

TECHNICAL DATA SHEET

# **PRODUCT DESCRIPTION**

Spectrem® 1 is a high-performance, single-component, moisture-cure, ultra-low modulus silicone sealant.

### **BASIC USES**

Spectrem 1 is the ideal sealant for 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.

When detailing over the ExoAir® Air Barrier system, Spectrem 1 is the recommended sealant to ensure an airtight seal throughout the building envelope. Spectrem 1 has excellent adhesion to most polyethylene-backed, self-adhering air barrier membranes. The performance of Spectrem 1 is exceptional when used on the polyethylene face of ExoAir 110, ExoAir 110AT, ExoAir TWF and the cured surface of ExoAir 130, and ExoAir 230.

Spectrem 1 is also recommended for use with Tremco's Silicone Rubber extrusions, Spectrem Simple Seal and Tremco's patented solution, Proglaze® ETA (Engineered Transition Assembly), for sealing between challenging conditions such as the opaque wall air barrier and window/curtain wall assemblies.

## **FEATURES & BENEFITS**

Spectrem 1 is a perfect choice for sealing difficult-to-adhere-to substrates. Spectrem 1 has excellent adhesion to a variety of substrates, allowing for one product that can be used for multiple applications on the same job, from perimeter caulking to expansion joints. The ultra-low modulus of Spectrem 1 means high elasticity with movement accomodation of +100/-50%.

There is no mixing required with Spectrem 1, so product is always ready to use for immediate application with conventional caulking equipment. Spectrem 1 provides resistance to driving rain, ozone, ultra-violet light and temperature extremes, plus safeguards against water penetration with exceptional weatherability in all climate zones. Additionally, Spectrem 1 is offered in a wide variety of colors, with custom colors and color matching also available for special projects.

Spectrem 1 meets or exceeds the requirements of the following specifications:

- ASTM C920 Type S, Grade NS, Class 100/50, Use NT, M, G, A, and O
- ASTM C1248
- ASTM C1382
- ASTM E84
- U.S. Federal Specification TT-S-001543A (COM-NBS) Class A
- U.S. Federal Specification TT-S-00230C (COM-NBS) Class A, Type II
- CAN/CGSB 19.13-M87, MCG-2-40-B-N
- EIMA Test Method 300.01
- Spectrem 1 has been tested as a component of several wall assemblies meeting ASTM E2357, the Standard Test Method for Determining Air Leakage of Air Barrier Assemblies, and NFPA 285, the Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non- Load-Bearing Wall Assemblies Containing Combustible Components

SEALANT. WATERPROOFING SEALANT. WATERPROOFING RESTORATION INSTITUTE

Issued to: Tremco CPG, Inc. Product: Spectrem 1 C719: Pass <u>Y</u> Ext:+100% Comp:-50%

Substrate: Anodized Aluminum unprimed Glass unprimed Mortar (concrete), and unprimed Mortar (concrete) primed with TREMprime Silicone Porous Primer.

Validation Date: 1/09/2024 - 1/08/2029





The Greenguard Gold certification on Spectrem 1 ensures safety for use in the most sensitive indoor environments including hospitals and schools. Spectrem 1 is accepted/compatible for use over Nudura Insulated Concrete Forms (ICF).

### **AVAILABILITY**

Immediately available from your local Tremco Sales Representative, Tremco Distributor, or Tremco Warehouse in 10.1 oz (300 mL)

## **COLORS**

Available in Adobe Tan, Aluminum Stone, Anodized Aluminum, Black, Blue Spruce, Bronze, Buff, Charcoal, Dark Bronze, Gray, Ivory, Light Bronze, Limestone, Off White, Purple, Sandstone, and White.

All colors are <u>not</u> available in all package sizes. Some colors may require a minimum quantity. Contact Tremco Customer Service for more information.

#### LIMITATIONS

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

## WARRANTY

A repair or replacement warranty is available on all Tremco products. Visit https://www.tremcosealants.com/warranties/ for details.

TYPICAL PHYSICAL PROPERTIES		
PROPERTY	TEST METHOD	TYPICAL RESULTS
As Supplied:		
Curing Time		7 to 14 days
Flow, Sag or Slump Inches	ASTM C639	Nil
Full Adhesion		14 to 21 days
Tack Free Time	ASTM C679	30 to 60 min
Tooling Time	Skin Formation	10 to 20 min
Extension		+100
As Cured, After 14 Days at 77°F (25°C),	50%RH:	
Joint Movement Capability	ASTM C719	+100% / -50%
Hardness (Shore A)	ASTM C661	+15
Peel Strength Aluminum & Glass	ASTM C794	30 pli (5.2 kN/m)
Stain & Color Change	ASTM C510 TT-S-001543A	None
Staining of Porous Substrates, White	ASTM C1248	No Stain
Marble Primed & Unprimed		
Tear Strength, Die ("C")	ASTM D624	40 pli (0.7 kN/m)
Tensile Strength at 100% Elongation	ASTM C1184	35 psi (0.24 MPa)
Tensile Strength at Max Elongation	ASTM D412	200 psi (1.38 MPa)

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.



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Tremco Construction Products Group (CPG) brings together Tremco CPG Inc. and its Dryvit and Nudura brands; Willseal; Prebuck LLC; Tremco Barrier Solutions, Inc.; Weatherproofing Technologies, Inc. and its Pure Air Control Services and Canam Building Envelope Specialists offerings; and Weatherproofing Technologies Canada, Inc.



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