workmanship used to install those materials. Despite whether the repair is covered by a warranty or not, the inspector will outline a scope of work to remedy the problem. This may be as simple as instructing the contractor to install a patch over an open flashing or as complex as a specification being written, bid, and the work performed to replace a roof area.



Flashing of a skylight on a thermoplastic roof.

Roof inspections are an essential element of customer satisfaction. Roof inspections can be performed by many people, and each has his own goal and purpose. Manufacturers' inspections are intended to ensure that the roof system meets the manufacturers' specifications (or approved deviations from those specifications) so that long-term performance of the roof system during the warranty period can be expected. ■

ABOUT THE AUTHOR

George Furman is division manager of contractor services for Firestone Building Products Co. Prior to this position, he worked as a warranty claims engineer and manager for Firestone. Before his employment by Firestone, Furman worked in the roofing trade as a mechanic, foreman, superintendent, and estimator. He has a bachelor of arts degree in economics from Eastern Illinois University.



GEORGE FURMAN