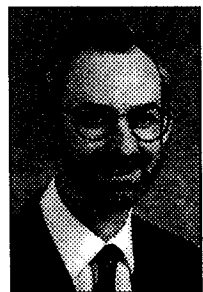


The BUR and mod bit maintenance manual: Optimizing service life

by Thomas L. Smith, AIA, RRC

The Asphalt Roofing Manufacturers Association (ARMA) and NRCA recently published the *ARMA/NRCA Manual for Inspection and Maintenance of Built-Up and Modified Bitumen Roof Systems: A Guide For Building Owners*. This new document is tailored after the *SPRI/NRCA Manual of Roof Inspection, Maintenance, and Emergency Repair for Existing*



Single-Ply Roofing Systems. Both manuals contain information on modified bitumen membrane roof systems.

Although the new manual primarily is intended for building owners, it contains helpful information for roofing contractors and other roofing professionals. The manual is organized into seven sections: introduction, historical record, system performance, roof inspections, owner-performed maintenance, emergency repairs and a summary of owners' responsibilities.

Introduction

In the introduction, building owners are made aware of several important aspects related to roof systems. For example, even though a manufacturer's or contractor's warranty may have been purchased, a building owner still is responsible for proper roof system care and maintenance. The manual also advises that a warranty can be voided inadvertently by building owner actions (e.g., failure to notify the warrantor of leaks in a timely manner or failure to notify the warrantor prior to the installation of new rooftop equipment).

Service agreements between

building owners and professional roofing contractors also are discussed. These agreements typically cover periodic inspections and the performance of specific routine maintenance.

Historical records

The manual advises building owners to maintain historical records of their roof systems. The file should include baseline information, such as details of the system's construction (e.g., type of deck, type and thickness of the insulation, kind of membrane), and the names of the material manufacturers and contractor. This information is supplemented by subsequent reports on inspections, maintenance and repairs. Good historical records should minimize the costs of future repair and maintenance work.

System performance

In this section, building owners are informed of various natural and man-made factors that can affect roof system performance. With this understanding, the owner should realize the importance of semiannual inspections; if problems develop, corrective action can be taken before serious damage occurs.

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Detailed guidance is given on conducting semiannual inspections, including a checklist to assist inspectors. The inspections may be conducted by building owner personnel or roofing professionals; in either case, the manual advises that inspectors should understand the design and basic components of the roof system.

In addition to the semiannual inspections, several situations (e.g., unusual weather conditions, such as

hail, high winds or unusually heavy snow) are presented where special inspections should be performed.

Maintenance

Also described in the document are certain types of maintenance that can be accomplished by a building owner's maintenance personnel (e.g., debris removal at roof drains). However, the manual recommends that certain maintenance procedures, such as reapplication of surface coatings, be performed by a professional roofing contractor.

It also advises that if ductwork or HVAC units are suspected of causing leakage, a building owner should contact a mechanical contractor to assess the ductwork's watertight integrity and recommend repair procedures.

Emergency repairs

Guidance on temporary leak and wind damage repairs is given. Although this information is useful for roofing contractors, it can be invaluable to building owners if a contractor is not available. For example, if the building is in a remote location or there is widespread damage (e.g., a large hailstorm or hurricane), a building owner's personnel may have to execute the emergency repairs. For this reason, building owners with built-up or modified bitumen membranes should have this document at each of their facilities.

Commitment

The manual states that a building owner can have a significant impact on his roof system's service life. By committing to the roof system's care by limiting and controlling access, avoiding abuse, having inspections conducted, performing routine maintenance and having repairs made, the roof system's service life will be enhanced. By following the manual's recommendations, a building owner's roof investment should be maximized. **[PR]**

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