

TerraChip® Technical Data Sheet

System Description

TerraChip[®] is a seamless flooring system that combines non-porous protection with architectural beauty. With several colors, types, and sizes of TerraChip decorative aggregates, TerraChip can be tailored to each customer's needs.

The **TerraChip** system uses 100% solids materials and incorporates the latest light stable technology. **TC BaseCoat** or **LV BaseCoat** is the epoxy matrix which holds the colored chips while providing excellent adhesion. Rapid cure of either BaseCoat is possible with 3 different curing speeds. Alternatively, **TerraFlex**, a urethane-modified epoxy, may be used as the basecoat for non-concrete subtrates. The vinyl-acrylic **TerraChip Aggregate**, available in ¼" and micro sizes, or the mica based **TerraChip Deco** aggregate provide the pattern while creating a laminate structure in the basecoat. **TerraThane**® provides the clear coat finish. Available in 4 versions, it provides superior gloss and color retention. When 2 clear coats are desired, **Sealer LS** is used as the first clear coat. Sealer LS is formulated with hydrogenated epoxy to provide enhanced uV stability for an epoxy coating. Both Sealer LS and TerraThane incorporate technology to prevent discoloration of the basecoat and aggregate. **TerraGrip** is a polymer aggregate that can be added to the finish coat when additional slip resistance is desired.

Features and Benefits

Aesthetic: Provides an attractive finish with endless design capabilities. Exhibits superior gloss and color stability

Sanitary: Seamless, non-porous finish results in easy cleanup

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

Durabke: Provides excellent resistance to stains and

mechanical wear

Chemical Resistant: Provides resistance to a variety of chemicals.

Applications

Schools & Universities
Showrooms
Hospitals and Health Care Facilities
Cafeterias and Kitchens
Garages
Restrooms, Showers & Lockerrooms
Lobbies, Aisles, and Offices

Pharmecuetical, Food & Beverage Plants

Application Overview

Environment

Apply when air, surface, and material temperatures are between 45°F and 100°F (Consult temperature guidelines for appropriate version of basecoat and topcoats)). The surface temperature must be at least 5° above the dew point to prevent moisture condensation.

Substrate

The substrate must be structurally sound and free of oil, grease, and other contaminants. Concrete must be prepared by shot blasting, scarifying or acid etching to create a surface profile equivalent to 40-60 grit sandpaper.

Application

The basecoat is applied to the substrate at a rate of 150 sf/gallon. The chip aggregate is then broadcast into the wet basecoat to rejection. After drying, the excess chips are scraped and vacuumed. Sealer LS is applied at 125-150 sf/gallon, and then a finish coat of TerraThane is applied at 250 sf/gallon. (2 clear coat system)

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

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

The technical data and suggestions presented here are believed to be reliable and accurate at the time of publication. American Industrial makes no warranty, expressed or implied, based on this literature. Published technical data and recommendations are subject to change without notice.

Vet Clinics

substrate, changes in color and gloss. Claims must be made within 12 months of installation of material.

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 per ASTM F1869, or concrete relative humidity exceeds 75% per ASTM F2170, 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 SDS 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 epoxy resins and 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.

Performance Properties

Adhesion >450 psi (concrete fails)

(ASTM D-4541)

Hardness 84 Shore D

(ASTM D-2240)

Abrasion Resistance 55 mgs.

(ASTM D-4060) cs-17 wheels, etc

Coefficient of Friction 0.60

(ASTM D-2047, 10 second slipmaster test on dry surface

with leather inserts)

Porosity 0.0

(NACE TM-01-74)

Flammability Self-extinguishing

(ASTM D-635)

Maximum Service Temperature 180°F

Chemical Resistance

Acetone 0-40%	II	Glycerine	I	Sugar		I
Alcohol, Isopropyl	I	Glucose	I	Sulfuric Acid (0-30%)		I
Beer	I	Hydrochloric Acid (37%)	II	Sulfuric Acid (50%)		III
Bleach (5%)	I	Hydraulic Fluid	I	Sulfuric Acid (98%)		NR
Blood	I	Hydrogen Peroxide (10%)	II	Tetrachloroethylene		III
Boric Acid	I	Jet Fuel	I	Toluene		II
Carbon Tetrachloride	II	Lactic Acid (30%)	II	1-1-1 Trichloroethane I		III
Calcium Hydroxide (50%)	I	Mineral Oils	I	Trisodium Phosphate		I
Chromic Acid (10%)	I	MEK	Ш	Urine	_	I
Citric Acid	I	Perchloroethylene	I	Vinegar		I
Deionized Water	I	Phosphoric Acid (40%)	II	Water		I
Detergents	I	Phosphoric Acid (80%)	NR	Xylene		II
Diesel Fuel	I	Propylene Glycol	Ш	-		
Ethylene Glycol	I	Salt Water	I	I	Prolonged contact	
Fats & Fatty Acid	I	Sodium Benzoate	I	II	Splash and spill exp	oosure
Formaldehyde (0-30%)	II	Sodium Carbonate	I	III	Caution	
Formic Acid	NR	Sodium Hydroxide (50%)	I	NR	Not Recommended	
Gasoline	I	Sodium Hypochlorite (15%)	II			

The technical data and suggestions presented here are believed to be reliable and accurate at the time of publication. American Industrial makes no warranty, expressed or implied, based on this literature. Published technical data and recommendations are subject to change without notice.