

# **Product Description**

Tremsil® 400 is a high-performance, single-component, neutral-cure, medium-modulus silicone sealant.

# **Basic Uses**

Tremsil 400 is specifically designed to achieve a watertight seal in expansion joints, and for general perimeter caulking of windows, doors and frames, precast and tilt-up panels.

# **Features and Benefits**

- Medium modulus with capability to handle up to 40% expansion and contraction, making it ideal for use in dynamically moving joints.
- Extremely low VOCs and can be used in any VOC regulated area across the US and Canada.
- Primerless adhesion for most construction materials reduces installation time.
- Comes ready to use with no mixing required for immediate application with conventional caulking equipment.

## **Availability**

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

### Packaging

Tremsil 400 is available in 300-mL (1/12-gal) cartridges and 600-mL (20-oz) sausages.

All colors are not available in all package sizes. Contact Tremco Customer Service for more information.

# Colors

Limestone, White, Anodized Aluminum, Residential Sandalwood, Bronze, Light Bronze, Builders Stone, Geographic Beige, T400 Charcoal, T400 Independence Gray, T400 Medium Gray, T400 Gray, Black, and Off White.

## Limitations

- Do not apply over damp or contaminated surfaces.
- Always apply sealants using adequate ventilation.
- Not intended for continuous water immersion.
- Not intended for structural glazing/tensile bead applications.

## **Substrate Preparation**

Surfaces must be sound, clean, and dry. Contact surfaces should be free of loose dirt, dust, oils, and any other contaminants.

Tremco recommends that air temperatures be 40 °F (5 °C) or above before applying any sealant. If colder weather is imminent, please refer to the Tremco Guide for Cold Weather Applications at www.tremcosealants.com.

### **Applicable Standards**

- Tremsil 400 conforms to US Federal Specification TT-S-00230C, Type II, Class A
- ASTM C 920, type S, Grade NS, Class 35, Use NT, M and A
- CAN/CGSB 19.13-M87

# SEALANT • WATERPROOFING

Issued to: Tremco Incorporated Product: Tremsil® 400

**C719:** Pass <u> Ext:</u>+40% Comp:-40%

**Substrate:** Unprimed glass and aluminum and primed and unprimed mortar [The mortar substrates were primed with TREMprime Silicone Porous Primer P].

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SEALANT VALIDATION

## Priming

Tremsil 400 does not generally require a primer for most construction materials. When needed, it is recommended that TREMprime® Silicone Porous Primer be used for porous substrates such as concrete, brick, and stone. For non-porous substrates such as aluminum, stainless steel, or other assorted metal we recommend TREMprime Silicone Metal Primer. Tremco always recommends a mock-up or field adhesion test on actual materials to be used on the job to verify the need for a primer.

## **Joint Design**

Tremsil 400 may be used in any non-traffic joints designed in accordance with accepted architectural/engineering practices. Joint width should be 4 times anticipated movement, but not less than 1/4" wide.

## **Joint Backing**

Closed-cell or reticulated polyethylene backer rod is recommended as joint backing to control sealant depth and to ensure intimate contact of sealant with joint walls when tooling. Where depth of joint will prevent the use of backer rod, an adhesive-backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at time of sealant application.

## **Sealant Dimensions**

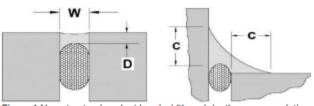


Figure 1 Non-structural sealant bead width and depth recommendations and appropriate joint design

Expansion joints: The minimum joint width (W) and sealant contact depth (C) of any silicone sealant application is 1/4" by 1/4" (6.35 mm by 6.35 mm). It is recommended that the sealant joint depth (D), when measured from the face of the sealant bead to the crown of the backer rod, be equal to one-half the sealant joint width (W), known as 2:1 width-to-depth joint ratio.

# Single-Component, Neutral-Cure Silicone Sealant

For silicone sealants, the minimum sealant joint depth (D) at crown of backer rod is 1/8" (3 mm) and the maximum sealant joint depth at crown of backer rod is 1/2" (13 mm). For joints that are wider than 1" (25 mm), contact Tremco's technical services or the Tremco sales representative nearest to the application site for additional support.

Window perimeter joints: For fillet beads, or angle beads around windows and doors, the sealant should exhibit a minimum sealant contact depth [C] of 1/4" (6.34 mm) onto each substrate. Proper joint backing or bond breaking must be implemented to allow the sealant to perform when exposed to joint movement.

# **Clean Up**

Excess sealant, smears adjacent to the joint, and tooling equipment can be cleaned with xylene, Toluene, MEK, IPA or mineral spirits before the sealant cures.

### Warranty

Tremco warrants its Products 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 Tremco Products. Tremco's sole obligation shall be, at its option, to replace, or refund the purchase price of the quantity of Tremco Products proven to be defective and Tremco shall not be liable for any loss or damage.

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

TYPICAL PHYSICAL PROPERTIES		
PROPERTY	TEST METHOD	TYPICAL VALUES
Uncured:		
Sag	ASTM D2202	0-0.01"
Tack free time	ASTM C679	30 to 40 min
Tooling Time	Skin Formation	10 to 15 min
As Cured: After 14 days at 77 °F (25 °C), 50%RH		
Cyclic Movement	ASTM C719	+/-40%
Elongation	ASTM D412	210 to 235%
Hardness (shore A)	ASTM C661	30 +/-5
Peel Strength Aluminum and Glass	ASTM C794	2.63 to 3.51 kN/M (15 to 20 pli)
Tensile Strength at Max Elongation	ASTM D412	1.24 to 1.38 MPa (180 to 200 psi)



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