

TECHNICAL DATA SHEET Railing Support Embed Pan Sealant

1. Product Name

Railing Support Embed Pan Sealant

2. Manufacturer

Formulated Materials, LLC 3010 NW 149th St., SUITE 100 Oklahoma City, OK 73134 Tech Services: (844) 405-3676 www.formulatedmaterials.com

www.formulated.info



Railing Support Embed Pan Sealant is a single-component, STPE (Silyl Terminated Polyether) sealant that combines the best of silicone and polyurethane properties for waterproofing applications. It is designed to bond and cure in the presence of liquid water and will tolerate water immersion immediately after application allowing it to be applied in wet weather and on damp substrates. This odorless, fast-curing sealant is resistant to bacterial growth and features a light blue color, making pinholes easy to identify and treat. It can be applied in a single layer (30-90 mils thick), delivering exceptional adhesion, flexibility, and durability in extreme temperatures. Embed Pan Sealant is capable of correcting negative slope, filling pond areas and creating moderate positive slope to drain.

Key Features

- Fills pan and seals all fasteners to protect from water intrusion at penetrations,
- 99% solids formula will not shrink.
- May be fully exposed to UV and weather for up to 6 months.
- Bonds and cures in wet weather and on damp substrates tolerates rain immediately after application.
- Superior long-term adhesion.
- Retains integrity and remains flexible in extreme heat and cold (-250° F to 2000° F).
- Solvent free, isocyanate free, phthalate free.
- Will not support mold growth.
- Meets ASTM C-836, E-96, and SCAQMD VOC requirements.

Suitable Substrates

- Rubberized Asphalt Membranes.
- ABS
- OSB / Plywood
- Aluminum.
- Steel
- Galvanized

Product Composition

STPE (Silyl Terminated Polyether) sealant.



Product Limitations

- Surfaces must be clean, dry and free of foreign matter.
- Not indefinitely UV-stable.
- Containers which have been opened must be used as soon as possible.
- Do not dilute with solvent under any circumstance.
 These limitations are not to be construed as all inclusive.

Packaging

• 20 oz. sausages.

4. Technical Data

Applicable Standards

	ASTM Test	Standard
	D-2240	Standard Test Methods for Rubber Property - Durometer Hardness
	D-624	Standard Test Methods for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
	D-412	Standard Test Methods for Vulcanized Rubber and Ther- moplastic Elastomers – Tension
	D-1518	Standard Specification for Precured Elastomeric Silicone Joint Sealants



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Technical Chart

Property	Test Method	Results
Appearance		Viscous paste, mild odor, gray color
Gun Grade		Non-Sagging
Total Solids		99%
Specific Gravity		1.48 - 1.58
VOC Content		30 g/L maximum
Tack Free Time		60 min +/- 10 min
Elongation at Break	ASTM D-412	>200%
Joint Movement Capability	ASTM C-1518	200%
Hardness, Shore A	ASTM D-2240	40 – 50
Tensile Strength	ASTM D-412	>150 psi
Corrosive Properties		Non-corrosive
Shrinkage		None visible after 14 days

Environmental Considerations

FORMULATED MATERIALS is dedicated to environmental responsibility in product development and manufacturing processes. When used per applicable guidelines, this product may contribute to LEED® certification.

5. Instructions

General Surface Prep

Ensure the surface is clean, dry and structurally sound. Repair any cracks, spalling, or unstable areas. Remove dust, dirt, oil, grease, and contaminants. Use mechanical methods (grinding, sanding) if needed. Verify moisture levels meet product requirements. Address excessive moisture if necessary. Apply primer as specified and allow it to dry thoroughly. Maintain recommended temperature and humidity. Avoid extreme conditions. Perform a final check to clear debris and confirm the surface meets all preparation guidelines before application.

Installation of Product

Use the product as packaged without dilution or alteration.

Always read the Safety Data Sheet (SDS) for full precautionary instructions before use.

Tools Required

- Hammer
- · Disposable Putty Knife
- 20 oz. Sausage Caulking Gun

Steps to Seal the Embed Pan

1. Prepare the Area:

• Ensure the embed pan is securely installed as part of the Elevation® Railing Support Embed System.

2. Apply the Sealant:

 Fill the pan void completely with Elevation[®] Embed Pan Sealant, ensuring the sealant reaches the highest flange of the embed pan.

3. Encapsulate the Components:

 Fully encapsulate the railing embed and all fasteners with the sealant to prevent any potential moisture penetration.

4. Seal the Perimeters:

Seal the perimeters of Elevation[®] Railing Support Embed PansTM where the S60 membrane overlaps the embed pan plate.

5. Tooling the Sealant:

 Lightly tool the applied sealant with a dry putty knife, joint knife, or spatula within 2-3 minutes of application. Do not use soapy water during tooling.

Note: Ensure all steps are completed thoroughly to provide a long-lasting, watertight seal for embedded balcony railing supports.

Curing

- Elevation® Embed Pan Sealant is sensitive to heat and moisture.
 Higher temperatures and/or high humidity will accelerate the cure time.
- At 70° F and 50% Relative Humidity product fully cures in 7 days.

Cleaning of Equipment

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

Storage & Handling

reduce shelf life.

Health Precautions

- Store at 70° F / 21° C with 50% RH.
- Shelf Life of 6 months from date of manufacture.
 NOTE: High temperature and/or high humidity may significantly

- Follow all local safety regulations, including OSHA Section V: Chapter 4 for Fall Protection in Construction.
- Follow the manufacturer's Safety Data Sheets (SDS) and safety protocols for PPE.

Conformance to Building Codes

Installation must comply with all applicable local, state, and federal codes, regulations, and industry standards.

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6. Availability

Item	Description	Size	Color
10100	Elevation® Pan Sealant	20 oz. Sausage BX/20	Grey

20 per box / 45 boxes per pallet

7. Product Warranty

For details and complete warranty information, visit www.formulatedmaterials.com

8. Product Maintenance

Properly installed products do not require ongoing maintenance.

9. Technical Services Information

For Technical Services, contact Formulated Materials at (844) 405-3676.

10. Filing System

Additional product information is available from Formulated Materials upon request.

