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Product Data Sheet For:

PLEXI*QUARTZ*

High Performance Seamless Epoxy Flooring System

Description:
Plexi*Quartz* 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 1/16th, 3/32, and 1/8th inch. The Plexi*Quartz* system is available in 15 standard solid colors and 18 standard color blends. The Plexi*Quartz* aggregates can be custom blended to create an infinite number of proprietary custom patterns. Plexi*Quartz* 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.

Areas of Use:
- Pharmaceutical plants
- Showers/locker rooms/restrooms
- Labs/clean rooms/bio-research
- Animal care facilities
- Operating rooms
- Concession stands/commercial kitchens

Typical 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) No seams where germs can hide
- Resistant to mechanical wear
- Resistant to chemical attack and etching
- Resistant to UV degradation
- Plexi*Quartz* is available with Bio-inhibitor antimicrobial. This treatment will provide the floor with long-term protection against a broad spectrum of bacterial and fungal attack. It is formulated into the flooring system from the basecoat up through the topcoat.

Limitations:
Do not apply in temperatures less than 50°F or greater than 95°F (Material cures slower at cooler temperatures and working time will be substantially reduced at higher temperatures). Both components should be stored in a dry place at temperatures between 65°F and 80°F. Do not apply to slabs on grade unless a heavy un-ruptured vapor barrier has been installed under the slab. Do not thin. Substrate temperature must be at least 5°F above the dew point.

Chemical Resistance:
The Plexi*Quartz* 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, Phosphoric and Sulfuric
- Dilute alkalis, including potassium hydroxide
- Fats, oils, and sugars
- Some organic solvents, including aliphatic hydrocarbons

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

Surface Preparation (Concrete):
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 Plexi*Quartz* 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” double broadcast system. 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 (Plexi*Crest* P) as final topcoat. Additional finish coats may be applied depending upon smoothness of surface desired.

Cleaning and Maintenance:

Do not expose Plexi*Quartz* 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 Safety Data Sheet for this product as well as precautions contained on product labeling.

Typical Physical Properties:

Tensile Strength, min. ASTM C-307	2,600 psi
Tensile Strength, (Resin) min. ASTM D-638	4,000 psi
Compressive Strength, ASTM C-579 ASTM D-695	14,500 psi 17,500 psi
Resistance to Elevated Temperatures MIL-D-3134	No slip or flow at required temperature range 155-165 F
Bond Strength, min. ASTM D-4541	>400 psi
Hardness (Resin) ASTM D-2240 Shore D	80-90
Hardness (Aggregate) MOH'S Mineral Scale	6.5-7.0
Abrasion Resistance ASTM D-4060, Taber Abrader C17 1000 gr load, 1000 cycles	<.003 gr
Coefficient of Friction ASTM D-2047	Standard: .60 Ramp/Incline:.80 (Passes ADA Recommendations)
Water Absorption, max. ASTM C-413	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	> 400 psi 100% concrete failure
VOC Content 40 CFR 59, Subpart D	VOC = 0g/L
Thermal Shock Resistant ASTM C-884	Passes
Impact Resistance ASTM D-2794	>160 in. lbs. No Chipping, Cracking or Delaminating; Not more than $1/6^{th}$ of an inch permanent indentation
Coefficient of Thermal Expansion ASTM C-531	2.0×10^{-6}