

# TREMCO

# Vulkem<sup>®</sup> 931

## One-Part High Performance Urethane Elastomeric Sealant

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### Product Description:

Vulkem 931 is a one-part, moisture curing, fast skinning polyurethane sealant. Vulkem 931 is durable, flexible and offers excellent performance in moving joints. Vulkem 931 does not require a primer on most construction materials. Once cured, Vulkem 931 exhibits tenacious adhesion and an aesthetically appealing satin sheen finish.

### Basic Uses:

Vulkem 931 is an excellent sealant for use in moving joints in vertical applications. Typical applications for Vulkem 931 include: expansion and control joints, panel and wall systems, perimeter caulking (windows, door, panels), reglets, flashing, etc. Vulkem 931 is capable of +100%/-50% movement when correctly installed into a properly prepared joint.

### Limitations:

- Do not apply over damp or contaminated surfaces.
- Use with adequate ventilation.

### Packaging:

1/12 gallon (300 ml) Cartridges, 20 oz. (600 ml) Sausages, 2 (7.57 l) and 5 gallon (19 l) pails and 55 gallon (208 l) drums.

### Standard Colors:

Aluminum, Antique White, Black, Bronze, Buff, Dark Bronze, Gray, Ivory, Limestone, Redwood Tan, and White

### APPLICABLE STANDARDS:

Conforms to U.S. Federal Specification TT-S-00230C, Type II,

Class A and ASTM C920, Type S Grade NS, Class 100/50, Use NT, M, A, and O, CGSB CAN2 19.13-M87, MC-2-40-B-N.

### INSTALLATION

#### Joint Design & Dimensions:

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

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 sealant 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, or presence of form release agents,

masonry waterproofings, dust, loose mortar or laitance, architectural paints or finishes, the joint surface may require a thorough wire brushing, grinding, sandblasting, 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. Excess sealant and smears adjacent to the joint can be removed with Xylol or Toluol before sealant cures.

#### Joint Backing-Bond Breaking Tape:

Closed cell polyethylene, reticulated foam and some open cell polyurethane rods may be used 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 sealant application.



**Application:**

Vulkem 931 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 forms within 6 hours. Curing continues at the rate of 1/16 inch (1.6mm) depth per day. The cure rate may be slightly reduced at lower temperatures and less humidity.

**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.

**Warranty:**

Tremco warrants its Vulkem Sealants to be free of defects in materials, 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 Vulkem Sealants, Tremco's sole obligation shall be, at its option, to replace, or to refund the purchase price of the quantity of Vulkem Sealant proved to be defective and Tremco shall not be liable for any loss or damage.

**TYPICAL PHYSICAL PROPERTIES**

| ASTM C920<br>TT-S-00230C                                | Requirement  | Vulkem 931 Results   |
|---|--|--|
| Rheological Properties at 40 and 122°F. (4.4 and 50°C.) | 3/16" (4.8mm) Maximum Flow<br>No Deformation                           | 0<br>None  |
| Hardness Properties                                     | 15-50 (Shore A)  | 30   |
| Weight Loss   | Less than 10%  | 3.0  |
| Tack Free Time  | Tack Free 72 Hours<br>Maximum  | 1  |
| Stain & Color Change                                    | No Visible Change<br>No Stain  | None<br>None   |
| Durability-Cyclic Movement<br>Adhesion & Cohesion       | 1-1/2 sq. in. (9.7 cm <sup>2</sup> ) Max<br>Total Bond Loss            | Passes   |
| Adhesion-In-Peel  | Not less than 5 pli (22N)<br><br>Less than 25% Bond Loss               | Aluminum-18-22 pli (80-98N)<br>Concrete-20-25 pli (89-111N)<br>Brick-19-23 pli (85-102N)<br>No Adhesion Loss |
| Effects of Accelerated<br>Weathering                    | No cracks greater than #2<br>on U.V. and Cold Temperature<br>Bond Test | Passes   |

For MSDS and Spec Data Sheets,  
Call our 24 Hour Fax-Back Line:  
**1-800-551-2806**  
or visit our website:  
[www.tremcosealants.com](http://www.tremcosealants.com)

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