



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.

The **TerraChip** system features 100% solids materials and incorporates the latest light stable technology. **TerraChip Base** is the resin matrix which holds the colored chips. It provides excellent adhesion and rapid turnaround. Alternatively, **TerraFlex**, a urethane-modified epoxy, may be used for crack bridging or for non concrete substrates. 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. It is a 100% solids aliphatic polyurea with unsurpassed color and gloss retention. **Sealer LS** is used as a first clear coat when 2 clear coats are desired. **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 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

Long Lasting: Provides excellent resistance to mechanical wear and continual cleanup. Exhibits superior color and gloss stability

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

Vet Clinics

Pharmaceutical, Food & Beverage Plants

Application Overview

Environment

Apply when air, surface, and materials are between 60°F and 90°F. And relative humidity is below 80% for 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.

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

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.

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 through concrete slabs can result in system failure. If moisture emissions exceed 3 lbs./1000 sq. ft./24 hours, use of TerraPrime MM may be required. 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 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 (ASTM D-4541) >250 psi (concrete fails)

Hardness (ASTM D-2240) 84 Shore D

Abrasion Resistance (ASTM D-4060) 55 mgs. cs-17 wheels, etc

Coefficient of Friction (ASTM D-2047, 10 second slipmaster test on dry surface with leather inserts) 0.60

Porosity (NACE TM-01-74) 0.0

Flammability (ASTM D-635) Self-extinguishing

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	III
Calcium Hydroxide (50%)	I	Mineral Oils	I	Trisodium Phosphate	I
Chromic Acid (10%)	I	MEK	III	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	III		
Ethylene Glycol	I	Salt Water	I		
Fats & Fatty Acid	I	Sodium Benzoate	I	I	Prolonged contact
Formaldehyde (0-30%)	II	Sodium Carbonate	I	II	Splash and spill exposure
Formic Acid	NR	Sodium Hydroxide (50%)	I	III	Caution
Gasoline	I	Sodium Hypochlorite (15%)	II	NR	Not Recommended

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