

## DESCRIPTION

Ecocrete Urethane-CR is a two component, high solids aliphatic urethane protective coating. Urethane-CR offers exceptional performance properties not found in other protective coatings. Urethane-CR provides excellent chemical, abrasion, and impact resistance. Urethane-CR is available in a clear gloss or satin and 15 standard colors.

## TYPICAL USES

- Interior and exterior applications
- Commercial and residential applications
- Maintenance coatings
- Top coat for floor coatings
- Aviation hangars
- Automotive facilities
- Marine coatings
- Industrial coatings

## TECHNICAL DATA

Solids by Weight..... 73% Color & 63% Clear  
Flexibility ASTM D-222..... Passes 1/8"  
Taber Abrasion (1,000 GM Load, 1,000 Cycles) CS17 Wheel..... 35 mg loss  
Impact Resistance ASTM D-2794..... Passes 160 in/lb

## 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 ..... 10-12 hours  
Dry Time for Light Foot Traffic ..... 24 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
Blood ..... No Effect	Xylene ..... No Effect
Whiskey ..... No Effect	MEK ..... Film Softened
Black Ink ..... No Effect	50% Sodium Hydroxide ..... No Effect
Brake Fluid ..... No Effect	25% Hydrochloric Acid ..... No Effect
Gasoline ..... No Effect	25% Sulphuric Acid ..... No Effect
Hydraulic Fluid ..... No Effect	25% Acetic Acid ..... No Effect
Mineral Spirits ..... No Effect	25% Nitric Acid ..... Film Blistered

## CONSIDERATIONS & LIMITATIONS

- 1) Prepare substrate according to 'Surface Preparation' section of this document.
- 2) Substrate must be primed.
- 3) May reflect moving cracks and control joints.
- 4) Recoat window is 24-36 hours, exterior use in direct sunlight will shorten recoat window.
- 5) When satin finish is desired over a cementitious floor, a gloss coat must be applied first, as a base coat. Once dry & completely sealed, apply satin coat as the top coat to avoid the matting agent sitting on top and turning white.
- 6) 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.
- 7) Concrete substrate should be professionally tested with calcium chloride for moisture vapor emission and transmission to determine hydrostatic pressure prior to the installation of any polymer flooring system. If test are above 3lbs x 1,000 sq ft x 24/hr substrate must be primed with Ecocrete Moisture Barrier Primer (MBP).
- 8) Perform relative humidity test using in situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum 75% relative humidity level measurement.
- 9) 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.
- 10) 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.
- 11) For industrial/commercial use. Installation by trained personnel only.

# URETHANE-CR

## TECHNICAL DATA SHEET & APPLICATION INSTRUCTIONS

## CHEMICAL RESISTANT HIGH SOLIDS ALIPHATIC PROTECTIVE COATING

## BENEFITS

- Excellent top coat for thin-film and high-build coatings systems, color chip, color quartz, and for all our other resinous & cementitious flooring systems.
- Very high chemical resistance
- UV Stable
- Accelerator available

## TYPICAL APPLICATION

- One Coat – Ecocrete Urethane-CR @ 5-10 wet mils

## STANDARD FINISHES

- Clear Gloss
- Clear Satin
- Black
- White
- Bone White
- Wheat
- Light Brown
- Dark Brown
- Mocha
- Natural Gray
- Light Gray
- Dark Gray
- Charcoal
- Tile Red
- Forest Green
- Safety Red
- Safety Yellow

## PACKAGING & COVERAGE

- 1 Gallon Cans (1 Gallon Kit)
- 5 Gallon Pails (15 Gallon Kit)
- 320 ft<sup>2</sup>/gal @ 5 wet mils
- 160 ft<sup>2</sup>/gal @ 10 wet mils

## 🌐 SURFACE PREPARATION

- Prime substrate with Ecocrete Epoxy Primer, Moisture Barrier Primer (MBP) or Urethane-250 HD.
- The surface must be clean and sound, free from dirt, oil, grease, and any other contaminants that may inhibit bond.
- All surface irregularities, cracks, expansion joints, and control joints should be properly addressed prior to application.
- 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: Use MBP same way as listed if using MBP due to MVE or MVT.

Refer to Ecocrete's Surface Preparation Guidelines for detailed instructions available at [www.ecocretecoatings.com](http://www.ecocretecoatings.com).

## 🌐 MIXING & APPLICATION STEPS

- **MIX RATIO: 2A : 1B (by volume)**

- 1) If using a non-slip additive for exterior or wet areas, broadcast evenly across floor to the desired non-slip texture needed.
- 2) Pre-mix each component separately prior to mixing together; cleaning the mixing paddle before switching products to not cross contaminate.
- 3) Mix Part A with Part B for 3 minutes, scraping the sides and bottom of mixing container, with a power drill and mixing paddle.
- 4) Immediately after mixing, pour material out in an even row on substrate. Use a chip brush to cut in and/or a squeegee to spread material uniformly at the proper mil thickness across the floor. Roll material using a 3/8" nap roller to a uniform appearance.
- 5) Allow to cure.

Notes:

- Avoid puddling and thick applications, as these areas may turn white.
- Wear spike shoes while spreading material so you can walk on material to back roll.
- If using stain, it is important to maintain a consistent film thickness, as thicker areas will be glossier and thinner areas will be duller.
- If using a satin finish, refer to #5 in the Considerations & Limitations section.

## 🌐 CARE & MAINTENANCE

Refer to Ecocrete's Care & Maintenance Guidelines available at [www.ecocretecoatings.com](http://www.ecocretecoatings.com).

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