

Eco-Crete™ SL

Slurry Applied with Broadcast Urethane Mortar System



System - A three-part, cementitious-polyurethane slurry system with aggregate broadcast, for resurfacing lightly eroded interior concrete floors in areas that require thermal shock resistance and slip resistance. System is sealed with Eco-Crete TC, a cementitious grout coat.

- **ADVANCE YOUR SUSTAINABILITY GOALS** – Utilizes renewable bean oils and environmentally friendly packaging.
- **LEED® CREDIT** – LEED Green Building Certification Program credits may be available:
 - **Indoor Environmental Quality**
 - 4.2 Low-Emitting Materials, Paint & Coatings
 - **Material and Resource**
 - 6 Rapidly Renewable Materials
- **EXTREME THERMAL STABILITY** – Steam cleanable.
- **SEAMLESS** – Hygienic finish; no grout joints

PRIMARY APPLICATIONS

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| Commercial Kitchens | Food & Beverage Facilities |
| Restrooms & Locker Rooms | Laboratories |
| Supermarkets and Food Prep Areas | |

BENEFITS

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| Impact & abrasion resistant surface | Anti-slip surface, meets ADA recommendations |
| Low odor, fast installation, fast cure | Resistant to moisture vapor transmission (MVT) |
| Thermal shock & chemical resistant | Resistant to fungi growth per ASTM G-21 |
| High temperature resistant to 180°F (82.2°C) | |

SYSTEM PROPERTIES

| Property | Test Method | Results |
|--------------------------------|-------------|-----------------------------------|
| Compressive Strength | ASTM C579 | 8,400 psi (57.9 MPa) |
| Tensile Strength | ASTM C307 | 1,050 psi (7.2 MPa) |
| Flexural Strength | ASTM C580 | 2,700 psi (18.6 MPa) |
| Bond Strength | ASTM D-4541 | 100% Concrete Failure |
| Impact Strength | ASTM D-4226 | >160 in-lb |
| Volatile Organic Compound, VOC | ASTM D3960 | Mixed A+B+C = 0.04 lb/gal (5 g/L) |
| Resistance to Fungi Growth | ASTM G-21 | Passes, Rating of 1 |
| Flammability | ASTM D635 | Self-extinguishing |

Testing performed at 70°F. The data shown above reflects typical results based on laboratory testing under controlled conditions. Variations from the data shown may result. Test methods are modified where applicable.

INSTALLATION DATA

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| Coverage rate @ 1/8" (3.18 mm) for a 3/16" (4.76 mm) finished floor | | 32 ft² (2.97 m²) per unit |
| Application Temperature, ambient | | 40-85°F (4.4-29.4°C) |
| Application Temperature, material | | 50-80°F (10-26.6°C) |
| Pot Life, @ 77°F (25°C) | | 15 minutes |
| Traffic, @77°F (25°C) | | Light: 12 hours / Full: 24 hours |
| Fully Cured, @ 77°F (25°C) | | 7 days |

GENERAL PRODUCT INFORMATION

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| STORAGE: | Materials should be stored indoors between 65°F (18°C) and 80°F (26.6°C). |
| SHELF LIFE: | 6 months |
| PACKAGING OPTIONS / PART NUMBERS: | <p>Eco-Crete™ SL</p> <p>1 gallon / 9014442 (½ gallon Part A, ½ gallon Part B, 1 bag C + 1 powder pigment)</p> <p>10 gallons / 9014444 (5 gallons Part A, 5 gallons Part B, 10 bags C + 10 powder pigments)</p> <p>500 gallons / 9014445 (250 gallons Part A, 250 gallons Part B, 500 bags C + 500 powder pigments)</p> <p>Eco-Crete™ C</p> <p>9014446 (0.25 gallon Part A, 0.25 gallon Part B, 1 bag C + 1 powder pigment)</p> <p>Eco-Crete™ TC</p> <p>1 gallon / 9014853 (½ gallon Part A, ½ gallon Part B, 1 bag C + 1 powder pigment)</p> <p>10 gallons / 9014854 (5 gallons Part A, 5 gallons Part B, 10 bags C + 10 powder pigments)</p> <p>500 gallons / 9014855 (250 gallons Part A, 250 gallons Part B, 500 bags C + 500 powder pigments)</p> |
| STANDARD QUARTZ BLENDS / SOLIDS – 50# BAG: | For part numbers, refer to Coatings Price List or contact Tennant Customer Service for assistance. Custom blends are also available. |
| OPTIONS: | <p><i>Colors:</i> Available in Red, Gray, Dark Gray, Tan, Green, Blue, Safety Yellow and Black</p> <p><i>Cove:</i> A seamless, smooth transition can be created between the flooring and wall using Eco-Crete CB.</p> |
| LIMITATIONS: | <p><i>Contamination (Fisheyes):</i> Product may not adhere if oil, silicones, mold release agents or other contaminants are present.</p> <p><i>Outgassing:</i> Blisters may result if sand is not broadcast into the slurry.</p> <p><i>Movement:</i> Moving joints and cracks will reflect through the installed system. 7 day old concrete can be coated, but any shrinkage cracks that form may show in the Eco-Crete.</p> <p><i>UV/Light Stability:</i> This product is not light stable and will yellow/amber over time unless topcoated with optional UV resistant topcoat.</p> <p><i>Product Stability:</i> Part A and Part B resins must not be allowed to freeze. If you suspect product has frozen, please call Tennant technical support.</p> |

IMPORTANT: READ AND FOLLOW ALL PRECAUTIONS AND INSTRUCTIONS BEFORE PROCEEDING.

PLEASE SEE SAFETY DATA SHEET (SDS) FOR HANDLING PROCEDURES.

USE PRODUCT AS DIRECTED.

KEEP OUT OF THE REACH OF CHILDREN.

PRELIMINARY FLOOR INSPECTIONS

CHECK THE TEMPERATURE AND HUMIDITY: Floor temperature should be between 40°F (4.4°C) and 85°F (29.4°C) and material temperature should be between 50°F (10°C) and 80°F (26.6°C) for Eco-Crete SL. Humidity must be less than 80%. **DO NOT** coat unless floor temperature is more than five degrees over the current, local dew point.

BARE CONCRETE

CHECK THE CONCRETE: Concrete must be structurally sound and free of curing membrane, paint and/or other sealer with no standing water. If you suspect that the concrete has been previously sealed, call Tennant Company Tech Support for further instructions.

CHECK FOR MOISTURE: Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. Calcium chloride testing or in-situ relative humidity testing is recommended. Readings must be below 12 pounds or less per 1,000 ft² (2.3 kg per 92.9m²) over a 24-hour period on the calcium chloride test or below 85% relative internal concrete humidity. Test methods can be purchased at www.astm.org, see ASTM F1869 or F2170, respectively or follow test kit manufacturer's instructions.

APPLICATION EQUIPMENT

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| <ul style="list-style-type: none"> Protective clothing Spiked shoes Mixing pail Slow speed drill (500 rpm or less) Cam / Gauge rake Porcupine roller Loop roller | For optional cove Eco-Crete CB: |
| | <ul style="list-style-type: none"> Chalk line Duct tape Cove strips Paint brushes 4" (106.6 mm) Roller Frame with covers Trowel (stainless steel), 3/8" (9.5 mm) or ½" (12.7 mm) radius cove trowel Putty Knife |
| <ul style="list-style-type: none"> Trowel (stainless steel), 4"x12" (101.6 x 304.8 mm) Pool Trowel, Notch Trowel and Margin Trowel Flat squeegee ¼" Nap roller Roller assembly Jiffy® Mixer Blade [Tennant Part #. 08643-1 (small unit) / 08643-5 (large unit)] | |
| For optional topcoat Eco-HTS 100: | |
| <ul style="list-style-type: none"> Application Tray | <ul style="list-style-type: none"> 3/8" (10 mm) Medium Nap Roller |

ASSEMBLE EQUIPMENT: Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

PREPARATION

Detergent scrub and rinse with clean water to remove surface dirt, grease, oil and contaminants.

Steel shot blast (minimum shot size of 330) to a minimum surface profile of CSP-5 meeting ICRI (International Concrete Repair Institute) standard guideline #310.2R. Use magnetic broom to remove excess shot, sweep to remove large debris and vacuum to remove fine dust.

Scarify: Sweep to remove large debris and vacuum to remove fine dust.

Key-in all termination points, drains and joints that may move with a 1/4" (6.35 mm) by 1/4" (6.35 mm) cut.

Patch all depressions, divots and stress cracks in concrete with Eco-Crete SL. For areas thicker than 1/4", use Eco-Crete HF.

JOINTS: Fill all static (non-moving) cracks or control joints with Eco-Crete SL. Cracking of the resurfacer will occur over joints that are overlayed and later move. Because resurfacer are not flexible, joints that might move should be honored (cut) after the installation and filled with Eco-PJF or Eco-EJF. Isolation joints must be honored and filled with a flexible material designed for this purpose.

APPLICATION - OVERLAY - ECO-CRETE™ SL

COVERAGE RATE: Coverage rate will depend upon application thickness. A one bag mix will nominally cover (finished floor): 32 ft² (2.97 m²) @ 1/8" (3.18 mm) for a 3/16" (4.76 mm) finished floor.

To achieve a nominal 3/16" (4.76 mm) finished floor, set the rake at 1/8" (3.18 mm).

Pour out 0.50 gallons (1.89 litres) Eco-Crete SL Part A into a measuring container. Then, **POUR THE MEASURED PART A INTO THE MIXING PAIL.**

ADD ONE POWDER PIGMENT BAG TO PART A and mix for about 15 seconds.

Pour out 0.5 gallons (1.89 litres) Eco-Crete SL Part B into a measuring container that is separate from the one used with the Part A. Then, **ADD THE MEASURED PART B TO THE PIGMENTED PART A** already in the mixing pail.

MIX FOR APPROXIMATELY 30 SECONDS or until thoroughly blended using the Jiffy mixer.

GRADUALLY ADD ALL CONTENTS OF A BAG OF ECO-CRETE SL FILLER into the liquid mixture in the mixing pail. . Blend thoroughly until all particles are wetted out, normally about two minutes. **DO NOT BLEND AGGRESSIVELY OR INTRODUCE AIR. NOTE:** *It is critical to use the same mixing sequence to ensure color consistency throughout the entire application.*

POUR ONE ECO-CRETE SL PART C into the mixing pail. Blend thoroughly until all particles are wetted out, normally about two minutes. **NOTE:** *It is critical to use the same mixing sequence to ensure color consistency throughout the entire application.*

POTLIFE AT 75°F: *Mix only enough material, which can be raked, porcupine and loop rolled in a 15-minute period.*

POUR THE MIXED MATERIAL onto floor.

CAM/GAUGE RAKE material over desired area.

USE HAND TROWELS to finish along edges and drains.

USE PORCUPINE ROLLER to release any entrained air as well as work resins to the surface.

IMMEDIATELY ROLL THE ECO-CRETE SL with a loop roller to remove gauge rake marks and level material. **NOTE:** *Late or heavy rolling may induce pinholes. In cool conditions, a smoothing trowel may need to be used prior to porcupine rolling to remove rake marks.*

LAY ABUTTING EDGES WITHIN 10 MINUTES to ensure a clean edge. A "wet edge" installation is imperative during large placements to avoid lines and ridges in the finished floor.

APPLICATION –TRACTION – BROADCAST QUARTZ OR SILICA SAND

IMMEDIATELY BROADCAST COLORED QUARTZ OR SILICA SAND in the area to excess. Do not dump or pile the aggregate. Gently scatter it onto the floor by hand tossing so as to cover the wet resin completely. A mechanical blower may be used to scatter the granules. A coverage rate of 0.75 pounds (0.35 kg) per ft² (0.09 m²) is recommended.

ALLOW SYSTEM TO CURE APPROXIMATELY 6-8 HOURS to withstand foot traffic.

THOROUGHLY SWEEP AND VACUUM to remove loose colored quartz / silica sand granules from surface.

APPLICATION – OPTIONAL COVE – ECO-CRETE™ CB

NOTE: *Cove installation may be done before placement of the floor; however, a smoother transition is achieved by installing the cove after the floor has been placed.*

COVERAGE RATE: The cove mix below typically covers 35 lineal feet (10.7 meters) at a height of 4 inches (101.6 mm). The coverage of the Eco-Crete CB could vary depending on its thickness (cove shape). The primer mix will cover 120 ft² (11.1 m²).

APPLICATION – PRIMER – ECO-CRETE TC

Pour out 0.50 gallons (1.89 litres) Eco-Crete Part A into a measuring container. Then, **POUR THE MEASURED PART A INTO THE MIXING CONTAINER.**

Pour out 0.50 gallons (1.89 litres) Eco-Crete Part B into a measuring container that is separate from the one used with the Part A. Then, **ADD THE MEASURED PART B TO THE PART A** already in the mixing pail, and mix for 15 seconds. **POTLIFE:** *Mix only enough material that can be applied within a 15-minute period.*

GRADUALLY ADD ALL CONTENTS OF A BAG OF ECO-CRETE TC FILLER into the liquid mixture and blend thoroughly until all particles are wetted out, normally about 2 minutes.

APPLY PRIMER TO WALL BASE OR EQUIPMENT PADS using a paint brush or roller that will receive cove. Allow primer to dry.

APPLICATION – COVE – ECO-CRETE CB

Pour out 0.25 gallons (0.95 litres) Eco-Crete Part A into a measuring container. Then, **POUR THE MEASURED PART A INTO THE MORTAR MIXER.** Begin mixing.

ADD ONE POWDER PIGMENT BAG TO PART A and mix for about 15 seconds.

Pour out 0.25 gallons (0.95 litres) Eco-Crete Part B into a measuring container that is separate from the one used with the Part A. Then, **ADD THE MEASURED PART B TO THE PART A** already in the mortar mixer. **POTLIFE:** *Mix only enough material that can be applied within a 15-minute period.*

POUR ONE BAG PART C into the mortar mixer. Mix until uniform (approximately one minute). The resin needs to completely wet out the sand.

POUR THE MIXED MATERIAL along wall or at the base of equipment pads.

USE COVE TROWELS to apply, compact and finish material.

APPLICATION – SEAL COAT - ECO-CRETE™ TC

NOTE: *Blended colors of quartz or flake for a more decorative look must be sealed with a clear, light stable topcoat.*

COVERAGE RATE: Coverage rate will depend upon application thickness. A one-bag mix of Eco-Crete TC will nominally cover: 120 ft² (11.1 m²) per unit as topcoat over 20/40 broadcast.

Pour out 0.50 gallons (1.89 litres) Eco-Crete TC Part A into a measuring container. Then, **POUR THE MEASURED PART A INTO THE MIXING PAIL.** **ADD ONE POWDER PIGMENT BAG TO PART A** and mix for about 15 seconds.

Pour out 0.5 gallons (1.89 litres) Eco-Crete TC Part B into a measuring container that is separate from the one used with the Part A. Then, **ADD THE MEASURED PART B TO THE PIGMENTED PART A** already in the mixing pail.

MIX FOR 15 SECONDS or until thoroughly blended using a Jiffy® mixer.

POUR ONE ECO-CRETE TC PART C into the mixing pail. Blend thoroughly until all particles are wetted out, normally about two minutes. **NOTE:** *It is critical to use the same mixing sequence to ensure color consistency throughout the entire application.*

POTLIFE AT 75°F: *Mix only enough material, which can be squeegeed and rolled in a 15-minute period.*

POUR THE MIXED MATERIAL onto floor in ribbons. Using a flat squeegee move material uniformly across floor. Roll and backroll material using a ¼" nap roller to a uniform appearance. Do not over work.

ALLOW COATING TO DRY 24 HOURS at 75°F (24°C), 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full coating properties take 14 days to develop.

TECHNICAL SUPPORT

For any preparation or application questions, please call Tennant technical support at 800-228-4943, option 4 (US & Canada), 800-832-8935 (International).

DISPOSAL

Dispose of all excess material, packaging and other waste in accordance with federal, state and local regulations.

MAINTENANCE GUIDELINES

Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).

Care: Proper maintenance will increase the life and help maintain the appearance of your new Tennant floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish.

Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.

Detergent: Tennant has a full range of detergents--general purpose to heavy duty--for your cleaning needs. For assistance in determining which detergent is right for your facility or for additional technical information call: 800-228-4943, option 4 (US & Canada), 800-832-8935 (International).

Caution: Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface. Do not drop heavy or pointed items on the floor as this may causing chipping or concrete popouts in the case of a weak cap.

Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass® between the tire and the floor coating can prevent discoloration.

Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

Repair: Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

This warranty applies to all Specialty Surface Coatings, with the following exceptions: Eco-Hard-N-Seal™, Eco-EDP™ (Electrostatic Dissipative Primer), Eco-EDE™ (Electrostatic Dissipative Epoxy), and SDS™ (Static Dissipative System). These products have a separate warranty policy.

Tennant Company warrants its Specialty Surface Coatings to be free from defective manufacture, improper formulation, and defective ingredients. Warranty covers replacement of materials only.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

In no event shall Tennant or Seller be liable for any incidental, consequential, or special damages arising out of the use of Tennant Specialty Surface Coatings. **THE ONLY REMEDY OF THE USER OR BUYER, AND THE ONLY LIABILITY OF TENNANT AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES, OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE) SHALL BE REPLACEMENT OF THE PRODUCT OR, AT THE ELECTION OF TENNANT OR SELLER, RETURN OF THE PURCHASE PRICE.**

No representative of Tennant has authority to give any other warranty or assume other liability. The presence of a Tennant employee during the application of Tennant's Specialty Surface Coatings does not extend or alter the warranty or limitations in any manner whatsoever.