

VFI®-4386 FORM COATING EPOXY

VFI-4386 Form Coating Epoxy is a coating with high rigidity and enough flexibility for casting concrete or other cementitious products over EPS, wood, and steel surfaces. An epoxy coating is an alternative to the VFI-2100 urethane molding rubber series or urethane form coatings like VFI-2538 70 D EPS Form Hard Coat. The coating will self-level, providing a uniform casting surface that can also be sanded to a desired finish. At a higher viscosity, it allows for easier application in fewer passes and less sagging and dripping on verticals.

- Flexible and will not crack or deform
- Hard enough to be sanded for a uniform surface
- Extended pot life allows for easy application with a roller
- Not moisture sensitive and can go over damp surfaces
- Adheres to EPS, wood, and steel

PHYSICAL PROPERTIES

	TEST METHOD	TEST RESULTS
Shore Hardness	ASTM D2240	83 ± 2 D
Tensile Strength	ASTM D412	7,700 psi
Tensile Modulus	ASTM D412	534,000 psi
Elongation at Break	ASTM D412	21%
Flexural Strength	ASTM D790	10,900 psi
Flexural Modulus	ASTM D790	344,000 psi
Weathering	N/A	Not UV Stable
Adhesion (prepared plywood/existing coating)	ASTM D4541	Pass
Standard Color	N/A	Blue or Clear

LIQUID PROPERTIES

	TEST METHOD	TEST RESULTS
Solids by Volume	ASTM D2697	100%
Mix Ratio by Volume	N/A	2A:1B
Mix Ratio by Weight	N/A	100A:45.73B
Weight per Gallon A Side	ASTM D1475	9.51 lb/gal
Weight per Gallon B Side	ASTM D1475	8.7 lb/gal
Viscosity A Side	ASTM D2196	5,200 cps
Viscosity B Side	ASTM D2196	300 cps
Gel Time	N/A	33 minutes
Tack-Free Time	N/A	35 minutes
Cure to Handle	N/A	6 hours
Recoat Window	N/A	24 hours
Full Cure Time	N/A	4-5 days
Volatile Organic Compounds	N/A	0

MANUFACTURER OF HIGH-PERFORMANCE POLYMERS

Toll-Free 800-307-9218 | www.volatilefree.com | info@volatilefree.com

VFI®-4386 FORM COATING EPOXY

THICKNESS REQUIREMENTS

The coating can be applied in a minimum of 30 mil passes with a maximum thickness of about a quarter inch.

SURFACE PREPARATION

For ensured adhesion, all surfaces must be clean and free of contaminants, including dirt, dust, and debris. Oil and grease must be removed by scrubbing with a cleaning detergent and rinsing with water.

- EPS – Ensure that EPS foam has been aged for at least 30 days. Foam between 1 and 3 PCF is acceptable, but for an optimal cost-to-quality ratio, we recommend 2 PCF foam. Once clean and dry, VFI-4386 can be applied directly to the surface.
- Wood – The surface should be clean, relatively dry, and sanded for good mechanical adhesion.
- Steel – The surface must be cleaned by roughly sanding or sandblasting to SP6 to remove all rust, mill scale, dirt, and other contaminants.

MIXING

CAUTION: Depending on the overall volume being mixed and the ambient temperature, excessive heat may build up. Due to the exothermic reaction generated, only mix what you are ready to apply. The more you mix, the hotter the material will be, and it may cause fumes and smoke.

Before combining the A and B sides, premix the Hardener (B side) until a uniform mix is achieved. The epoxy (A side) does not need to be premixed.

Pour the measured B side into the measured A side and mix them until uniform. Transfer the mixture to a new container and mix again before use.

APPLICATION GUIDELINES

VFI-4386 can be applied by brush or roller to EPS, wood, and steel surfaces. Pour the material onto the surface immediately after mixing. Leaving it in the mixing container can cause it to over-generate heat, which causes the material to thicken faster and cure faster. For additional recoats, a good surface profile is required, so the cured coating must be sanded between each application. Also, ensure the surface is clean, free of concrete dust, and dry.

CLEANUP

When cleaning application equipment, we recommend using xylene, MEK, or a similar solvent to completely remove the coating.

STORAGE/SHELF LIFE

The product has a shelf life of 6 months from the date of manufacture. It should be stored in a dry, temperature-controlled space between 60°F - 90°F.

PRECAUTIONS

The material is toxic when inhaled, swallowed, or in contact with skin. If you are experiencing any symptoms, call a poison center or doctor immediately. Wear all necessary PPE to avoid prolonged exposure, including adequate full-face respiratory equipment. Avoid breathing in vapors or repeated skin contact. Do not add foreign material to the product. See Safety Data Sheet for complete safety data.