



Custom Linings® PQFS Poly-Quartz Floor System Poly-Epoxy-Quartz-Topcoat

DESCRIPTION

Custom Linings® Poly-Quartz Floor System (PQFS) is a liquid applied, chemically cured system that utilizes our Poly-Epoxy Primer 21, broadcast quartz or granite aggregate/crystals and 2 coats of aliphatic urethane clearcoat. Custom Linings PQFS is durable, chemical resistant, abrasion resistant and will not soften or become brittle in extreme heat or cold. This system is suitable for use in a wide range of applications.

FEATURES

Seamless waterproof membrane
USDA approved
Abrasion resistant
Excellent Adhesion

Chemical Resistant
UV Resistant
Impervious to water

TYPICAL USES

Horizontal concrete floors and slabs in:
Power Plants
Aircraft Hangers
Mining Facilities

Warehouse Floors
Water treatment Plants
Equipment Maintenance areas

COLORS

Unlimited based on blending combinations of Quartz and Granite

SURFACE PREPARATION

Floors and slabs should be structurally sound and fully cured. Test floors for vapor drive if required using ASTM D-4263.

Repair concrete using Poly-Epoxy 21 (blended with floor aggregate) or with Poly-caulk 80. PQFS can crack if applied over an elastomeric joint sealant.

Warranties are issued only on floors that are mechanically profiled (ie. shotblasting). Acid etching is not recommended. Remove all curing and parting compounds and existing floor coatings or surface hardeners.

A test patch (4ft X 4ft) should be used to ensure proper adhesion.

Prior to recoating an existing coating, sand, grind or use priming material 21 to ensure proper adhesion.

MIXING and POTLIFE

Poly-epoxy-used for primer and aggregate bonding: Poly-epoxy 21 has a limited pot life of 20-30 minutes at normal temperatures (75 F [24 C] at 50% relative humidity).

Aggregate-mix colors and prepare prior to starting job.
Topcoats: 1110 or 100

Staingard 1110 industrial topcoat-two component-two coats required.

Polyglaze 100 commercial topcoat-single component-one or two coats as required.

application to be made 6-10 hours after Poly-Epoxy/aggregate stage is completed.

Do not hand mix. Mix with a Jiffy Mixer and electric drill at a very low speed for 3 to 5 minutes until a homogenous mixture is achieved on each material step prior to application. Keep the blades submerged in the coating to avoid introducing air bubbles.

Atmospheric and floor temperatures must be between 60 F and 85 F during application.

APPLICATION

Phase 1: Check area of application to ensure that it conforms to the substrate requirements as stated in the surface preparation section. Mix Poly-Epoxy 21 according to specifications. 21 will serve as a primer and bonding agent for the aggregate. Apply 21 to the floor using a squeegee at a rate of 1 gallon to every 50-100 square ft. Apply 1-3 gallons of 21 per session, then back roll with a phenolic core roller to spread evenly. After back rolling broadcast aggregate at a rate of 5 gallons or 50 lbs per 100 square feet, until all aggregate showing is dry with no wet spots. Allow 21 with aggregate to dry for 6-8 hours.

Phase 2: When 21 and aggregate is completely dry and solid, lightly sweep or vacuum loose aggregate from surface. Save for future use.

Phase 3: Apply Custom Linings Topcoat. Apply 1110 to the substrate at a rate of 1/2 gallon/100 sq. ft. or Polyglaze at the rate of 1 gallon per 100 sq. ft. For best results use a squeegee or phenolic core roller. 1110 takes 8 hours to dry and 100 takes 10-18 hours to become tack free.

Phase 4: Apply a second coat of Custom Linings Topcoat per specifications.

Phase 5 (Optional): For additional traction on your PQFS application, you may broadcast part of the removed loose aggregate from phase 2, into the wet topcoat. Backroll to encapsulate and distribute the aggregate immediately after the first coat has dried. Or for greater ease of cleaning add a third topcoat.

At 70 F and 50% relative humidity allow 72 hours of cure time before permitting heavy traffic on the finished system. Poly-Quartz Floor System will cure completely in 7 days.

LIMITATIONS

The following conditions must not be coated with the Poly-Quartz Floor System: below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite, lightweight concrete, asphalt surfaces, asphalt overlays.

Chained or studded tires may cause accelerated wear on flooring surfaces and is not recommended.

Uncured materials are sensitive to heat and moisture.

Poly-Quartz Floor System should not be subjected to rising water tables or hydrostatic pressure on slab-on-grade applied. Concrete must exhibit 300-psi minimum strength. Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles, and shall be without ridges, projections.

A continuous coating application should ensure a floor with no lines or streaks.

The substrate must be structurally sound and sloped for proper drainage.

Do not subject to continuous water immersion.

Do not use where moisture can reach the underside of the coating, or a vapor barrier may be required.

Field visits by Custom Linings personnel are for the purpose of making technical recommendations only and are not to supervise or provide quality control on the job site.

WARNING

The products in this system contain Isocyanates and Solvents.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Custom Linings representative or visit our website for current technical data and instructions.

SAFETY PRECAUTIONS

This product is for industrial use only by professional applicators and is not intended or suitable for use in or around a household or residential property. Keep away from children and household items. This material contains polyisocyanates. Vapors and spray mist are harmful. Improper handling and use may be hazardous. At all times safety precautions must be strictly followed during storage, handling and application.

WARNING

Individuals with chronic respiratory problems or prior respiratory reactions to such materials should not be exposed to vapors. All personnel entering the application area, including the applicator must wear properly fitted, NIOSH/MSHA approved, fresh air positive pressure air respirators with a full face piece or an air supplied hood.

Keep the material away from sparks, flash and open flames. Containers, even those that have been emptied, may contain dangerous and explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

LIMITED WARRANTY

Custom Linings warrants its products to be free of manufacturing defects and that they will meet Custom Linings current published physical properties. Custom Linings warrants that its products, when properly installed by a licensed applicator according to Custom Linings guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of three (3) years. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Custom Linings of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Custom Linings shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Custom Linings shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Custom Linings reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Custom Linings makes no claim that these tests or any other tests, accurately represent all environments.