



Product Data Sheet For: **PLEXIQUARTZ HIGH PERFORMANCE SEAMLESS EPOXY FLOORING SYSTEM**

DESCRIPTION

PlexiQuartz Broadcast Skid-Resistant System is aesthetically pleasing, 100% solids clear epoxy resin and colored aggregate flooring system, which is installed at a nominal thickness of 1/8 inch. The PlexiQuartz system is available in 15 standard solid colors and 18 standard color blends. The PlexiQuartz aggregates can be custom blended to create an infinite number of proprietary custom patterns. PlexiQuartz is extremely attractive, durable and chemical resistant. The inorganic naturally occurring quartz granules are color coated using state-of-the-art ceramic coating technology for lasting color stability. This attractive flooring system is ideal for most commercial, institutional, and light industrial installations where a durable, seamless, chemically resistant, and aesthetically appealing flooring system is required.

Typical Physical Properties

Tensile Strength, min ASTM C-307	2,600 psi
Tensile Strength, (Resin) min. ASTM D-638	6,000 psi
Compressive Strength, ASTM C-579 ASTM D-695	12,500 psi 17,500 psi
Resistance to Elevated Temperatures MIL-D-3134J	No slip or flow at required temperature range 155-165 °F
Bond Strength, min. ASTM D-4541	>400 psi
Impact Strength, Passing MIL D-3134	No Chipping, Cracking or Delaminating
Hardness (Resin) ASTM D-2240 Shore D	70 - 80
Hardness (Aggregate) MOH'S Mineral Scale	6.5 - 7.0
Abrasion Resistance ASTM D-4060, Taber Abrader C17 1000 gr load, 1000 cycles	0.12 gr
Water Absorption, max. ASTM D-570	0.02%
Flammability ASTM D-635	Self Extinguishing Bond to Concrete
Flexural Strength ASTM C 580 ASTM D 790	4,500 psi 10,000 psi
Antimicrobial Resistance ASTM G-21	Passes
Adhesion ACI 503R	450 psi 100% concrete failure

Advantages

- Available in standard solid colors and 18 patterns
- Custom patterns (infinite number of designs)
- Surface texture, smooth to aggressive
- Skid inhibiting for “can’t dry areas”
- Resistant to mold, mildew, and fungi (does not promote bacterial growth)
- Resistant to mechanical wear
- Resistant to chemical attack and etching
- Resistant to UV degradation

Chemical Resistance

The PlexiQuartz system, with the recommended finish coat, will resist spillage of and exposure to the following chemicals for a period of up to 7 days at 72°F.

- Dilute mineral acids including Hydrochloric (<30%), Phosphoric (<20%) and Sulfuric (<30%)
- Alkalis, including potassium hydroxide to 50% concentration
- Some dilute organic acids such as acetic (30%), formic, and citric
- Fats, oils, and sugars
- Mineral oils, diesel fuel, kerosene, and gasoline
- Some organic solvents, including aliphatic hydrocarbons

Note: Full chemical resistance is achieved after curing for 7 days.

Surface Preparation

Good surface preparation is essential to a satisfactory coating system. A method that will achieve a profile of at least CSP 3 as described by the International concrete Repair Institute is recommended. Although various methods are acceptable, captive shot blasting is the preferred means of achieving this profile by abrading the concrete and removing latent materials that impede adhesion.

Precautions

- An effective moisture barrier is required for substrates on or below grade.

- The substrate must be structurally sound, cleaned of any foreign matter that will inhibit adhesion, and dry.
- These products should be installed at a substrate temperature between 50°F and 85°F.
- Maximum service temperature is 170°F.
- System will follow the contour of the substrate. Ensure the substrate is smooth and all cracks and holes are repaired prior to installation.

Application

1. Prepare substrate properly in accordance with instructions above.
2. Install optional cove base as required.
3. Apply primer coat of epoxy resin.
4. Broadcast PlexiQuartz aggregate, by hand or by mechanical blower, into the wet receiving coat of epoxy making sure the entire floor is covered to saturation with aggregate (dry appearance).
5. Allow curing, usually overnight, and thoroughly vacuum off the excess aggregate.
6. Repeat steps 3, 4, and 5 to ensure 1/8” thickness. Repeat for a third time to yield 3/16” thickness.
7. Apply clear grout coat by squeegee with light backroll with a tight nap roller. Allow to cure 8 – 10 hours.
8. Apply clear finish. Additional finish coats may be applied depending upon smoothness of surface desired.

Cleaning and Maintenance

Do not expose PlexiQuartz system to any chemicals until the full curing time of 7 days has passed. Regular cleaning and maintenance will prolong the life of all polymer-flooring systems, enhance appearance and reduce any tendency to retain dirt.

Safety

Safe storage, handling, and use dictate that adequate health and safety precautions are observed with this product. User is specifically directed to consult the current Material Safety Data Sheet for this product as well as precautions contained on product labeling.

Notice: The technical data contained herein are true and accurate to the best of our knowledge. All products are offered and sold subject to Plexi-Chemie Standard Conditions of Sale. Published technical data and instructions are subject to change without prior notice.