Installation of DOWSIL™ 778 Silicone Liquid Flashing

in rough openings of surface/barrier wall construction

Photo courtesy of images by Kenneth

Installation instructions

This document is intended to provide guidance on the surface preparation and application of DOWSIL™ 778 Silicone Liquid Flashing when used in rough masonry openings for windows and doors. The location design and extent to which the flashing should be applied to restrict liquid water from entering should be determined or reviewed by an appropriate design professional.

To facilitate this process, typical details for different installations are available at www.dow.com/air-barrier.

Surface preparation

Differences in substrate composition or environment may require different surface preparation methods. It is always best to evaluate prior to full installation of the project.

1. Remove any form release, laitance, dirt and debris.
2. Ensure that if compressed air is used to remove dirt and debris, the air is dry and oil-free.
3. Consult concrete supplier's cleaning recommendations for form release or laitance removal.
4. DOWSIL™ Primer P has been shown to be effective on damp surfaces to prevent potential bubbling. Field test to confirm this before use.

Treating the rough opening

1. Ensure that the rough opening has not been damaged or cracked during construction. Repair any damage or defects prior to installation of the liquid flashing.
2. Clean the surface of the rough opening where DOWSIL™ 778 Silicone Liquid Flashing will be applied. Surface should be clean and dry before application.
3. If desired as part of the water control design, the liquid flashing can be applied along the face of the rough opening. Limit the dimension to no more than 4". See Figure 1. Alternatively, if there are concerns about applying stucco with sufficient wet-out pressure to tight or constrained dimensions, DOWSIL™ 778 Silicone Liquid Flashing can be cut back from the edge (typically 1¼").[1, 2] See Figure 2.
4. Apply beads of DOWSIL™ 778 Silicone Liquid Flashing along the interior of the rough opening along the block or concrete. Spread the liquid flashing using a flat blade. Target a 25-mil applied thickness with a coverage rate of 10 square feet per sausage (without factoring waste).
5. Use of 16 to 20 mesh silica sand to enhance the wet-out of the stucco application by creating a rough surface is acceptable with DOWSIL™ 778 Silicone Liquid Flashing.

Use of chips may be needed if coating the outside face of the rough opening. Chips should be cast after application of DOWSIL™ 778 Silicone Liquid Flashing and before skin- over of the surface of the liquid flashing.

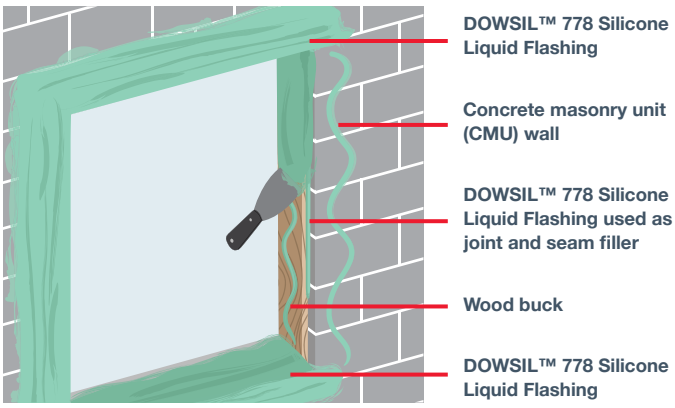

Figure 1: Typical installation applying DOWSIL™ 778 silicone liquid flashing with a spatula.

Alternative rough-opening detail

Wet-out is a critical factor in developing adhesion between stucco and liquid flashing. Some dimensions may be too small to apply proper wet-out, which may impact adhesion.

To address concerns with adhesion, industry standards allow cutting back the placement of liquid flashing. Figure 2 shows liquid flashing cut back from the edge (typically 1¼").

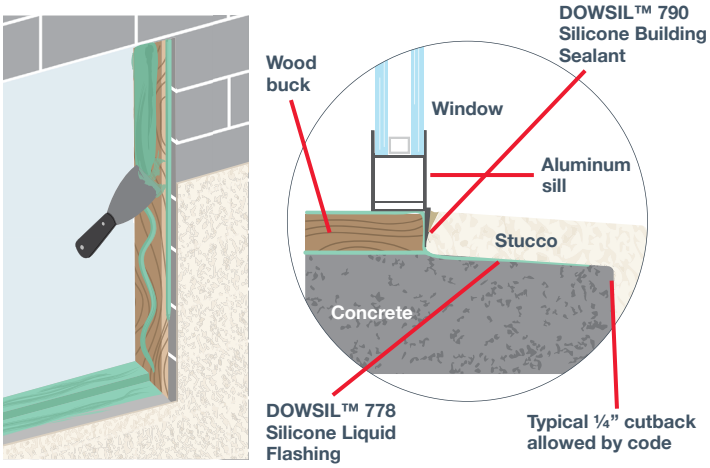

Figure 2: Alternative application detail to minimize adhesion issues.

Treating the wood buck

1. Industry guidelines[1,2] recommend applying a zigzag pattern of sealant along the back of wood bucks prior to installation in the rough opening. When a weatherseal is specified, DOWSIL™ 778 Silicone Liquid Flashing can be applied following this or other published industry recommendations.
2. Once the buck is installed, fasteners can be spot-applied with DOWSIL™ 778 Silicone Liquid Flashing to cover the head. Extend coverage of fasteners to ¾" to 1" diameter over the fastener head with a flat blade.
3. Apply beads of DOWSIL™ 778 Liquid Flashing along the edge and face of the wood buck as well as any transitions at the corners. Spread the sealant using a flat blade, targeting a 25-mil applied thickness with a minimum 20-mil thickness.
4. Ensure that the flashing applied to the wood buck marries onto the flashing applied to the concrete surfaces with some overlap.

Installation of the window/door

1. Follow the window/door manufacturer's or design consultant's direction for application and location of the appropriate weather sealants.
2. For flanged windows or doors, DOWSIL™ 778 Silicone Liquid Flashing, DOWSIL™ 790 Silicone Building Sealant or DOWSIL™ 791 Silicone Weatherproofing Sealant can be used when a weather sealant is specified for application on the surface of the flange. *See note below.*

Installation of stucco

1. Apply stucco according to manufacturer's recommendations.
2. Stucco can be applied directly to the surface of DOWSIL™ 778 Liquid Flashing after 24 hours of cure.
3. DOWSIL™ 790 Silicone Building Sealant can be used in designs or installations specifying a weatherseal between the termination of the stucco and window assembly. *See note below.*

Note: To prevent cure inhibition, DOWSIL™ 778 Silicone Liquid Flashing should be cured for 48 to 72 hours prior to application of DOWSIL™ 790 Silicone Building Sealant if the two products will be in contact.

References

[1]FMA/AAMA 200-12, "Standard Practice for the Installation of Windows with Frontal Flanges for Surface Barrier Masonry Construction for Extreme Wind/Water Conditions," AAMA, Schaumburg, IL.

[2]FMA/AAMA 400-13, "Standard Practice for the Installation of ExteriorDoors in Surface Barrier Masonry Construction for Extreme Wind/Water Exposure," AAMA, Schaumburg, IL.

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