ECO-CHIP FLOOR

TECHNICAL DATA SHEET & APPLICATION INSTRUCTIONS

MOISTURE TOLERABLE 100% SOLIDS EPOXY FLOORING SYSTEM WITH A DOUBLE BROADCAST OF A COLOR CHIP BLEND & URETHANE-CR TOP COAT

DESCRIPTION

Ecocrete Eco-Chip Floor is a 60 mil, seamless, chemical resistant floor system to produce an abrasion and slip resistant protective flooring system with a decorative finish with or without integral cove base. Eco-Chip Floor is a fluid applied epoxy floor system comprised of a moisture remediation epoxy primer, 100% solids clear epoxy with a double broadcast of a decorative color chip blend, a grout coat of 100% solids clear epoxy and a chemical resistant, aliphatic, clear urethane top coat.

TYPICAL USES

- *Interior applications*
- *Locker rooms*
- *Commercial and Residential applications*
- *Restrooms*
- *Maintenance facilities*
- *Animal care facilities*
- *Automotive facilities*
- *Garages*

TECHNICAL DATA

Flexibility ASTM D-222	Passes 1/8"
Compressive Strength	10,500 psi
Taber Abrasion (1,000 GM Load, 1,000 Cycles) CS17 Wheel	24 mg loss
Impact Resistance ASTM D-2794	Passes >68 in/lb

STORAGE & INSTALLATION @ 75ºF

Storage Environment	Dry area, 40-85ºF
Application Temperature, ambient	50-95ºF
Application Temperature, material	50-70ºF
Application Temperature, substrate	Minimum 5ºF above dew point
Pot Life	See individual TDS'
Working Time	See individual TDS'
Dry Time for Recoat	See individual TDS'
Dry Time for Light Foot Traffic	See individual TDS'
Vehicular Traffic	See individual TDS'

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 65-85ºF. 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

When Urethane-CR is used as a top coat

CONSIDERATIONS & LIMITATIONS

1) Prepare substrate according to 'Surface Preparation' section of this document.
2) System can be top coated with Epoxy Clear to qualify for LEED projects. Chemical & Stain resistance is limited.
3) Recoat window is 24-36 hours, exterior use in direct sunlight will shorten recoat window.
4) If material shells over or outside recoat window, it is required to sand and vacuum clean, solvent wipe with acetone and then recoat.
5) 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 is above 10 lbs x 1,000 ft^2 x 24/hr then a second coat of Ecocrete Moisture Barrier Primer at 10 mils must be used as a mitigation system for up to 20 lbs x 1,000 ft^2 x 24/hr – it must be installed prior to resinous flooring application.
6) Perform relative humidity test using in situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum 98% relative humidity level measurement.
7) 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.
8) For industrial/commercial use. Installation by trained personnel only.

BENEFITS

- *Decorative & Durable*
- *Chemical & Stain resistant**
- *Excellent abrasion & slip resistance*

TYPICAL APPLICATION

- Primer: 10 mils of Moisture Barrier Primer
- 1st Broadcast coat: 8 mils of Epoxy Clear with Color Chip Blend aggregate
- 2nd Broadcast coat: 13 mils of Epoxy Clear with Color Chip Blend aggregate
- Grout coat: 16 mils of Epoxy Clear
- Top coat: 5 wet mils of Urethane-CR Clear

STANDARD BLENDS

- Latte
- Arizona Tan
- Burnt Toffee
- Desert Brown
- Snow Gray
- Sterling Gray
- Wolf Gray
- Smokey Gray
- Brisk Blue
- Ocean Blue
- Clover Green
- Fireworks

PACKAGING & COVERAGE

- 1 Gallon Cans
- 5 Gallon Pails
- 55 lb Box

- Primer coat: 160 ft^2/gal @ 10 mils
- 1st Broadcast coat: 200 ft^2/gal @ 8 mils per coat
- 2nd Broadcast coat: 120 ft^2/gal @ 13 mils per coat
- Aggregate: 440 ft^2 per 55 lb box
- Grout coat: 100 ft^2/gal @ 16 mils
- Top coat: 320 ft^2/gal @ 5 wet mils

ecocrete Floor Coating Systems

SURFACE PREPARATION

- The surface must be clean and sound, free from dirt, oil, grease, and any other contaminants that may inhibit bond.
- Shot blasting and/or diamond grinding is required to a CSP-2 or CSP-3.
- All surface irregularities, cracks, expansion joints, and control joints should be properly addressed after application of primer.
- Properly cover areas not to receive product(s).

Crack Repair: Route out cracks with diamond crack chaser and vacuum clean. Prime with MBP neat and then thicken the MBP 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. [*Refer to Epoxy Thickener TDS for further details.*]

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

MIXING & APPLICATION STEPS

- **MIX RATIOS:**
  - **PRIMER COAT: Moisture Barrier Primer – 3A : 2B (by volume)**
  - **BROADCAST COATS & GROUT COAT: Epoxy Clear – 3A : 2B (by volume)**
  - **TOP COAT: Urethane-CR Clear – 2A : 1B (by volume)**

PRIMER COAT:

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) 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 10 mils across the floor. Back roll material using a 3/8" nap roller to a uniform appearance.
4) Allow to cure.

Notes:

- If pinholes are present once first coat is dry due to porosity of concrete substrate, apply a second coat @ 8-10 mils.
- Do not walk on material with spiked shoes after it has been back rolled.

1st BROADCAST COAT:

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) Immediately after mixing, pour material out in an even row on substrate. Use a chip brush to cut in and a notched squeegee to spread material uniformly at 8 mils across the floor. Back roll material using a 3/8" nap roller to a uniform appearance.
4) Then, while wearing spiked shoes, broadcast Color Chip Blend upwards, allowing the aggregate to fall into wet epoxy until rejection. Keep a wet edge to tie in each new epoxy mix.
5) Allow to cure.
6) Sweep up excess chips with a clean, dry, stiff broom. Scrape floor and vacuum clean.

Notes:

- Wear spiked shoes while spreading material so you can walk on material to back roll.
- Keep a wet edge while applying.

2nd BROADCAST COAT:

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) Immediately after mixing, pour material out in an even row on substrate. Use a chip brush to cut in and a notched squeegee to spread material uniformly at 13 mils across the floor. Back roll material using a 3/8" nap roller to a uniform appearance.
4) Then, while wearing spiked shoes, broadcast Color Chip Blend upwards, allowing the aggregate to fall into wet epoxy until rejection. Keep a wet edge to tie in each new epoxy mix.
5) Allow to cure.
6) Sweep up excess chips with a clean, dry, stiff broom. Scrape floor and vacuum clean.

Notes:

- Wear spiked shoes while spreading material so you can walk on material to back roll.
- Keep a wet edge while applying.

GROUT COAT:

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) 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 16 mils across the floor. Back roll material using a 3/8" nap roller to a uniform appearance.
4) Allow to cure.

Notes:
- Wear spiked shoes while spreading material so you can walk on material to back roll.
- Keep a wet edge while applying.

TOP COAT:
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) 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 5 mils across the floor. Back roll material using a 3/8" nap roller to a uniform appearance.
4) 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.

Notes:
- See individual Technical Data Sheets for further information.
- Use tape where coating is to be stopped and key all terminations with a minimum $^{1}/_{8}$" W x ¼" D saw cut.