



Detail-oriented

NRCA construction details provide useful guidance

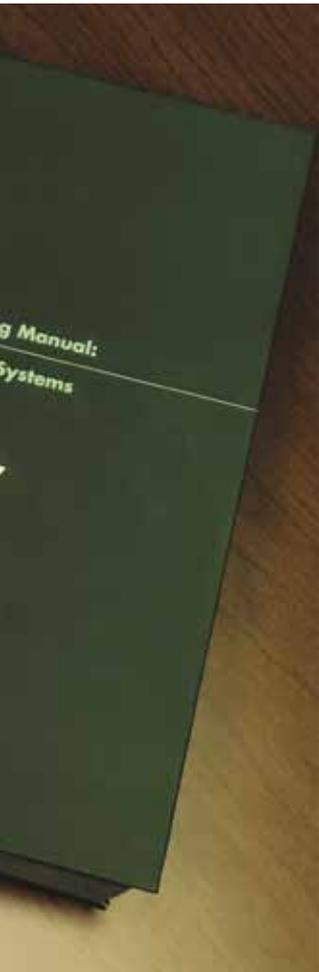
by Mark S. Graham

Proper design of construction details is important to a roof system's performance and longevity. NRCA provides guidance to roof system designers—and the roofing industry in general—regarding design and installation quality for long-term performing roof system construction details.

NRCA construction details

NRCA provides more than 620 construction details applicable to various roof system types in *The NRCA Roofing Manual*. The four volumes of the manual are: *The NRCA Roofing Manual: Metal Panel and SPF Roof Systems—2016*, *The NRCA Roofing Manual: Steep-slope Roof Systems—2017*, *The NRCA Roofing Manual: Architectural Metal Flashing and Condensation and Air Leakage Control—2018* and *The NRCA Roofing Manual: Membrane Roof Systems—2019*.

Each volume contains construction details for specific roof system types. For example, construction details for asphalt shingle roof systems are provided in Chapter 6—Construction Details in the Asphalt Shingle Section of *The NRCA Roofing Manual: Steep-slope Roof Systems—2017*. Asphalt shingle roof system construction details are



denoted as “ASPH-” followed by a number and sometimes a letter (for example, ASPH-3 and ASPH-3A).

Construction Detail ASPH-3—Eave With Water and Ice-dam Protection Membrane depicts NRCA’s preferred method for addressing an eave detail using a water and ice-dam protection membrane with a stripping ply over the drip edge metal. Construction Detail ASPH-3A—Eave With Water and Ice-dam Protection Membrane depicts an alternative detail NRCA also considers acceptable based on any limitations described in the detail’s notes.

Many construction details for specific roof system types depict common sheet-metal flashings. Consult the construction details in the Architectural Metal Flashing Section of *The NRCA Roofing Manual: Architectural Metal Flashing and Condensation and Air Leakage Control—2018* for specific guidance and options specific to architectural metal flashings.

NRCA’s construction details are presented in the same time-tested, best industry practices context on which *The NRCA Roofing Manual* is based. In some instances, the construction details are more conservative than manufacturers’ standard construction details. Manufacturers’ standard construction details typically are based on the specific manufacturer’s minimum requirements to achieve a specific warranty term. As a result, NRCA’s

construction details may be more complex and labor-intensive (and more costly) to install than others’ standard details.

Using NRCA’s details

NRCA’s construction details are intended to provide a basis for roof system designers to develop project-specific construction details for conditions applicable to their projects. It is unlikely simply copying NRCA construction details will adequately reflect project-specific conditions.

For example, NRCA’s construction details depict roof decks and vertical flashing substrates as generic, nonspecific materials. Roof system designers should incorporate their project-specific roof deck and vertical flashing substrate material types into construction details.

Similarly, common conditions, such as insulation thicknesses and flashing heights, are depicted in NRCA’s construction details as standard dimensions. Roof system designers should incorporate their project-specific thicknesses, dimensions and any other appropriate parameters into their construction details.

To help roof system designers use and customize NRCA construction details to project-specific conditions, NRCA’s construction details are available as AutoCAD®-compatible (.dwg) files.

The four-volume set of *The NRCA Roofing Manual*, individual volumes of the manual and *The NRCA Construction Details: CAD Files—2019* are available to NRCA members as free downloads through NRCA’s website, www.nrca.net; nonmembers can purchase the CAD files. A hard copy version of *The NRCA Roofing Manual* four-volume set and individual manual volumes are available for purchase at www.nrca.net. 🌐📄

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Manual	Detail type	Designation ¹
<i>The NRCA Roofing Manual: Membrane Roof Systems—2019</i>	Built-up roof systems	BUR-
	Polymer-modified bitumen	MB-
	EPDM roof systems	EPDM-
	Thermoplastic roof systems	TP-
<i>The NRCA Roofing Manual: Architectural Metal Flashing and Condensation and Air Leakage Control—2018</i>	Coping	C-
	Chimney	CH-
	Counterflashing	CF-
	Embedded edge	EE-
	Expansion joint	EJ-
	Fascia cap	FC-
	Gutter	G-
	Headwall flashing	HF-
	Pipe penetration	PP-
	Scupper	SC-
	Sidewall flashing	SW-
Valley	V-	
<i>The NRCA Roofing Manual: Steep-slope Roof Systems—2017</i>	Asphalt shingle roof systems	ASPH-
	Clay and concrete tile	TILE-
	Metal shingle roof systems	MS-
	Slate roof systems	SLATE-
	Wood shake roof systems	WOOD SHK-
	Wood shingle roof systems	WOOD SHNG-
<i>The NRCA Roofing Manual: Metal Panel and SPF Roof Systems—2016</i>	Architectural metal panel roof systems	AM-
	Structural trapezoidal seam metal panel roof systems	STM-
	Structural vertical seam metal panel roof systems	SVM-

¹Detail designations are followed by an additional numeral and possibly a letter designation.

Construction detail designations



FAA predicts substantial growth in commercial drone use

The Federal Aviation Administration’s annual forecast report projects the number of commercial drones—or unmanned aircraft systems—in use could triple by 2023, according to www.constructiondive.com.

The noncommercial drone market is slowing; the FAA registered more than 900,000 owners and about 1.25 million noncommercial drones in 2018. However, the market is projected to grow to 1.39 million by 2023.

Companies are starting to explore potential applications of drones for business purposes, such as package delivery and medical services. In 2018, the FAA chose 10 cities for its UAS Integration Pilot Program, giving governments the chance to test real-world drone applications and see how they would affect airspace.

The FAA has been trying to address potential airspace issues involved with increased drone use. In 2015, the agency required owners

to register their drones online to better track their use. Although registration grew more

slowly in 2018, at the current rate, the number of commercial drones by the end of this year is projected to surpass the previous year’s projections for 2022.

With the commercial drone market set to continue growing, more governments likely will begin addressing new applications and permitting issues.



To read more about commercial drone use, go to www.professionalroofing.net.

ASTM International committee presents award

ASTM International’s Committee D08 on Roofing and Waterproofing has presented its William C. Cullen Award to Helene Hardy Pierce, vice president of technical services, codes and industry relations for NRCA member GAF, Parsippany, N.J.

ASTM International’s Committee D08 on Roofing and Waterproofing established the William C. Cullen Award to recognize members who demonstrate outstanding contributions and personal commitment to the field. An ASTM International member since 1984, Hardy Pierce was honored for her contributions to the committee and leadership within the roofing industry.

She previously received ASTM International’s Award of Merit in 1998 and an Award of Appreciation from ASTM International’s Committee D08 on Roofing and Waterproofing in 2017. Hardy Pierce also is a member of the Construction Specifications Institute, International Institute of Building Envelope Consultants (formerly RCI Inc.) and Roofing Industry Committee on Weather Issues Inc.



Hardy Pierce

Green Building Initiative® announces revised standard

The Green Building Initiative has announced the release of *ANSI-GBI 01-2019: Green Globes® Assessment Protocol for Commercial Buildings*, a revised green building standard approved by the American National Standards Institute.

The only green building organization to deliver a commercial buildings rating system through an ANSI-audited consensus process, the Green Building Initiative first published the Green Globes standard in 2010. Efforts to revise the standard began four years ago. ANSI approved the revised standard as a consensus document at the end of April and published it as an approved standard in the institute’s Standards Action publication May 3.

ANSI-GBI 01-2019 includes revised green building criteria regarding resilience, life-cycle cost analysis, moisture-control analysis, health and effectiveness, and other market advances. ANSI also approved a maintenance plan for the standard to ensure revisions will occur every two years to keep the standard updated with the most recent market advances.

“More than 230 public meetings were held to deliberate the latest science and research, baselines and market advancements since the last update to Green Globes,” says Vicki Worden, president and CEO of the Green Building Initiative. “There’s tremendous excitement about Green Globes contributing leading edge thought leadership to green building design, construction and operations with this revised standard.”

ANSI-GBI 01-2019, associated change proposal forms and a schedule for continuous maintenance are available at www.thegbi.org/ansi.

