

TREMCO® Vulkem® 45

One-Part Pourable Polyurethane Sealant

Product Description:

Vulkem 45 is a one-part moisture curing, pour grade polyurethane joint sealant. Vulkem 45 does not require a primer on most construction materials.

Basic Uses:

Vulkem 45 has been formulated for sealing expansion and control joints in parking garages, plazas, terraces, highways, bridges, swimming pool decks, reservoirs, sewage treatment plants, floor and sidewalk joints.

Extraordinary adhesion, cohesion, abrasion and tear resistance are inherent in the base polymer.

Vulkem 45 is suitable for use in continuous water immersion.

Limitations:

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

Packaging:

Quart (850 ml) cartridges, packaged 12 per case. Also available in 5 gallon (19 L) pails and 55 gallon (208 L) drums.

Standard Color:

White, Limestone, Gray, Buff and Black.

Applicable Standards:

Vulkem 45 meets the requirements of U.S. Federal Specification TT-S-230C, Type 1, Class A and ASTM C920, Type S, Grade P, Class 25 Use T, M, A, O and I. Vulkem 45 passed Canadian Standard 19GP16a. USDA Approved.

INSTALLATION

Joint Design:

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

Dimensions:

For joint 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). For joints larger than 1 (2.5cm) inch, use Vulkem 245.

Surface Preparation:

For good adhesion, the joint interface must be sound, clean and dry. Depending on the substrate, 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 generally not required. Where necessary, light tooling can be done immediately. 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 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 side adhesion. Joint backing must be dry at time of sealant application

Application:

Vulkem 45 is easy to apply with conventional caulking equipment. At 75°F (23.9°C), 50% R.H. a skin forms within 24 hours. Curing continues at the rate of 1/16 inch (0.16mm) depth per day. The cure rate is 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 material, but makes no warranty as to appearance or color. Since method 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 proven to be defective and Tremco shall not be liable for any loss or damage.

TYPICAL PHYSICAL PROPERTIES

ASTM C920-94 TT-S-00230C	Requirement	Vulkem 45 Results
Rheological Properties	Self Leveling at 40°F	Self Levels
Extrusion Rate	20 Seconds Maximum	3 Seconds
Hardness Properties	25-50	35
Weight Loss	Less than 10%	5%
Tack Free Time	Tack Free 72 Hours Maximum	30
Stain & Color Change	No Visible Change No Stain	None None
Durability-Cyclic Movement Adhesion & Cohesion	1-1/2 sq. in. (9.7 cm ²) Max Total Bond Loss	Passes
Adhesion-in-Peel	Not less than 5 pli (22N)	Aluminum-30-34 pli (133-151N) Concrete-16-20 pli (71-89N) Granite-30-34 pli (133-151N)
Effects of Accelerated Aging	Less than 25% Bond Loss No cracks greater than #2 on U.V. and Cold Temperature Bond Test	No Adhesion Loss Passes



For MSDS and Spec Data Sheets
 visit our website:
www.tremcosealants.com



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