

Roof repair expertise

NRCA releases a new addition to its
technical library

by Maciek Rugar

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n December 2022, NRCA released *The NRCA Repair Manual for Asphalt Shingle Roof Systems*. This newest addition to NRCA's technical publication library is patterned after and a companion to NRCA's *Repair Manual for Low-slope Membrane Roof Systems, Second Edition*. Both manuals provide step-by-step instructions with photo illustrations.

The NRCA Repair Manual for Asphalt Shingle Roof Systems is an unbiased, authoritative manual of industry best practices your crews can use as a go-to reference guide for identifying problems and properly repairing asphalt shingle roof systems.

Scope and use

The procedures in *The NRCA Repair Manual for Asphalt Shingle Roof Systems* are intended for long-term repair of asphalt shingle roof systems. For each repair procedure, the manual provides step-by-step instructions in text and photographs to assist field workers. Procedures are based on information collected by NRCA from knowledgeable, practicing roofing contractors and asphalt shingle manufacturers and reflect the consensus of the consulted professionals.

The manual contains 31 procedures that address a variety of repairs and maintenance tasks



commonly performed on asphalt shingle roof systems. The manual does not address temporary, emergency, unconventional or regionally specific repairs.

Complex repairs, including those requiring additional evaluation or design work, are outside the scope of the manual. In such cases, field crews should collect additional information describing existing conditions and forward it to management who may choose to develop project-specific bids for building owners.

The manual does not include all repair practices and applications such as time-tested area practices that have been found to work satisfactorily in specific climates or geographic regions.

The procedures primarily are intended for professional field workers but may be used by building maintenance personnel trained in roofing safety practices and common repair scenarios applicable to the roof system installed on buildings. If building maintenance personnel have no experience with needed repairs, it is best for the building owner to hire a professional roofing contractor to perform the work.

The manual may be used as a resource by roofing professionals when communicating with building owners, homeowners' associations, insurance companies and others. For instance, roofing contractors can reference the manual to substantiate asphalt shingle roof system repair practices and cost estimates to homeowners and insurance companies when repair costs are paid for by homeowners' insurance.

The task force

NRCA's Steep-slope Repair Task Force was responsible for creating the manual. The work took place from July 2020 to May 2022 during which the task force held 23 meetings. Earlier during its term, the task force developed *Asphalt Shingle Roof Systems—A Homeowner's Guide for Inspection, Maintenance and Repair*, a 30-page guide published by NRCA in the fall of 2020 (see "A new resource for consumers," November 2020 issue).

Nine task force members contributed to the development of the manual. Additionally, three NRCA member roof

system manufacturers and a member roofing contractor supplied expert help and materials for staging the repairs photographed for the manual.

Content

The introduction addresses the manual's scope, NRCA terminology used in the manual, manufacturer and contractor warranties, material identification, investigating leak root causes and roof system historical records.

Thirty-one repair procedures make up the core of the manual and are organized into seven sections:

General

Repair procedures in the General section address removing and replacing damaged or defective asphalt shingles from the field of a roof; replacing a section of damaged underlayment and roof deck sheathing; replacing hip cap shingles and ridge cap shingles; and repairing or replacing sheet-metal ridge cap flashings.

Fasteners

This section addresses backed-out nails, incorrectly seated shingle nails, and instances where too few nails had been used to fasten asphalt shingles or shingle nails had been placed incorrectly.

Flashings

This section includes procedures for installing new or missing flanged penetration flashings (a box attic exhaust vent, for example) and sheet-metal counterflashings; maintenance and repair of flanged penetration flashings and sheet-metal counterflashings; replacing step flashings and repairing headwall flashings; and backer flashing.

Valleys

Instructions for asphalt shingle roof system valley repairs including clipping valley shingles, trimming open valley shingles, stripping-in open valley metal, and complete replacements of closed-cut valleys and open valleys are addressed in this section.

Edge metal and gutters

This section addresses maintenance of gutter sealant, patching damaged gutter systems, installing drip edge

metal, installing and replacing downspouts, reusing existing gutters and replacing gutters.

Ice and snow

The Ice and Snow section includes detailed instructions for repairing roof system and roof deck damage resulting from ice dams and associated leaks. Practices for safe rooftop snow removal also are included.

Crickets

Cricket flashings and cricket substrates are addressed in the final section. NRCA recommends crickets at the upslope side of chimneys and roof curbs when the chimney or curb is more than 24 inches wide. For all crickets, NRCA suggests wood framing and decking be installed beneath crickets for support. The section provides instructions for installing a wood cricket substrate, flashing a shingled cricket and a metal-skinned cricket.

Repair procedures contained in all sections include a scope statement, checklist of tools and supplies, applicable warnings and notes for repair crews, and step-by-step instructions illustrated with color photographs.

Three checklists to help manage service crews also are included in Appendixes 1-3: a checklist of information collected from an incoming problem call, a checklist of information brought back from a service call, and an inventory of service truck materials and tools.

A go-to resource

The NRCA Repair Manual for Asphalt Shingle Roof Systems is a valuable resource for roofing professionals seeking best practice recommendations for asphalt shingle roof system repairs. For many of the repairs, no other sources exist for similar instructions at a comparable level of detail.

If your company performs asphalt shingle roof system repairs, especially if you've had your repair recommendations challenged in the past, you should add this manual to your technical reference library.

The manual is available as a three-ring binder where individual pages may be removed for convenience when preparing submittals and as a PDF to download. To get your copy, visit NRCA's online bookstore at nrca.net/store. 📖🔍

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