

OVERVIEW & FEATURES

Tread-Shield VTP is a two component 100% solids epoxy seal coat that can help control moisture vapor emission rates up to 20 lb./24 hr/1000 ft², prior to application of epoxy flooring and traffic coating systems. This product is formulated for use in a broadcast system as a primer to combat existing vapor drive issues prior to installing epoxy mortars or other suitable coating systems.

APPLICATION

Product Storage – Store product at 65°F and 85°F for at least 48 hours prior to use.

Surface Preparation – Do not apply over Gypsum compounds or light weight concrete. The concrete must meet acceptable industry standards as defined in ACI committee 201 report “Guide to Durable Concrete”. A vapor emission test should be performed to test for vapor drive (<https://www.humboldtmg.com/vapor-emission-test-kit.html>). For moisture testing, at least one test shall be performed for each 1000 ft² of floor surface to be treated. All dirt, foreign contaminants, sealing compounds, oil, solvent, paint, wax, grease, residual adhesives, curing compounds, silicate penetrating compounds, salts, efflorescence, mold, mildew, laitance or any other foreign materials that can affect the adhesion must be removed before surface preparation to assure a trouble-free bond to the substrate. The most suitable surface preparation would be a shot blast to provide a suitable profile to a minimum CSP #3 per ICRI Guidelines. The concrete substrate shall be smooth to prevent irregularities in application thicknesses. All dynamic, moving joints and cracks must be honored through the entire flooring system applied and filled with an elastomeric material that is suited for the general conditions of use. Inadequate surface preparation can result in leaving contaminants resulting in pin holes, bubbles, fish eyes or other deficiencies that can cause disbonding or coating failure.

Product Mixing – Tread-Shield VTP product has a mix ratio of 9.25# part A to 4.15# part B. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We highly recommend that the kits not be broken down unless suitable weighing equipment is available. Mix each individual component before using. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. Avoid whipping air into the liquids. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix before applying to the concrete substrate. Improper mixing may result in product failure.

Product Application – Tread-Shield VTP can be applied by brush or roller. However, the material can also be applied by a suitable serrated squeegee and then back rolled as long as the appropriate thickness recommendations are maintained. When applying by serrated squeegee, back roll the material at a right angle to the direction of the squeegee application.

Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. Do not use any heating equipment that would produce carbon dioxide. When rolling out the product, it is best to roll out the product in one direction and then back roll the material in the opposite direction to make sure it is worked into the concrete well. If concrete conditions or over aggressive mixing causes air entrapment, then an air release roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating. When the mixed material is applied to the concrete surface, pin holes or voids may develop when air is displaced (outgassing). If voids or pin holes occur, re-application to remove them must be undertaken. Grind these areas and clean off residue; make sure the surface is dry and re-coat. The moisture vapor barrier must be applied to form a continuous monolithic void free application. Thinner applications than recommended may result in insufficient moisture vapor protection.

Because this material has a short pot life, it is beneficial in some applications to remove the material from the mixing pail by pouring the material onto the substrate and spreading it along the floor. Spreading out the material will allow the applicator more time to work with the material before it begins to cure.

Recoat or Topcoating - Tread-Shield or other suitable coating systems can be applied as an intermediate or top coat. Do not apply any coatings, overlays, or other surfacing before the material is properly set up. This is typically about 12-16 hours at 70°F. Colder temperatures will require more cure time for the product before recoating or topcoating can commence. Before recoating or topcoating, check for epoxy blushes (a whitish, greasy film, or deglossing.) If a blush is present, it can be removed by any standard detergent, cleaner prior to topcoating or recoating. Many epoxy coatings and urethanes as well as multiple coats of this product are compatible for use. Maximum recoat window for the moisture vapor coating is 48 hours.

Clean Up - Use xylol

Floor Cleaning - CAUTION! Some cleaners may affect the color of the floor installed. Test each cleaner in a small, area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

PRECAUTIONS

- Use with adequate ventilation.
- Skin or eye exposure or inhalation can result in serious medical problems.
- Avoid contact with eyes, skin and clothing.
- Workmen should wear gloves or protective creams; if skin contact occurs, wash at the first opportunity with soap and water.
- In the event of eye contact, immediately flush eyes with plenty of water. Call a physician.
- Keep out of the reach of children.
- For industrial use only.

Technical Data	Tread-Shield VTP
Solids	
by Weight	100% (+/- 1%)
by Volume	100% (+/- 1%)
Recommended Thickness	17 mils @ 94.4 sf/gal
Viscosity (mixed @ 73°F (23°C))	500-1,000 cps (typical)
Shelf Life	One year in unopened container
Adhesion (concrete failure, no delamination)	350 psi
*Set Time @ 70°F (21°C)	
Pot Life	28-38 minutes
Tack Free	6-10 hours
Recoat or Top Coat	12-16 hours
Full Cure	3-7 days
Hardness Shore D	75-80
VOC	0 g/l
Packaging (Kit)	3 gallon (13.6 l) 15 gallon (68.2 l)

*Time varies depending on air temperature and humidity.

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.

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