

FLOOR-TECH SP PRIMER

PENETRATING EPOXY PRIMER FOR CONCRETE & CEMENTITIOUS SURFACES



FLOOR-TECH SP PRIMER is a solvent-free epoxy primer specifically formulated to seal and strengthen concrete surfaces. Its deep-penetrating formula enhances surface integrity and ensures strong mechanical adhesion with Thortex topcoats, making it an essential first layer in high-performance coating systems.

Key Features & Benefits:

- Deep penetration into porous or cementitious substrates
- Excellent adhesion to ensure compatibility with Thortex topcoats
- Easy to apply and cures in low temperatures down to 41°F

Ideal for use on new or prepared concrete, FLOOR-TECH SP PRIMER provides a reliable foundation for long-term coating performance.

TYPICAL APPLICATIONS

FLOOR-TECH SP PRIMER is a solvent-free epoxy primer engineered to seal and strengthen porous substrates such as concrete and cementitious materials. Its low-viscosity, penetrating formula absorbs deeply, creating a solid foundation for the application of Thortex chemical and corrosion-resistant topcoats.

Ideal for demanding industrial environments, FLOOR-TECH SP PRIMER ensures strong mechanical adhesion and supports long-term coating durability.

Typical Applications:

- Penetrating primer for concrete and cementitious surfaces
- Internal & external tank surfaces
- Structural concrete
- Industrial flooring systems

Its ability to cure at temperatures as low as 41°F makes it suitable for use in challenging on-site conditions.

APPLICATION GUIDE

Phase 1: Surface Preparation

Existing Concrete:

- If the surface is contaminated, pressure wash using clean water.
- Once dry, lightly abrasive blast or scarify the surface, taking care not to expose the aggregate.
- Remove all dust and debris before application.

New Concrete:

- Allow new concrete to cure for a minimum of 21 days and treat to remove any surface laitance.
- Check that the moisture content is 8% or below prior to coating.
- Lightly scarify the surface, ensuring the aggregate is not exposed.
- Remove all dust and debris before application.

Phase 2: Product Preparation

Before mixing, confirm the following conditions:

- The base component is at a temperature of 60–77°F.

- The ambient and surface temperatures are above 41°F.
- The ambient and surface temperatures must be at least 6°F above the dew point.

Phase 3: Product Mixing

For full unit sizes (4L or 18L):

1. Transfer the entire contents of the Activator unit into the Base container.
2. Mix thoroughly using an electric paddle mixer until the material is uniform and streak-free.
3. Once mixing begins, the material must be used within 25 minutes at 68°F.

Phase 4: Product Application

Step 1: Transfer for Application

- Pour the fully mixed material into a paint kettle or paint tray to maximise pot life and ease of use.

Step 2: Stripe Coating

- Using a 2-inch wide synthetic brush, apply a stripe coat to all edges, joints, corners, and equipment.
- The stripe coat should be approximately 4 inch wide and applied at 6 mil wet film thickness.

Step 3: Full Surface Application

- Once the stripe coat is touch dry and suitable for overcoating, apply the mixed product to all remaining surfaces.
- Maintain a consistent wet film thickness of 6 mil using a brush or roller.

⚠ PLEASE NOTE:

- Once cured, the surface should display a semi-gloss finish.
- If the finish appears dull, indicating surface porosity, or if pinholes or weak spots are visible, a second coat will be necessary to ensure full sealing and surface integrity.

Proper application ensures deep penetration, strong adhesion, and a reliable foundation for Thortex topcoats.

APPLICATION AT A GLANCE

Step 1: Preparation

Ensure you have the following tools and materials:

- 1 x Base Unit
- 1 x Activator Unit
- 1 x Spatula
- 1 x Slow-Speed Drill with Paddle
- 1 x Medium Pile Roller or 1 x 2-inch Wide Synthetic Brush

Step 2: Mixing – Combine Components

- Pour the entire contents of the Activator into the Base container.

Step 3: Mixing – Achieve Uniform Consistency

- Mix thoroughly using the slow-speed drill and paddle.
- Use a spatula to scrape down the container edges and ensure no unmixed material remains.
- Continue mixing until the product is completely streak-free and uniform.

Step 4: Application

- Apply the mixed primer to the properly prepared substrate using a brush or roller.
- Apply at a wet film thickness (WFT) of 6 mil.
- Verify thickness using a wet film thickness gauge.

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Step 5: Curing & Inspection

- Allow the coating to cure for a minimum of 3 hours.
- The cured surface should appear uniform with a semi-gloss finish.
- If dull patches are visible, they indicate excessive porosity. These areas must be overcoated with a second coat at 6 mil WFT.

Following these steps ensures optimal penetration, adhesion, and surface integrity for subsequent topcoat applications.

TECHNICAL DATA & PERFORMANCE

Characteristics

Appearance

Base	Plate Straw Liquid
Activator	Amber Liquid
Mixed	Pale Straw Liquid

Solids Content

100%

Volume Capacity

926cc/Kg

Sag Resistance

Nil at 6 mils

Density

Base	1.12
Activator	1.00
Mixed	1.08

Mixing Ratio

Component	Base	Activator
By Weight	2.24	1
By Volume	2	1

Shelf Life

5 years if unopened and stored in normal dry conditions 60-86°F

Coverage Rates

4LTRS of fully mixed product will give the following cover rates
286ft ² at 6mil

18LTRS of fully mixed product will give the following cover rates
1,280ft ² at 6mil

Please note that the coverage rates provided are theoretical and do not account for the profile or condition of the surface being repaired.

Cure Times

Useable Life

50°F	50 minutes
68°F	25 minutes
86°F	12.5 minutes
104°F	6 minutes

Minimum Overcoating Times

50°F	6 hours
68°F	3 hours
86°F	1.5 hours
104°F	45 minutes

Maximum Overcoating Times

50°F	72 hours
68°F	36 hours
86°F	18 hours
104°F	9 hours

Pack Sizes

This product is available in the following pack sizes:
4LTR
18LTR

Mechanical Properties

Compressive Strength ASTM D695	629kg/cm ² (8,945 psi)
Flexural Strength ASTM D790	703kg/cm ² (10,000 psi)
Hardness Shore D ASTM D2240	84
Tensile Shear Adhesion ASTM D1002 (Abrasive Blasted Mild Steel with 75-micron profile)	201kg/cm ² (2,860 psi)
Tensile Shear Adhesion ASTM D1002 (On rusted steel)	167kg/cm ² (2,375 psi)
Pull Off Adhesion ASTM D4541-17 Cementitious Substrate (Abrasive Blasted Mild Steel with 75-micron profile)	Dry 525 psi (cohesive in substrate) 37kg/cm ² Wet 475 psi (cohesive in substrate) 33.4kg/cm ²
Heat Resistance	Suitable for use in immersed conditions at temperature up to 140°F Resistant to dry heat up to 302°F dependent on load

Approvals

Food Contact USDA compliant for incidental food contact

Technical Service

Complete technical assistance is available. Please contact Thortex America, INC with your requirements: 1-610-831-0222 | kclarke@thortex.com

The products that we supply are for professional use only, it is your responsibility to read the technical data sheets before you place an order and prior to application of the product

Quality

All THORTEX AMERICA, INC products are manufactured and supplied in accordance with an ISO 9001 registered Quality Management System.

Warranty

All THORTEX AMERICA, INC warrants that the performance of the supplied product will conform to the typical descriptions provided in the Technical Data Sheet.

Health & Safety

Please ensure good practices are followed at all times during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn. Before mixing and applying the material, please ensure you have read and fully understood all relevant information.

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Legal Notice

The data provided in this Product Technical Data Sheet is for informational purposes only and is believed to be accurate at the time of issuance. However, we cannot assume responsibility for results obtained by others whose methods are beyond our control. It is the customer's responsibility to assess the suitability of the product for their intended use. THORTEX AMERICA, INC accepts no liability arising from the use of this information or the product described herein.