Tundra Series Windows

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Foam Sealant Application User Guidelines

The use of spray foam sealants around the perimeter of a window and or door can be a valuable augmentation to installation and provide added value to the consumer. Foam insulation however can have significant draw backs if not done correctly. These Guidelines are a general advisory intended to assist in the choice and application of foam sealant around windows and doors made by Walsh Building Products. It remains the responsibility of the applicator to assure that the material is proper for any particular use.

Types of Foam

• Polyurethane Single Part There are two types of urethane foam a single part and a two part system. We recommend only a single part system that is based on a moisture cure. The single part system must be of a low pressure, minimal expansion and be designated for use with windows and doors. There are some foam products that are single part which are not suitable for use due to high expansion, high pressure, shrinkage, durability, etc.

• Polyurethane Two Part This requires that two different parts are mixed together at the time of application which will foam the material and force the cure. We do not recommend this type of foam for a number of reasons, high expansion, safety, application control, etc. Some two part polyurethanes will expand up to 30 times their initial application volume.

• Latex Single Part This material is a water-based cure that is similar to the single part urethane.

Application

• Always read and follow the manufacturer's direction in regard to use, application, safety, environmental issues, clothing, disposal and any other concerns.

• Use only low pressure foam that the manufacture explicitly states is intended and safe for window and door applications. The sealant must conform to AAMA 812-04 testing protocol with PVC window profiles.

• Check the MSDS for health issues and handling directions.

• All foams require a clean dry surface prior to application.

• Most foam should not be applied when the temperature is at or below freezing, some products state 45° as the minimum low temperature application threshold. Conversely the foam has a high temperature application point in some cases 105°.

• The foam should be applied after the window is set into the opening insuring that it shimmed properly according to the manufactures direction. The window should be plumb, level and square and operation of the window/door is correct prior to application.

• Low expansion foam will typically require only require a 50% fill rate, never use a high expansion foam. Never over fill!

• The window/door should have all fasteners, shims, exterior trim and exterior caulking completed prior to foam application. Allow the exterior caulk to set up prior to foam application.

• Interior trim should be applied only after the foam is fully cured.

• Foam sealants in many cases do not weather well. The foam will discolor, physically degrade, crack, and shrink back when exposed to sunlight and/or water. Investigate the available information regarding any product you consider.

• Foam and the propellant are extremely flammable.

Observation

• Foam in some cases can take up to 5 days to fully cure and remain stable.

• Initially some foam may cause bowing distortion of the frame but it must shrink back.

• Initial bowing of some foam's was up to 1/8" in 36" window frame sill.

• Improper foam and poor application method can impair performance and operation for which Walsh Building Products will not be responsible.

• Low pressure foam does not necessarily mean low expansion. Low expansion does not necessarily mean low pressure.

Foams – Recommended – Examples

• TeQ Foam by OSI (2012 Data)
  - Passed all test criteria
  - Tested AAMA 812-04, AAMA 504
  - Less than .002" frame distortion
  - Single Part Polyurethane

Foams –Use Only with Added Caution

- Great Stuff Window & Door by Dow (2012 Data)
  - Long Cure time
  - Excessive deflection Tested to AAMA 812-04
  - Single Part Polyurethane

- Touch 'n Seal (2012 Data)
  - No testing to AAMA 812-04
  - Single Part Polyurethane
- Tytan by Selena (2012 Data)
  - No testing to AAMA 812-04 or AAMA 504
  - Single Part Polyurethane

Foams – Not Recommended – Examples

- Great Stuff Gaps & Cracks by Dow (2012 Data)
- Great Stuff Big Gap Filler by Dow (2012 Data)
- Dap Tex Plus by DAP Products Inc (2012 Data)
- Dap Tex Multi-Purpose by DAP Products Inc (2012 Data)