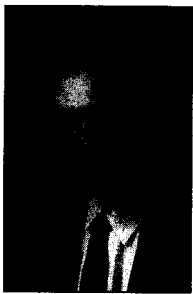


The single-ply maintenance manual: Optimizing roof life

by Thomas L. Smith, AIA, CRC

N RCA and the Single Ply Roofing Institute (SPRI) recently published the *SPRI/NRCA Manual of Roof Inspection, Maintenance, and Emergency Repair for Existing Single-Ply Roofing Systems*.



The manual was prepared by a task force of contractors and manufacturers and contains valuable information for building owners and roofing contractors on

thermoplastic, thermoset and modified bitumen membranes.

1. *Introduction.* This section discusses several different issues, including the importance of periodic inspections, maintenance and repair. *Warranties*, and how they can be inadvertently voided by the building owner are examined, along with *service agreements* between owners and their professional roofing contractors (for items such as periodic inspections and specific routine maintenance). Owners are also advised on the importance of controlling *rooftop access* and maintaining a log of people visiting the roof to minimize roof damage.

2. *Historical record.* The building owner is advised of the importance of keeping a record of the roof system. The record should include information on the roof system and subsequent information on inspections, maintenance and repairs. The manual contains a sample historical record form in the appendix; by keeping a record, the owner's cost for future repair and maintenance work should be minimized.

3. *Causes of problems.* A number of natural and man-made causes of problems that affect roof service

life are identified. The purpose of this section is to alert building owners to the fact that they should have their roofs periodically inspected so that problems may be found in the early stages when they can often be cost-effectively corrected. A careful review of this section, in comparison with provisions in many warranties, will reveal that many roof problems are often not covered. Thus, astute owners will recognize the value of periodic inspections and follow-up maintenance and repairs.

4. *Roof inspections.* Two types of inspections are identified: periodic inspections and special inspections. Periodic inspections are recommended in the spring and fall, and it is noted that many professional roofing contractors provide this service for a fee. Information regarding the use of the building owner's personnel for the fall inspection is given, though ideally this inspection would also be performed by a roofing professional. Special inspections by a roofing professional are recommended following events such as unusual weather (e.g., large hail) or construction adjacent to the roof.

This section also includes information to assist the inspector. In addition, the appendix includes an inspection form.

5. *Owner-performed maintenance.* The inspection form identifies problems that typically can be handled by the owner's personnel and those items that should be performed by a professional roofing contractor. This section discusses the types of problems that the building owner's maintenance personnel should be able to perform, such as debris removal, unclogging drains and redistributing small areas of ballast.

6. *Emergency repair.* Recommendations on leak repair and wind damage repair procedures are given. This information is applicable to roofing contractors, as well as building owners. Ideally, emergency repairs should be per-

formed by a contractor, but if the building is in a remote location or if there is widespread damage (e.g., a large hail storm or hurricane), the building owner may have to execute emergency repairs because of a lack of availability of a professional roofing contractor.

To my knowledge, this is the first document to give detailed information on emergency repair procedures for single-ply wind damage. Coupled with good judgment on the part of those performing emergency repairs, this data should be of great value.

7. *New penetrations and equipment.* As roofing professionals are aware, improper installation of new penetrations (e.g., plumbing vents) or rooftop equipment (e.g., signs or satellite dishes) is often the cause of roof problems and may also void the roof warranty. The manual advises building owners to contact the membrane manufacturer before installing new equipment or penetrations, and to have the work related to the roof be performed by a professional roofing contractor.

8. In the concluding section, it is stated that "by making a commitment to periodic inspections, appropriate maintenance and repairs, along with controlling roof access, the roof's service life can be optimized and the building owner's investment maximized."

This is a well-organized manual that presents competent and useful information. It is a document that building owners should have at each of their facilities. The task force that produced this exceptional manual is currently working on a follow-up document that will provide professional roofing contractors with detailed information on performing repairs on the different types of single-ply membranes.

To purchase a copy of the manual, contact NRCA's Marketing Department at (708) 299-9070. **FR**

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