

# TECHNICAL BULLETIN

August 8, 2019

## Liquid Flashings

In recent years, the use of liquid flashings has gained tremendous popularity, especially as waterproofing roof designs have become more complex and detailed. Products abound in the marketplace, and while some may appear to be a good deal, only a few are explicitly Accepted by the *RoofStar Guarantee Program*: (a) single-component flashing systems, and (b) fleece-reinforced 2-component PMMA flashings. In addition to these, the *RoofStar Guarantee Program* acknowledges accessory flashing products marketed as a loose fibre-reinforced 2-component PMMA flashing for limited application; as Accessories, these products are not Accepted for widespread use on guaranteed Projects, and they may be used only in very restricted circumstances.

Members must pay close attention to the limited applicability of each product type, and note the restrictions imposed on their use by the Guarantee Program. Failure to select the appropriate material for a specific application may result in a flagged deficiency that the Member Contractor will be obliged to rectify before a RoofStar Guarantee can be issued.

This bulletin does not identify all the possible opportunities or limitations presented by each product type, and the applicator should consult both the *Roofing Practices Manual* and the product manufacturer to ensure compliance with the *RoofStar Guarantee Program*.

### Fleece-reinforced PMMA (2-component) flashing

Catalyzed polymethyl methacrylate (PMMA) flashing resin is a durable, hard-setting 2-component material that must be applied in two or more coats together with an embedded polyester fleece reinforcement fabric. Fleece-reinforced PMMA products are acceptable for application in the water plane, and may be used where foot traffic or contamination of the membrane is an issue (for example, below a kitchen fan), where abrasion may cause premature wear of the roof membrane (i.e. around the perimeter of a drain sump), or where it is difficult to flash a protrusion with membrane (I-beams or HSS posts, for example). Fleece-reinforced PMMA may also be used to terminate the top edges of membrane where it terminates on a vertical surface (as an alternative to mechanical fastening).

The RPM provides clear standards for the use and application of this product type, limited to SBS-modified bituminous membrane roof systems. Consult the manufacturer's application and preparation requirements, as a properly prepared substrate is key to the material's success.

These products must be installed with clean edge lines and uniform application rates. Also note cure times, as a delay in applying the fleece reinforcement may yield poor, unacceptable results and a flagged deficiency.

You can find notes scattered throughout the Standard, but the application requirements are found in both <u>Part 10 (PERIMETERS and WALLS)</u> and <u>Part 11 (DRAINS and PENETRATIONS)</u>. You will also find useful notes on the Material pages for Accepted Materials. Read the product description, and review the

Technical Data Sheet downloadable from the RPM. Ensure that these notes are consulted in combination with the Standards in the RPM.

Fleece-reinforced PMMA flashing systems should not be confused with field-applied PMMA systems which are handled similarly to flashings, but fall under a different set of Standards and limited use.

### Single-component liquid flashing

Single-component liquid flashing systems Accepted by the *RoofStar Guarantee Program* may not be used to terminate membranes, seal hard-to-flash penetrations at the water plane, or reinforce membranes against abrasion. Rather, these polyurethane products are suitable to coat galvanized flashings used at the water plane, or they may be used to flash details that membranes cannot be applied to, well above the water plane. Additionally, single-component polyurethane flashings may be used as an alternative to fleece-reinforced PMMA, to waterproof dowels set in a pre-curb (pre-curbs are at least 100 mm, or 4" above the water plane; the *RoofStar Guarantee Standards* require at least two independently cured coats that cover dowels and intersecting membranes).

Fleece reinforcement is required in single-component polyurethane flashings where a change in angle occurs, or where there is a joint between two supports (where the flashing is used to bridge a joint). In instances where a fleece is used, a second coating of liquid is required after the first coat has cured.

Clean edge lines and a uniform application typify good installation.

#### Accessory detailers

While these accessories are a PMMA product, they are reinforced with fibre mixed in at the time of application. These products may not be used as a substitute for fleece-reinforced PMMA, nor may they be used at the water plane. They are suitable for application where movement is not expected, and for limited areas where a fleece-reinforced PMMA flashing cannot be used. Commonly, fibre-reinforced PMMA detailers are used around bolts and nuts at least 100 mm (4") above the water plane, where neither membranes nor a fleece-reinforced PMMA flashing would be practicable.

This product should be installed with clean edge lines and a uniform application.

**End of Bulletin**