

DESCRIPTION

Ecocrete Urethane 250-HD is a low viscosity, two-component, acrylic urethane. Urethane 250-HD demonstrates superior adhesion and penetration, allowing it to be applied to minimally profiled concrete. Ecocrete Urethane 250-HD is UV stable and it produces a hard glossy or matte finish resistant to stains. Urethane 250-HD performs excellent in freeze thaw climates and under extreme UV.

TYPICAL USES

- Interior and exterior applications
- Sealing exterior decorative concrete
- Commercial and residential applications
- Top coat for floor coatings
- Maintenance coatings
- Marine coatings
- Automotive facilities
- Industrial coatings

TECHNICAL DATA

Solids by Weight.....	38%
Flexibility ASTM D-222.....	Passes 1/8"
Taber Abrasion (1,000 GM Load, 1,000 Cycles) CS17 Wheel.....	69 mg loss
Impact Resistance ASTM D-2794.....	Passes

STORAGE & INSTALLATION @ 75°F

Storage Environment	Dry area, 40-85°F
Application Temperature, ambient	50-95°F
Application Temperature, material	50-70°F
Application Temperature, substrate	Minimum 5°F above dew point
Pot Life	~ 25 Minutes
Shelf Life	1 year
Dry Time for Recoat	4 hours
Dry Time for Light Foot Traffic	6-8 hours
Vehicular Traffic	72 hours

Material cures more slowly at cooler temperatures and working time will be substantially reduced at higher temperatures. The optimum temperature for installation of this product is 65-85°F. Contact Ecocrete Coatings if temperatures are outside this range. At lower temperatures, the material will be more viscous and difficult to move, requiring more effort to install it. At elevated temperatures, the material will cure more quickly, so applicator will need to work accordingly.

CHEMICAL & STAIN RESISTANT CHART (ASTM D-1308 24HR IMMERSION)

Urine	No Effect	Skydrol	No Effect
Mustard	No Effect	Xylene	Film Softened
Whiskey	No Effect	MEK	Film Destroyed
Motor Oil	No Effect	50% Sodium Hydroxide	No Effect
Brake Fluid	No Effect	10% Hydrochloric Acid	No Effect
Gasoline	No Effect	10% Sulphuric Acid	No Effect
Vegetable Oil	No Effect	10% Acetic Acid	No Effect
Mineral Spirits	No Effect	Coffee	No Effect

CONSIDERATIONS & LIMITATIONS

- 1) Prepare substrate according to 'Surface Preparation' section of this document.
- 2) May reflect moving cracks and control joints.
- 3) Use only with adequate ventilation and/or appropriate cartridge type respirator.
- 4) When matte finish is desired, a gloss coat must be applied first, as a base coat. Once dry & completely sealed, apply matte coat as the top coat to avoid the matting agent sitting on top as the sealer penetrates substrate.
- 5) If coating over a porous substrate, additional coats may be required.
- 6) Perform relative humidity test using in situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum 75% relative humidity level measurement.
- 7) Recoat window is 8-12 hours, exterior use in direct sunlight will shorten recoat window.
- 8) If used outside in direct sunlight and material shells over or if outside recoat window, it is required to sand thoroughly and vacuum clean, solvent wipe with acetone and then recoat.

URETHANE – 250 HD

TECHNICAL DATA SHEET & APPLICATION INSTRUCTIONS

HIGH PERFORMANCE ACRYLIC ALIPHATIC CLEAR POLYURETHANE SEALER

BENEFITS

- Superior adhesion and penetration
- UV Stable
- Stain resistant
- Excellent in freeze thaw and extreme UV climates
- Wet look when using Gloss finish

TYPICAL APPLICATION

- Two Coats – Ecocrete Urethane-250 HD @ 5 wet mils per coat

STANDARD FINISH

- Gloss
- Satin
- Matte

PACKAGING & COVERAGE

- 1 Gallon Cans (1½ Gallon Kit)
- 5 Gallon Pails (15 Gallon Kit)
- 320 ft²/gal @ 5 wet mils

🌐 CONSIDERATIONS & LIMITATIONS CONTINUED

- 9) If using as a primer, concrete substrate should be professionally tested with calcium chloride for moisture vapor emission and transmission to determine hydrostatic pressure prior to the installation flooring system. If test are above 3lbs x 1,000 ft² x 24/hr substrate must be primed with Ecocrete Moisture Barrier Primer (MBP).
- 10) If using as a top coat, it is recommended to use a non-slip additive for all exterior applications or wet areas. It is the end users' responsibility to determine amount of non-slip needed for their environment.
- 11) Always use protective clothing, gloves, and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Safety Data Sheet for detailed safety precautions.
- 12) For industrial/commercial use. Installation by trained personnel only.

🌐 SURFACE PREPARATION

When used as a primer:

- The surface must be clean and sound, free from dirt, oil, grease, and any other contaminants that may inhibit bond.
- Urethane-250 HD has the capabilities to adhere to difficult surfaces, however, always profile the substrate as well as possible.
- All surface irregularities, cracks, expansion joints, and control joints should be properly addressed prior to application. [*Refer to Crack Repair*].
- Properly cover areas not to receive product.

When used as a top coat:

- The surface must be clean and sound, free from dirt, oil, grease, and any other contaminants that may inhibit bond.
- Properly cover areas not to receive product.

Crack Repair: Route out cracks with diamond crack chaser and vacuum clean. Prime with Epoxy Primer neat and then thicken the Epoxy Primer with Epoxy Thickener to create a peanut butter consistency and fill crack pulling flush with putty knife or leave slightly high and allow to cure. Then grind smooth for best results. (*This method is for under pigmented coating systems, not for exposed exterior applications.*) [*Refer to Epoxy Thickener TDS for further details.*]

Note: Substitute Epoxy Primer with MBP if using MBP due to MVE or MVT.

Refer to Ecocrete's Surface Preparation Guidelines for detailed instructions available at www.ecocretecoatings.com.

🌐 MIXING & APPLICATION STEPS

• MIX RATIO: 2A : 1B (by volume)

- 1) Pre-mix each component separately prior to mixing together; cleaning the mixing paddle before switching products to not cross contaminate.
- 2) Mix Part A with Part B for 3 minutes, scraping the sides and bottom of mixing container, with a power drill and mixing paddle.
- 3) After mixing, pour material out in an even row on substrate. Use a chip brush to cut in and a solvent resistant pump-up sprayer to spray material (or dip & roll material using a 3/8" nap roller) uniformly at the proper mil thickness across the floor. Back roll material using a 3/8" nap roller to a uniform appearance.
- 4) Once dry for recoat, if using a non-slip additive for exterior or wet areas, broadcast evenly across floor to the desired non-slip texture needed.
- 5) Repeat steps 1-3 to apply a second coat.
- 6) Allow to cure.

Notes:

- If applying over a cementitious substrate, the recommended method is to use a solvent resistant pump-up sprayer to spray material and back roll to a uniform appearance.
- If using a Matte finish, refer to #4 in the Considerations & Limitations section.

🌐 CARE & MAINTENANCE

Refer to Ecocrete's Care & Maintenance Guidelines available at www.ecocretecoatings.com.

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