

The Tale of Two Flashings

When Properly Applied, Both Stories End in Front-Line Protection

by Richard Rinka

When it comes to channeling water across a building envelope from roof to ground, flashing and sealants are at the front line between fenestration units and critical weather resistant barriers (WRB). Two types of flashing have surfaced as prevalent: the self-adhering and liquid-applied varieties. That's likely due to their relatively simple methods for application.

Both self-adhering and liquid-applied flashings must demonstrate their acceptability in the field through established criteria and laboratory testing. These are set forth in AAMA 711-13, *Voluntary Specification for Self-Adhering Flashing Used for Installation of Exterior Wall Fenestration Products*, and AAMA 714-19, *Voluntary Specification for Liquid-Applied Flashing Used to Create a Water-Resistive Seal Around Exterior Wall Openings in Buildings*, respectively.

Self-Adhering Flashing

Flashings that are designed to be self-adhering are made of flexible materials that are coated on at least one side with an adhesive. These materials are used to bridge the gap between fenestration framing members (typically with mounting flanges) and the adjacent WRB, without the need for additional sealant or mechanical fasteners. Self-adhering flashing is typically sold in rolls 4-, 6- or 9-inches in width and come with a release liner that is removed prior to application.

The self-adhering flashing standard, AAMA 711 (currently in the final stages of updating), describes test methods used to simulate field conditions and



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specifies minimum performance requirements. The described testing methods are similar to those prescribed for liquid-applied flashing, with the addition of tensile strength and cold temperature (-18°C or 0°F) pliability.

Type A products do not require a primer. Type B products require use of a primer under certain field conditions. Both types are further categorized by exposure levels, including Level 1, for exposures up to 122°F (50°C), Level 2, for exposures up to 149°F (65°C), and Level 3, for exposures up to 176°F (80°C).

Liquid-Applied Flashing

Liquid-applied flashings—which are sprayed, brushed or troweled on—offer many performance advantages over other types, including outstanding adhesion to a wide variety of substrates. They also offer the

advantage of ultimate conformability for complex geometries and, in many cases, vapor-permeable water-resistant seals. Liquid-applied flashings cure to an elastomeric solid, providing a water-resistive seal at the interface between the door or window and WRB.

There are several different types of liquid applied flashings based on their chemical composition. These include water-based acrylic, asphaltic-based, and other elastomers with high solid content. These products have different installation considerations, including application thickness, shrinkage, vapor permeability, and use on damp surfaces.

The recently updated standard for liquid-applied flashing is AAMA 714-19. A previous edition has been referenced by both the International Residential Code (IRC) and the International Building Code (IBC). It defines minimum performance and

durability requirements that enable the specifier to evaluate and select the product that performs as expected. The standard defines methods used for testing (typically referencing ASTM test standards) for various performance requirements, including adhesive strength when cured, exposure to elevated temperatures, ultra-violet (UV) aging, thermal cycling, water immersion and water penetration resistance around nails, and crack-bridging ability. It also discusses the compatibility with other building materials and provides guidance for use on damp surfaces.

Note that, in terms of exposure to elevated temperatures, the flashing must be stable to withstand the effects of heating due to direct or indirect sunlight expected throughout the life of the building. Its ability to do so without losing adhesion (as verified by a peel test) is described in three levels of classification:

- **Level 1** (test exposure at 50° C or 122° F for 7 days);
- **Level 2** (65° C or 149° F for 7 days); and
- **Level 3** (80° C or 176° F for 7 days).

Installation considerations for liquid-applied flashings include applying coatings in uniform thickness, and—like any flashing or sealant—they need to be applied within the specified temperature range for a given application. As always, installers are encouraged to refer to the manufacturer’s installation instructions for specific information. **[DWM]**



Richard Rinka is the technical manager for standards and industry affairs for the American Architectural Manufacturers Association in Schaumburg, Ill.

➤ rrinka@aamanet.org