



TRANSCENDING WHAT IS POSSIBLE WITH EPOXY



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DESCRIPTION:

TRANS4LOOR METALLIC FLOOR SYSTEM is a two- component, solvent free, 100% solids epoxy/amine system designed specifically for applications over concrete floors and countertops where maximum durability and chemical resistance are required within a decorative metallic system. The high gloss material is available in a solid color base coat, and a clear formula where metallic pigments are added.

USES:

Suitable for interior use only on concrete surfaces where a smooth, glossy, attractive and durable metallic finish is required. Ideal for concrete flooring in retail, residential, commercial spaces as well as commercial and residential automotive garages, aircraft hangers and other environments where durability with a decorative appearance is desired.

BENEFITS:

- Easy to use 1:1 formula that has a flowing characteristic that allows for dramatic final appearance when using Trans4loor metallic pigments.
- Can be top coated with one of several Fenix Brand Products for additional wear resistance and enhanced appearance.
- Forms a tough, high strength coating that is resistant to abrasion from heavy traffic and is unaffected by rubber burns.
- Resistant to damage caused by exposure to alkalis, solvents, acids, salt solutions and water, fats, oils and fuels.
- Formulated with resins which work as an adhesive within the slab, strengthening it around minor cracks, crevices and weak spots.
- Virtually odor-free during installation and curing, making it ideal for interior applications.
- Low maintenance, high-gloss finish is smooth, durable and easy to clean.
- Easy, user-friendly roller application.

APPLICATION PROCEDURES

PREPARATION:

1. Clean: The surface must be free of dust, dirt, oil, grease, paints, glues, sealers, curing agents, stamp tool releases, efflorescence, chemical contaminants, rust, algae, mildew, and other foreign matter that may prevent proper adhesion.
2. Cured: Any concrete must be sufficiently cured to have complete hydration, approximately 28 days depending on temperature and humidity.
3. Sound: No epoxy system should be placed on flaking or spalling concrete. If the surface is delaminating, or divots are present, then diamond grinding, shot blasting, or other mechanical means should be used to remove the delaminating areas. Depending upon size of area, patching may be required prior to application of the epoxy. Either Flash Patch or Deep Patch are an excellent choice as a patching product to complement the system. Refer to their respective TDS. Evaluate all cracks and determine if they are static or structural to set expectation of treatment. Refer to SCT-22 TDS. Construction Joints in concrete may have sufficient movement to “telegraph” through the Trans4loor epoxy. Large expansive slabs should have planned appropriate flexible caulks to allow for this movement and prevent bridging of Trans4loor epoxy across either side of the construction joint.



QUICK FACTS

MIXING RATIO

1:1 (1 PART A TO 1 PART B)

COVERAGE

VARIABLES UPON SUBSTRATE; APPROX. 200-300 BASE COAT KIT (100-150 SQ FT/GALLON)

VARIABLES UPON SUBSTRATE; APPROX. 80-100 METALLIC COAT KIT (40-50 SQ FT/GALLON)

PACKAGING

Available in 2-gallon and 10-gallon kits:

2-GALLON BASE COAT KIT	2-GALLON METALLIC COAT KIT*
(1) Gallon Part A, Black (1) Gallon Part B, Clear	(1) Gallon Part A, Clear (1) Gallon Part B, Clear
10-GALLON BASE COAT KIT	10-GALLON METALLIC COAT KIT*
(5) Gallon Part A, Black (5) Gallon Part B, Clear	(5) Gallon Part A, Clear (5) Gallon Part B, Clear

Metallic Pigment Sold Separately.
Available in 10 oz container for mixing with 2-gallons of clear epoxy.

4. Profiled:

- Concrete: For a proper bond, the surface of concrete must be opened up or roughed up to feel like 80 - 180 grit sandpaper. This profile is best accomplished through diamond grinding or shot blasting. Proper profile should follow the standard established by the International Concrete Repair Institute (ICRI) Technical Guideline No. 03732 for Concrete Surface Profile (CSP). The established profile is categorized as CSP-2 or CSP-3.
 - Finish or Top Coat: Screen the preceding coat with a 100 grit sanding screen on a rotational floor machine. This screening will ensure not only a good bond between coats, but also eliminate any debris or dust that may have settled onto the preceding coat as it was curing. Follow screening with vacuuming. Follow vacuuming with a microfiber wipe with a solvent such as xylene or acetone.
5. Limit Moisture: Since Trans4loor epoxy is not vapor permeable and due to the uncertainty of vapor barriers placed beneath concrete, testing prior to application is appropriate.
- Plastic sheet test (ASTM-D-4263) can often identify excessive moisture vapor transmission. Tape all four sides of an 18" (45 cm) square of clear plastic to the slab and leave in place for 16 hours. Any condensation formed or darkening of the slab beneath the plastic indicates the surface is too wet for an epoxy.
 - Calcium Chloride test (ASTM-F-1869) will quantify the amount of moisture that is transmitted to surface of the slab. The moisture measurement is expressed in terms of pounds (kg) per 1,000 ft² (m²) per 24 hours. Measurements that are in excess of 3 pounds per 1,000 ft² (1.4 kg per 100 m²) over 24 hours are too wet for an epoxy. Follow directions of test kit manufacturer.

Note: these observations and measurements may be inherently flawed as they are "snapshots in time." These tests serve only as guidelines.

CURE RATES:

Cure Rates @ 77°F	Cure Rates @ 77°F
Dry to touch - 6 to 8 hours	Dry to touch - 18+ hours
Light Traffic = 16 hours	Light Traffic = 18+ hours
Heavy Traffic = 24 hours	Heavy Traffic = 3 days
Full Cure = 5 to 7 days	Full Cure = 14 days

MIXING AND APPLICATION: PLANNING

1. Select appropriate PPE (personal protection equipment). Provide adequate ventilation. Refer to SDS.
2. Work across the narrowest dimension of an area where practical.
3. Work to an exit from wet product.
4. To track coverage rate for each 2-gallon kit, after establishing room dimensions, before mixing commences, place a short piece of masking tape on the wall to correspond to the distance one kit should cover. Product should cover as a clear coat: approximately 100 - 150 ft² per gallon (10.7 - 16 mils) or as a thick build: 40- 50 ft² per gallon (23-26 mils).
5. Mask all areas requiring protection. Product will stick to just about everything.

MIXING AND HANDLING

1. Organize mixing station that will not need to be relocated, and will not block the progress of application. Staging is critical so that Part A and part B are not confused with one another or mixed too far in advance. Once A and B are mixed, the catalyzed product should be placed on the floor immediately. If left in the pail too long, product will cure at an accelerated rate, rendering it useless.
2. Pour 1 part B into 1 part A. Note that kits are premeasured for convenience. Exercise care to avoid pouring product down the sides of the pail, as this will be difficult to mix.
3. Mechanically mix both parts A and B with "jiffy" style mixer blade for 3 minutes at medium speed. Jiffy style mixer at medium speed will help prevent air entrainment.
4. Pour contents completely out in a fairly long trail for application. Any unused portion left in the pail can cure at an accelerated rate, rendering it useless.
5. Do not leave the pail upside down to drain onto the floor. Any unmixed portion of A or B that may have accidentally been placed onto the side of pail can now drain down onto the floor, creating a spot that will not cure.
6. Clean out or replace mixing pails, mixer blades, and roller covers in a reasonable fashion, so that the chemistry of A and B remain consistent, especially over large projects.

BASE COAT

1. Spiked shoes are required throughout application.
2. Select spreader
 - For high build to cover small holes and imperfections in floor (e.g. blow-outs from carpet tack strip), a notched squeegee or gauge rake may be appropriate.
 - For a tighter coat, a squeegee or a roller ranging in nap size from mohair to 3/8" (9.5 mm) may be appropriate.
 - Rollers should be premium quality with phenolic core.
 - "De-fuzz" roller by wrapping tightly with masking tape and removing tape.
 - Large areas may require 18" (46 cm) rollers and wider squeegees.
3. Spread product evenly over area. Areas adjacent to walls may be "cut in" using a brush.
4. Backrolling: After achieving the appropriate coverage, begin progressively backrolling Primer Coat. Roller covers will require replacing periodically to prevent catalyzed product from setting up on roller cover or contaminating more freshly placed material.

METALLIC COAT

1. Clean: The Primer Coat should be cured, dry to the touch, and no longer tacky (refer to cure rates listed above as a guide) and then be screened with a 100 grit sanding screen on a rotational floor machine. This screening will ensure not only a good bond between coats, but also eliminate any debris or dust that may have settled onto the Primer Coat as it was curing. Follow screening with vacuuming. Follow vacuuming with a microfiber wipe with a solvent such as xylene or acetone.
2. Repeat all steps of application listed above. Planning, masking, mixing, and handling are identical in Top Coat.

Note: The Metallic Coat may complete the project, and does not necessarily require a Finish Coat. However, for enhanced durability and chemical resistance, a Finish Coat may be selected. Additionally, a Finish Coat may become the “carrier” for slip resistant agents for areas that may become wet, oily, or greasy when brought into service.

FINISH COAT

There are several choices that have varying advantages for the Finish Coat:

- DK 400 - Polyurethane SB (gloss) – high gloss
- DK 400WB - Polyurethane WB (gloss) – low VOC
- DK 400WB - Polyurethane WB (satin) – Low VOC
- DK 120 - Polyaspartic – quick dry
- DK 180 - Thick Build Polyaspartic – quick dry

The Top Coat should be screened with a 100 grit sanding disc on a rotational floor machine. This screening will ensure not only a good bond between coats, but also eliminate any debris or dust that may have settled as the primer coat was curing. Follow screening with vacuuming. Following vacuuming with a microfiber wipe with a solvent such as xylene or acetone. For specific directions on Finish Coat refer to the appropriate spec. sheet.

SACRIFICIAL COAT

A Sacrificial Coat is not required, but will add further protection to the finished product. The Sacrificial Coat may be applied at any step following a “stand alone” Primer Coat. SureFinish provides a protective sacrificial coat, as well as a measure of slip resistance, and is available in gloss and matte, as a simple mop on product.

SLIP RESISTANCE

Two recognized US agencies have issued directives on minimum coefficient of friction, OSHA (Occupational Safety and Health Administration) and Department of Justice through the ADA (Americans with Disabilities Act). The ADA is the more stringent of the two. The ADA directs that accessible walkways have a minimum coefficient of friction of 0.6. Ramps have been directed to be 0.8. The applicator assumes the responsibility to meet these standards. Areas that may become wet, oily, or greasy require special attention. Refer to spec. sheets on SureGrip (Additive) and its accompanying coefficient of friction table.

SUITABILITY SAMPLE

Because job site conditions and requirements can vary significantly, always prepare a sample on site. The sample should determine the product’s suitability for traffic and aesthetics. This is especially critical for areas of heavy traffic and/or custom coloration.

CLEAN-UP

Before Trans4loor Epoxy dries, clean spills and tools with a solvent such as xylene or acetone.

DISPOSAL

Contact your local government household hazardous waste coordinator for information on disposal of unused product.

LIMITATIONS

For use by trained professionals that have read the complete SDS.

- This product will have an “open time” once down on the floor for approximately 45 minutes to an hour at 65°F. This time where the material is workable will change with increases/decreases in temperature.
- Product is strictly for interior use, upon well-drained concrete slab with appropriate vapor barrier, subject to no hydrostatic pressure.
- When masking, use caution while taping to a floor that is not completely cured, especially at edges, as delamination may occur.
- Protect from metal wheel traffic and some furniture where point of contact may be damaging.
- Chemicals used in tire manufacturing may be detrimental to all sealers from vehicular parking.

WARRANTY

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufacturer’s or seller’s option. SureCrete LLC shall not be liable for cost of labor or direct and/or incidental consequential damages.

CAUTIONS

KEEP OUT OF REACH OF CHILDREN. Inhalation: Avoid prolonged breathing of airborne dust, particularly present during mixing. Use NIOSH approved respirator for nuisance if threshold limit values are unsafe. Skin Contact: Skin contact may cause irritation. Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. Eyes: Wear safety eye protection when applying. Contact with eyes may cause irritation. Flush eyes with water for 15 minutes. If symptoms persist, seek medical attention.

VOC REGULATORY COMPLIANCE

AIM	OTC	LADCO	CARB	SCAQMD	CANADA
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

TECHNICAL DATA	
Appearance (cured)	Gloss sheen
Water Resistance	Excellent, beads water
Mechanical Stability	Excellent
Light Stability	Yellows
Adhesion	400 psi (2758 kPa) (concrete failure)
Abrasion Resistance, Tabor	100 gm. load at 500 cycles = 31 mg loss
Compressive Strength	9000 psi (62053 kPa)
Solids	100%
Storage Stability	1 year
Appearance (wet)	Clear - Straw color
Odor	Epoxy
Application Temperature	50°F-90°F (10°C-32°C)
VOC Content	0
Pot Life	10-20 minutes