

TerraQuartz[®]

Technical Data Sheet

System Description

TerraQuartz[®] is a seamless flooring system that incorporates new resin technology into a classic quartz floor. The blended colored aggregate provides limitless design capabilities, improves wear resistance, and creates a texture to improve slip resistance.

The **TerraQuartz** system features 100% solids materials and incorporates the latest light stable technology. **TerraQuartz Base** is the resin matrix which accepts the quartz aggregate. It provides excellent adhesion and rapid turnaround.. The colored **TerraQuartz Aggregate** provides the pattern while increasing the strength and wear resistance of the system. **Sealer LS** is the light stable sealer. It is formulated with hydrogenated epoxy to provide maximum uV stability for an epoxy coating. For best results, **TerraThane**® is used as a finish coat. TerraThane is an aliphatic polyurea with unsurpassed color and gloss retention. Both sealers incorporate technology to prevent discoloration of the basecoat and aggregate.

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

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

Schools & Universities

Correctional Facilities

Restrooms, Showers and Locker Rooms

Animal Holding Areas

Application Overview

Environment

Apply when air, surface, and materials 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 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 100 sf/gallon. The quartz aggregate is then broadcast into the wet basecoat to rejection (about 50 lbs./100 square feet). After curing, remove the excess quartz. Repeat the application of basecoat and follow with a second broadcast of quartz aggregate. Again, remove excess quartz. Sealer LS is applied at 85-100 sf/gallon to seal the aggregate. A finish coat of TerraThane is applied at 200-300 sf/gallon to achieve the desired texture.

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 substrates should be tested for moisture before applying a seamless coating. Water vapor transmission upwards through on-grade (or sub 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 TerraQuartz® 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 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	>250 psi (concrete fails)
(ASTM D-4541)	

Hardness 84 Shore D (ASTM D-2240)

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

Compressive Strength 13,300 psi (ASTM D-695)

Porosity 0.0

(NACE TM-01-74)

Flexural Strength 6,200 psi

(ASTM D-790)

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		e	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	Vinega	r	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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