

Spectrem® 1

Ultra Low Modulus Silicone Joint Sealant

Product Description:

Spectrem 1 is an ultra-low modulus, high-performance, one-part, moisture-curing silicone joint sealant.

Basic Uses

Spectrem 1 has exceptional physical properties, making it an ideal sealant for sealing the most demanding dynamically moving joints. This includes material having a high coefficient of linear expansion such as aluminum curtainwalls, precast concrete panels, metal panels and window perimeters.

Spectrem 1 is formulated for expansion, control, lap joints, and EIFS applications. It also acts as an adhesive used in conjunction with Spectrem Simple Seal™. Simple Seal is used as a bridge seal in both new construction and restoration work. (Please refer to the Simple Seal data sheet for more on this product.)

Applicable Standards

Conforms to ASTM C920 Type S, Grade NS, Class 100/50, Use NT, M, G, A and O, ASTM C-1382 and CAN/CGSB-19.13-M87, MCG-2-40-B-N and U.S. Federal Specification TT-S-001543A



(COM-NBS) Class A, and U.S. Federal Specification TT-S-00230C (COM-NBS) Class A, Type II, EIMA Test Method 300.01 ASTM C1382.

Packaging

1/12 gallon (300mL) cartridges,
20 oz. (600mL) sausages, 2 gallon (7.6 L) and 4.5 (17 L) gallon pails and 55 gallon (208 L) drums.

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	Typical Value
As Supplied:		
Tack-free time	ASTM C-679	30-60 min.
Curing time		7-14 days
Full Adhesion		14-21 days
Flow, sag or slump inches	ASTM C-639	Nil
Tooling time		10-20 min.
As Cured: After 14 days at 77°F (25°C) and 50% R.H.		
Hardness (Shore A)	ASTM C-661	15
Tensile strength at maximum elongation	ASTM D-412	1.38 MPa (200 psi)
Tensile strength at 100% elongation	ASTM D-412	.24 MPa (35 psi)
Tear Strength, die ("C")	ASTM D-624	.7 kN/m (40 pli)
Peel Strength Aluminum, Glass, Concrete	ASTM C-794	5.2 kN/m (30 pli)
Stain and Color change	ASTM C-510 TT-S-001543A	None
Cyclic movement	ASTM C-719	
Extension		+100
Compression		-50

Standard Colors

Aluminum Stone, Anodized Aluminum, Gray, Limestone, White, Off White, Precast White, Bronze, and Black.

INSTALLATION

Joint Design

May be used in any joint designed in accordance with accepted architectural/engineering practices. Joint width should be 4-times anticipated movement, but not less than 1/4 inch (6.4mm) wide.

Joint Dimensions

For joints 1/4 inch (6.4mm) to 1/2 inch (12.7mm) wide, the width to depth ratio should be equal. Joints 1/2 inch (12.7mm) wide or greater should have a depth of 1/2 inch (12.7mm). Minimum joint size is 1/4 inch by 1/4 inch (6.4mm by 6.4mm).

Surface Preparation

For good adhesion, the joint interface must be sound, clean and dry. Depending on the substrates, the joint surface may require a thorough wire brushing, grinding, sand blasting, solvent washing and/or primer.

Tooling & Cleaning

Tooling is recommended immediately after application to insure firm, intimate contact with the joint interface. Dry tooling is preferred. Cleaning can be accomplished with solvents such as IPA or MEK while sealant is in an uncured state.

Joint Backing

Bond Breaking Tape

Closed cell polyethylene backer rods are preferred as joint backing to control depth of sealant bead. Where depth of joint will prevent use of joint backing, an adhesive backed

polyethylene tape should be installed to prevent three-sided adhesion. Joint backing must be dry at time of the sealant application.

Application

Spectrem 1 is easy to apply with conventional caulking equipment. Fill joint completely and tool. At 75°F (23.9°C), 50% R.H. a durable skin will form within 10 to 30 minutes.

Maintenance

Damaged sealant can be repaired. Consult your Tremco Distributor or Representative for repair procedures.

Availability

Immediately available from your local Tremco Field Representative, Tremco Distributor or Tremco Warehouse.

Limitations

- Do not apply to damp or contaminated surfaces.
- Use with adequate ventilation.
- Not intended for continuous water immersion.

Warranty

Tremco warrants its Sealants to be free of defects in material, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, with respect to Sealants. Tremco's sole obligation shall be, at its option, to replace, or to refund the purchase price of the quantity of Sealant proved to be defective and Tremco shall not be liable for any loss or damage.

