

OVERVIEW & FEATURES

Tread-Shield industrial epoxy coating is a two-component epoxy resin coating formulated with less than 2.8 lbs./gal. VOC (<340 grams/liter) while providing excellent adhesion, physical and chemical resistance properties. Tread-Shield provides unsurpassed protection for concrete, wood and metal surfaces and keeps these surfaces smooth, bright and more resistant to chemicals. Tread-Shield functions as a primer on concrete and is available in clear, standard and custom pigmented formulations.

Tread-Shield CLEAR can be used either as a coating or filled with marble chips or colored schemes or patterns.

Environmentally Friendly - Tread-Shield is formulated with less than 2.8 lbs./gal VOC, providing excellent protection for concrete, wood and metal surfaces without harming the environment.

Strong & Durable - The two component epoxy resin provides excellent abrasion and impact resistance and superior chemical resistance to a wide spectrum of chemicals.

100% Solids Content - Tread-Shield's high solids content yields increased dry film thickness. There's also no induction time and faster tack-free time for an attractive finish.

APPLICATION

Surface Preparation - All oil, grease, and chemicals should be removed by scraping or detergents prior to shot blasting or acid etching the floor. Repair all substrate deficiencies and replace all sealants prior to installing flooring system.

Expansion Joints - All expansion joints should be cured prior to applying Tread-Shield. Attempting to coat a wet joint compound will cause fish-eyeing in the urethane, requiring sanding and a second coat.

Priming - A suitable primer should be used before applying Tread-Shield. If a primer is not used, more porous substrates may cause outgassing and possible surface defects. Suitable primers include Tread-Shield Flex Primer, Tread-Shield Primer WB, and Tread-Shield VTP.

Product Application - The Tread-Shield epoxy should be applied at 16-20 mils. Tread-Shield should be applied with a notched squeegee. Smaller areas may be coated using 18" (457.2 mm) roller covers and roller pans. The notched squeegee should be approximately 36" (914.4 mm) long with 1/32" to 1/16" (.79 mm to 1.59 mm) notches at 1/4" to 1/2" (6.35 mm to 12.7 mm) intervals. Backrolling is typically done with 18" (5457.2 mm) short nap solvent-resistant roller covers. Over-rolling may cause bubbling or color separation.

Priming - A suitable primer should be used before applying this product. Without primer, porous substrates may cause outgassing and possible surface defects.

Top Coat - Tread-Shield Top Coat WB or Tread-Shield Top Coat VOC polyurethane top coats can be used for increased chemical resistance and UV stability.

Ventilation, Dewpoint & Humidity - Tread-Shield epoxy industrial coating is a solvent-based system. Color stability relies on the even flashing-off of the solvent system. Poor ventilation will delay the solvent flashing-off causing color separation and slow cure of the VOC. The building should have proper ventilation throughout. Humidity can be a problem when the foundation temperature is below the dewpoint (dewpoint can be checked in the field with a sling Psychrometer and Surface thermometer). When this occurs, a film of water will form on the coated surface thus slowing the flash-off of the solvents and inhibiting cure. This will result in poor color stability and cure of the epoxy.

Mixing Product - Mix only the material that can be applied within the working time limits at the actual field temperature.

1. Mix the pigmented portion (Part "A") of the Tread-Shield with a drill and jiffy mixer for 1 minute prior to adding the activator, Part "B".
2. Add Part "A" to Part "B" and mix for 3 minutes with the drill and jiffy mixer. The mix ratio of Tread-Shield is 2:1 by volume. While mixing, be careful to mix from the bottom and side for complete mixing.

Clean Up - Use Xylol

Floor cleaning - Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique before cleaning the entire surface.

PRECAUTIONS

- Use with adequate ventilation
- Skin or eye exposure or inhalation can result in serious medical problems
- Wear gloves or protective creams; if skin contact occurs, wash at the first opportunity with soap and water
- Avoid contact with eyes, skin and clothing; in the event of eye contact, immediately flush eyes with water and contact a physician
- Keep out of the reach of children
- For industrial use only
- Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure).
- It is best to let the floor remain dry for the full cure cycle.
- Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry.

Technical Data	Tread-Shield (Pigmented)	Tread-Shield (Clear)
Non-Volatile Content		
% by Weight	100	100
% by Volume	100	100
Viscosity @ 73°F (23°C) (Mixed)	1300-2300 cps	700-1000 cps
Recommended Film Thickness Wet	16-20 mils	16-20 mils
Pot Life @ 73°F (23°C)	30-50 minutes	20-30 minutes
Compressive Strength ASTM D 695	9,100 psi	11,200 psi
Hardness (ASTM D 3363)	80	81
Shelf Life	One year, unopened	One year, unopened
Flexural Strength ASTM D 790	5,400 psi	7,400 psi
(*Set Time @ 70°F (21°C))		
Tack Free	5-8 hours	6-8 hours
Recoat or Topcoat	8-12 hours	10-16 hours
Light Foot Traffic	12-14 hours	14-18 hours
Full Cure	2-7 days	2-7 days
Coverage	80-100 ft.2 (7.43-9.29 m ²)	80-100 ft.2 (7.43-9.29 m ²)
Packaging (Kit)	3 gallon (13.6 l) 15 gallon (68.2 l)	3 gallon (13.6 l) 15 gallon (68.2 l)

For specific recommendations and coverage rates, please contact your local Garland Representative or Garland Technical Service Department.

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Tests verified by independent laboratories. Actual roof performance specifications will vary depending on test speed and temperature. Data reflects samples randomly collected. ± 10% variation may be experienced. The above data supersedes all previously published information. Consult your local Garland Representative or the home office for more information.