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.

Features and Benefits
• Ultra-low modulus means high elasticity with movement accommodation of +100/-50%.
• With excellent adhesion to a variety of substrates, one product can be used for multiple applications on the same job from perimeter caulking to expansion joints.
• An excellent choice for sealing difficult-to-adhere-to substrates.
• Resistance to driving rain, ozone, ultra-violet light and temperature extremes safeguards against water penetration with exceptional weatherability in all climate zones.
• Wide variety of colors to choose from with custom colors and color matching also available for a particular project.
• No mixing required, so product is always ready to use for immediate application with conventional caulking equipment.
• Greenguard Gold certification ensures safety for use in the most sensitive indoor environments including hospitals and schools.

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

Packaging
10.1-oz (300-mL) cartridges
20-oz (600-mL) sausages
55-gal (208-L) drums
All colors are not available in all package sizes. Contact Tremco Customer Service for more information.

Colors
Aluminum Stone, Anodized Aluminum, Gray, Limestone, White, Off White, Precast White, Bronze, Buff, Dark Bronze, Ivory, Rustic Brick, Sandstone, Black, Adobe Tan, Champagne, and Charcoal.

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

Substrate Preparation
Surface 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.tremco.com.

Applicable Standards
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.

Application
Spectrem 1 is easy to apply with conventional caulking equipment. Fill joint completely and tool. At 75 °F (23.9 °C), 50% RH, a durable skin will form within 10 to 30 min. Please visit www.tremco.com for complete application instructions.

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” (6 mm) wide.

Joint Backing
Closed-cell polyethylene backer rods or the Tremco sealant tape illmod® 600 is 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 the time of the sealant application.
Sealant Dimensions

W = Sealant width, D = Sealant depth, C = Contact area.

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. 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 ½" (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.

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.

Compatibility and Continuity

Spectrem 1 Silicone Sealant is the recommended sealant for use when detailing over the ExoAir® Air Barrier system 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 120, Exoair 130, ExoAir 220 and ExoAir 230.

Spectrem 1 is 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. For more information on Proglaze ETA, Spectrem Simple Seal, ExoAir or Tremco’s Silicone Rubber Extrusions, please visit the Tremco website at www.tremcosealants.com.

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

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>TEST METHOD</th>
<th>TYPICAL VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Supplied:</td>
<td></td>
<td></td>
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<tr>
<td>Curing Time</td>
<td></td>
<td>7 to 14 days</td>
</tr>
<tr>
<td>Flow, sag or slump inches</td>
<td>ASTM C639</td>
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<tr>
<td>Full Adhesion</td>
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<td>14 to 21 days</td>
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<tr>
<td>Tack free time</td>
<td>ASTM C679</td>
<td>30 to 60 min</td>
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<tr>
<td>Tooling Time</td>
<td>Skin Formation</td>
<td>10 to 20 min</td>
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<tr>
<td>Extension</td>
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<td>Plus 100</td>
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<tr>
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<td>Hardness (shore A)</td>
<td>ASTM C661</td>
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<tr>
<td>Peel Strength Aluminum and Glass</td>
<td>ASTM C794</td>
<td>5.2 kN/M (30 pli)</td>
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<tr>
<td>Stain &amp; Color Change</td>
<td>ASTM C510 TT-S-001543A</td>
<td>None</td>
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<tr>
<td>Staining of Porous Substrates White Marble Primed &amp; Unprimed</td>
<td>ASTM C1248</td>
<td>No Stain</td>
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<tr>
<td>Tear strength, die (&quot;C&quot;)</td>
<td>ASTM D624</td>
<td>.7 kN/M (40 pli)</td>
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<td>Tensile Strength at 100% Elongation</td>
<td>ASTM C1184</td>
<td>.24 MPa (35 psi)</td>
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<td>Tensile Strength at Max Elongation</td>
<td>ASTM D412</td>
<td>1.38 MPa (200 psi)</td>
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