TerraFlex

Technical Data Sheet

Product Description

TerraFlex is designed to be used as a flexible basecoat for the **TerraChip®** System. It combines high elongation with excellent tear strength to provide long lasting service. It is used as the basecoat over properly prepared vinyl tile, ceramic tile, or wood. **TerraFlex** is also used over concrete to eliminate the transfer of substrate cracks and maintain a seamless flooring system.
TerraFlex is a two component 100% solids urethane-modified epoxy.

Features and Benefits

Adhesion: Provides excellent adhesion to concrete, ceramic tile, vinyl tile, and wood

Elongation: 120% elongation (40% at 32°F) provides crack-bridging; maintains the seamless nature of the TerraChip System

Thermal Cycle Protection: Elongation and strength combine to provide protection against cracking due to gradual temperature changes

100% Solids: Low odor makes it ideal for use in Pharmaceutical and Food & Beverage facilities

Sanitary: Can be applied as an integral cove base and wall coating. Seamless finish results in easy cleanup

Applications

Pharmaceutical Production and Storage Areas
Laboratories
Food and Beverage Processing Areas
Cafeterias and Kitchens
Garages
Hospitals and Health Care Facilities
Lobbies, Aisles, and Offices
Showrooms
Laundries
Airplane Hangars
Restrooms, Showers and Locker Rooms
Animal Holding Areas

Application Overview

Environment
Apply when air, surface, and material temperatures are between 65°F and 90°F. The surface temperature must be at least 5° above the dew point to prevent moisture condensation.

Substrate
The concrete must be structurally sound and free of oil, grease, and other contaminants. When applying directly to concrete, the concrete must first be prepared by shot blasting, scarifying or acid etching to create a surface profile equivalent to 40-60 grit sandpaper.

Mixing
Part "A" should be mechanically pre-mixed for 60 seconds before adding Part "B". After adding Parts "A" and "B" together, mix for 90 seconds. Do not hand mix.

Application
Immediately pour activated product on the substrate and, using a squeegee, pull out the material at the desired coverage rate.

Rolling
Using a 3/8" nap, non-shedding roller, roll the product in both directions to ensure even coverage.

TerraChip Applications
Apply **TerraFlex** at 150 square feet/gallon and broadcast chips within 20 minutes of application. 16 pounds of chips are required for 100 square feet. Remove the excess chips by scraping. Vacuum the surface. Apply **TerraThane** at 125-150 square feet/gallon.

Topping Applications
For details on crack treatment and the use of **TerraFlex** as an underlayment for heavy-duty toppings, refer to the **TerraRich®** Application Instructions.

Please refer to TerraChip Application Instructions or TerraRich Application Instructions for complete application details. Information here is summarized and is to be used only as a guideline.

Recommended Uses

- Base coat for TerraChip System
- Elastomeric coating for crack control
- Elastomeric membrane for heavy duty toppings

Product Limitations

Rising Temperatures
Concrete will outgas during periods of rising temperatures. To prevent bubbling, always apply when the application and cure temperatures will be constant or decreasing.

Cracks
Moving cracks in the substrate are likely to transfer to the coating unless treated properly.

Moisture
All concrete surfaces should be tested for moisture before applying a seamless coating. Water vapor transmission upwards through on-grade (or below grade) concrete slabs may result in system failure. If moisture emissions exceed 3 lbs./1000 sq. ft./24 hours, use of TerraPrime MM may be required prior to application of the coating system. Contact the manufacturer before application.

Safety

This product is intended to be installed by experienced professionals. Read the MSDS and product label for complete safety information before using. Avoid contact with all materials to prevent irritation. Use only with adequate ventilation.

Safety glasses, gloves, and protective clothing should be worn at all times while handling this product. Avoid exposure to eyes and skin as isocyanate resins and amine hardeners can cause mild to severe skin irritation.

Maintenance

Do not wash the floor within 5 days of installation. Exposure to water before the floor is completely cured may dull the finish. Damp mop as needed with a clean mop head and clean, warm water with a mild detergent or degreaser. Rinse thoroughly to avoid leaving residue. When using a new cleaner for the first time, test clean an inconspicuous area to ensure compatibility with the floor.

Storage

Store material in a cool, dry location away from flames. When stored properly, the shelf life will be a minimum of 1 year.

Warranty

American Industrial warrants its products to be free of defects in material and workmanship. This warranty specifically excludes the following: problems due to irregularities in the substrate, failures caused by moisture migration through the substrate, changes in color and gloss. Claims must be made within 12 months of installation of material.

Physical Properties

Components		2
Mix Ratio (A:B)		2:1
Solids		100%
Packaging	3 gallon kit	2 gal A/1 gal B
Coverage	(TerraChip)	150 sq. ft./gallon
Application Temperature		65°F-90°F
Viscosity (mixed)		600 cps
Pot Life (8 oz. @ 72°F)		40 minutes
Working Time (72°F)		45 minutes
Cure Time		16 hours (foot traffic) 16-24 hours (recoat)
Flash Point		Part A: >200°F Part B: >200°F
Shelf Life		12 months
USDA: Food and Beverage		Meets requirements.

Performance Properties

Adhesion (ASTM D-4541)	>250 psi (concrete fails)
Tensile Elongation (ASTM D-638)	120% @ 75°F 40% @ 32°F
Tensile Strength (ASTM D-638)	6000 psi
Hardness (ASTM D-2240)	51 Shore D
Abrasion Resistance (ASTM D-4060) cs-17 wheels, etc	
Maximum Service Temperature	180°F