Madico Wet Glaze Installation Instructions



In the event of glass breakage, the Wet Glaze Anchoring System, when combined with Madico Safety & Security window film, is designed to absorb and disburse the energy that the filmed glass is subjected to and transfer the reduced load over the entire glazed opening. By absorbing and distributing the load, the system is designed to retain the filmed glass in the opening and thus reduce the probability of glass fragments and debris from entering the room. The Wet Glaze System is economically viable in retrofit applications and is built around a triangular sealant joint connecting the film to the supporting framing members. To achieve acceptable performance, a very high-performance sealant must be used. We recommend DOWSIL[™] 995 Silicone Structural Sealant. To ensure maximum protection, many high-performance applications designed to withstand an applied force are built around a sealant bite of ½ inch for wind load applications and ½ inch for blast mitigation. These specifications have proven to perform well in a wide variety of tests. Because the requirements for any application are specific to that application, it is critical to ensure that the product is installed exactly as tested by Madico. The installation of the sealant bead is also critical to performance of the Wet Glaze system. A triangular-shaped bead is required to realize the full effect of this system. Concave joints and/or film that does not reach to the edge of the daylight opening will compromise the effectiveness of this attachment method.

Equipment

- Trimming Knife, Olfa[®] "Silver" Stainless Steel Knife (Part # GT126)
- Tooling knife, available locally
- Paper towels (lint free towels are best), available locally
- Isopropyl Alcohol, available locally
- Blue painters' tape, available locally
- Tape measure, available locally
- Silicone Structural Sealant, available locally, DOWSIL[™] 995
- Wet Glaze application equipment, available locally, Light Weight Sausage Gun

Wet Glaze Installation

• It is important for all substrates to be clean, dry, frost free and free of contamination during the installation and curing of the Wet Glaze. It may be necessary to allow the Safety & Security film to cure before installing Wet Glaze. Madico recommends allowing at least 7 days or longer until all visible application solution is gone before application of Wet Glaze.

Preparation of Windows and Frames

- Wash window with solution and squeegee.
- Wipe edges carefully with paper towel.
- Make sure that all loose dirt is removed. Repeat cleaning process if necessary.
- Ensure a straight and consistent bead width by applying masking tape evenly around the frame and film ½ inch (13 mm) onto the frame and film prior to Wet Glaze application
- Proceed to Application of Wet Glaze (next step)

Application of Wet Glaze

- Dispensed with a caulk gun with nozzle opening diameter matched to the size of bead width desired
- Tool exposed sealant surfaces to provide a clean smooth triangular shape
- To ensure Wet Glaze adhesion and ultimate performance, a minimum bite of ½ inch (13 mm) to the frame and film is required, see figure 1 below.
- Note, that there is generally a slight gap (less than 1/8 inch (3 mm) between the edge of the film and the glazing channel to allow for proper installation and removal of film mounting solution.
- Gasket or glazing channel thickness must be accounted for in designing the triangular joint.



Figure 1. Application utilizing a triangular bead of DOWSIL[™] 995 Silicone Structural

Post installation Visual Inspection

Due to the size of the silicone bead, the consistency of the silicone and intent for which a Wet Glaze application is being installed, the finished product may not be perfect in appearance. As long as the preparation of the materials and size guidelines of the Wet Glaze bead are met, the finished appearance of the bead will not affect the performance of the system.

- The Wet Glaze surface must appear smooth and flat
- There shall be no physical voids or lumps in the sealant bead
- The edges of the Wet Glaze on the film and frame surfaces shall appear straight
- The cross-section shall exhibit a triangular shape
- The Wet Glaze bead shall not be concave, which will detract from its effectiveness as a film attachment system. A small amount of taper (1 mm) near the edges is permissible
- A "wall" or "lip" along the edges of the Wet Glaze bead will not detract from the attachment system performance but does not look as clean. Minor amounts of wall formation may be unavoidable and are acceptable.
- Ideally, the corners of the windows should show these characteristics as well and include a seam or fold that marks the transition of applied sealant between adjacent frame members. However, a minor accumulation of material may be unavoidable and is acceptable.
- Any excess sealant on film, frame should be immediately wiped clean
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