606-6 Lane Avenue North
Jacksonville, FL 32254
Ph: (904) 693-8800 Fax: (904) 693-8700
www.plexi-chemie.com

Product Data Sheet For:

PLEXI*QUARTZ* CRI

High Performance
Troweled & Broadcast

(Commercial, Restaurant, Institutional)

Description:

Plexi*Quartz* CRI Troweled & Broadcast System is aesthetically pleasing, 100% solids clear epoxy resin and colored aggregate flooring system which is installed by troweling a nominal thickness of 3/16th to a 1/4 inch giving the base superior impact resistance and allowing the Plexi*Quartz* CRI to be applied over rough substrates. The Plexi*Quartz* CRI system is available in 15 standard solid colors and 18 standard color blends. The Plexi*Quartz* CRI aggregates can be custom blended to create an infinite number of proprietary custom patters. Plexi*Quartz* CRI 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 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
- Plex*Quartz* CRI 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.

Chemical Resistance:

The Plexi*Quartz* CRI 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:

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.

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. Trowel a 1/8th inch Plexi*Quartz* CRI base by hand or power trowel.
5. Sand the base, then apply a wet coat of epoxy and broadcast base to make sure that the entire floor is covered by the quartz aggregate.
6. Allow curing, usually overnight, and thoroughly vacuum off the excess aggregate.
7. Repeat steps 3, 4, and 5 to ensure 1/8" thickness. Repeat for a third time to yield 3/16" to a 1//4" thickness.
8. Apply clear grout coat by squeegee with light backroll with a tight nap roller. Allow to cure 8 – 10 hours.
9. Apply clear finish. Additional finish coats may be applied depending upon smoothness of surface desired.

Cleaning and Maintenance:
Do not expose Plexi*Quartz* CRI 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	ASTM C-307	2,600 psi
Tensile Strength, (Resin)	ASTM D-638	6,000 psi
Compressive Strength	ASTM C-579 ASTM D-695	12,500 psi 17,500 psi
Heat Resistance Limitation		No slip or flow at required temperature range 155°-200 °F
Impact Resistance, Passing	ASTM D-2794	>160 in. lbs. No Chipping, Cracking or Delaminating; Not more than $1/6^{th}$ of an inch permanent indentation
Hardness (Resin)	ASTM D-2240 Shore D	85 - 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
Bond Strength to Concrete	ASTM D-4541	>400 psi substrate fails
Water Absorption	ASTM D-570	0.02%
Flammability	ASTM E-648	Class 1
Flexural Strength	ASTM C-580	4,500 psi
Flexural Modulus of Elasticity	ASTM C-580	2.0×10^6
Antimicrobial Resistance	ASTM G-21	Passes
Adhesion	ACI 503R	450 psi 100% concrete failure
Indentation	MIL D-3134	0.025 max
Coefficient of Friction (Dry)	ASTM F-1679	Standard Texture >1.0 Medium Texture 0.96
Slip Resistant Index (Wet)	ASTM F-1679	Standard Texture >1.0 Medium Texture 0.93
VOC Content	40 CFR 59, Subpart D	Less than 50 grams per liter
Coefficient of Thermal Expansion	ASTM C-531	2.2×10^{-6}
Cure Rate	@ 77°F/25°C	12 hours for foot traffic 24 hours for normal operations