

Keeping up to date

NRCA issues interim updates to The NRCA Roofing Manual

by Mark S. Graham

In July, NRCA issued interim updates to the electronic versions of the 2014 and 2015 volumes of The NRCA Roofing Manual. The updates are intended to maintain the manual as a current authoritative roofing industry technical reference. Following is a brief overview of some of the more significant changes.

NRCA has expanded its cautionary language regarding water-based bonding adhesives

2014 volume update

Guidelines for determining design temperature gradients through roof assemblies' cross-sections have been added to the Condensation and Air Leakage Control section of *The NRCA Roofing Manual: Architectural Metal Flashing, Condensation and Air Leakage Control, and Reroofing—2014*. As it applies to low-slope roof

systems, this new information is added in Chapter 2—Condensation Control for Low-slope Roof Systems beginning on page 206. For steep-slope roof systems, this information is added in Chapter 3—Condensation Control and Ventilation for Steep-slope Roof Assemblies beginning on page 220.

Determining and analyzing the design temperature gradient through a roof assembly can help designers determine operating temperatures of roof assembly components and the proper placement of a vapor retarder in a roof assembly.

2015 volume update

A number of updates have been made to *The NRCA Roofing Manual: Membrane Roof Systems—2015*.

Information regarding heat induction-welded, thermoplastic, single-ply membrane roof systems has been added to Chapter 1—Roof System configurations (page 100) and Chapter 5—Roof Membranes (page 231).

Although manufacturers' insulation board layout patterns may vary, NRCA recommends roof insulation be installed in multiple layers and the top layer should be where board joints are in continuous straight lines in both directions rather than a staggered pattern.

In Chapter 2—Roof Decks (page 138) and Chapter 9—Reroofing (page 291), a cautionary note has been added indicating roofing operations and/or installing mechanically attaching rigid board insulation or a roof membrane likely will dislodge spray-applied fire-resistive materials applied to the undersides of steel roof decks.

In Chapter 4—Rigid Board Insulation (page 179), NRCA recommends designers specify flat stock polyisocyanurate insulation in multiple layers with 1½-inch minimum and 2½-inch maximum board thicknesses. When tapered-board polyisocyanurate insulation is used, NRCA recommends a maximum 2½-inch thickness for the tapered boards and a maximum 4-inch thickness for flat fill boards.

In Chapter 5—Roof Membranes (page 237), NRCA has expanded its cautionary language regarding water-based bonding adhesives to include hot, humid conditions. In situations where roofing work must take place during conditions unfavorable for water-based adhesive use (such as when construction project sequencing requires roofing work be conducted in fall or winter in a cold climate, in cold and damp conditions,

or in hot and humid conditions), NRCA recommends building owners and designers specify alternative roof system types that are not as sensitive to site conditions.

Appendix A1—Wind Loads (beginning on page 552) has been revised to address the allowable stress design (ASD) and strength design methods for determining design wind loads according to ASCE 7-10, "Minimum Design Loads for Buildings and Other Structures." Updated information also has been provided for converting strength design values to ASD values and adding an appropriate safety factor for designers to determine minimum required tested uplift-resistance capacities (FM approvals and Underwriters Laboratories ratings).

Staying current

NRCA issued its first interim update to the 2014 and 2015 manuals in January. This latest update further updates the 2014 and 2015 manuals and is intended to maintain the manual as a current authoritative technical reference.

NRCA members and those who have downloaded PDFs of the manuals can access updated PDFs at shop.nrca.net.

NRCA members who access The NRCA Roofing Manual using the NRCA app will receive push notifications indicating the updated versions are available.

The interim updates will be incorporated into the hard copy versions of the 2014 and 2015 manuals when they are republished in January 2018 and January 2019, respectively. 📱🌐🔗

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