

DESCRIPTION

PolySpec® LUX is a trowel applied, terrazzo type, decorative decking system, which consists of a 100% solids, two component epoxy resin binder and properly graded marble aggregate. This system is finished with clear catalyst cured epoxy resin coats. PolySpec® LUX does not require the use of grinding equipment.

The system meets the requirements listed on the Qualified Products List for MIL-D-24613, Type I, Class 3 and has a minimum fire rating of "Fire Retardant" when tested under this specification. The floor is installed 3/16" or 1/4" or to any greater thickness specified, with an average weight of 2.0 lbs. per square foot at 3/16".

TYPICAL APPLICATION

Table with 2 columns: Application Layer and Thickness/Quantity. Rows include Primer, Trowel Coat, 1st Seal Coat, 2nd Seal Coat, and Top Coat.

PERFORMANCE DATA

Compressive Strength (ASTM C-579) 8,940 psi
Adhesive Strength (MIL-D-24613).....365 psi
Tensile Strength (ASTM C-190).....1,710 psi
Impact Resistance (MIL D-24613)..... .0006 No Chipping, cracking or delamination
Indentation0002" (0.69%)
Water Absorption (MIL D-24613)Nil- When epoxy finish coats are properly applied and the marble chips are completely sealed.
Oil Absorption20%
Electrical Resistivity (NFPA Bulletin #99)..... Di-electric
Fire Resistance (MIL-D-24613)Fire retardant
Resistance to Elevated Temperatures (MIL-D-24613) No flow, no slip, no softening
Non-Slip PropertiesWill vary depending on surface finish.
Typical surface texture should yield
These minimum resistance factors:

Table with 4 columns: Friction Type, Surface, Dry, Wet, Oily. Rows include Static Friction and Sliding Friction for Leather and Rubber.

STORAGE & INSTALLATION

Storage Environment Dry area, 65-80°F
Application Temperature, ambient 50-85°F
Application Temperature, substrate Minimum 5°F above dew point
Service Temperature Maximum 150°F
Shelf Life 12 months
Pot Life, @ 77°F.....30 minutes
Foot Traffic, @ 77°F..... 12-16 hours
Full Service, @ 77°F36 hours

PolySpec® LUX
TECHNICAL DATA SHEET
Epoxy Terrazzo Floor

BENEFITS

- Decorative, terrazzo - like finish
Fast installation turnaround
Fire retardant
Completely seamless and water resistant
Extremely tough, durable system

RECOMMENDED USES

- Galleys
Pantries
Sculleries
Toilet and shower areas
Corridors
Offices

STANDARD COLORS

Please refer to the PolySpec Decorative Marble Color Chart

GENERIC DESCRIPTION

Epoxy "Terrazzo" Decking System

PACKAGING / COVERAGE

Primer @ 6 mils:
700/710 1-Gallon Unit / 250 sq. ft
Trowel Coat @ 1/4" thickness:
LUX Kit 6-Gallon Unit / 25 sq. ft.
1st Seal Coat @ 20 mils:
700/710 1-Gallon Unit / 80 sq. ft.
2nd Seal Coat @ 10 mils:
700/710 1-Gallon Unit / 160 sq. ft.
Top Coat @ 4-5 mils:
TuffRez 236 1-Gallon Unit / 350 sq. ft.



Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65°F to 80°F prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

CONSIDERATIONS & LIMITATIONS

1. Floors should be sloped to drain to prevent standing water or chemicals. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard.
2. Do not thin with solvents unless advised to do so by PolySpec.
3. Confirm product performance in specific chemical environment prior to use.
4. Prepare substrate according to "Surface Preparation" portion of this document.
5. Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
6. For industrial/commercial use. Installation by trained personnel only.

SURFACE PREPARATION

Steel: For steel surfaces, a "Near White Metal" ultra high-pressure wash or abrasive blast with anchor profile of 2–4 mils in accordance with Steel Structures Painting Council Specification SP-10 or NACE No. 2 is required.

Refer to PolySpec Surface Preparation Guidelines for more details.

INSTALLATION STEPS

1. **Primer Coat:** Mix 700/710 thoroughly for 1–2 minutes with a Jiffy type mixer, and scrape the sides and bottom of the can to insure complete mixing. Apply evenly to the deck with a brush, squeegee or short nap roller. Avoid puddles. Body coat is applied while primer coat is wet or tacky. Additionally it is acceptable to apply body coat over cured primer coat if sand is broadcast prior to full cure.

2. **LUX Trowel Coat:** Apply PolySpec® LUX directly over wet primer coat at a minimum thickness of 1/8". Pre-mix aggregates before mixing with catalyzed resin. Pour mixed 700/710 into the aggregate mix and blend thoroughly. Immediately spread the mix into the wet area of the primed floor. Scream the material to its proper thickness and then trowel the mix tightly to the deck using standard cement finishing tools. Use low level lighting to help avoid trowel marks. Allow material to cure 10-12 hours before sealing. Knock off any burrs with the edge of a steel trowel. Sweep the deck clean.

3. **Sealing:** Two or three coats are required to achieve desired finish. Workmen should wrap shoes in polyethylene, masking tape or other suitable covering to protect the surface. Mix 700/710 together making sure to stir thoroughly and to scrape the sides and bottom of the container to insure proper mixing. Pour from the mixing container at once to prolong working time. Apply by brush to base, corners, around pipes and other hard to reach areas. For walking surfaces and other accessible flat areas, apply with a red or white rubber squeegee. Take care not to leave ridges, lap marks or drops on the surface. **DO NOT OVER SEAL.** A properly sealed surface has all voids filled with sealer uniformly. Allow sealer to cure long enough to walk on, usually 12 to 14 hours depending on the temperature. All epoxy coatings cure faster in warm weather and slower in cold weather.

Apply second coat using brush and squeegee as in application of the first coat. If all voids are not filled in, a third coat may be necessary. After applying the final coat, back-roll the surface with a short nap roller (1/8") to eliminate any squeegee marks and to give an even texture.

Allow at least 16 hours cure time at 75°F (24°C) before opening the area to limited traffic. Allow to cure an additional 12 hours before opening the areas to full traffic. Avoid contact with water to the surface for 36 hours depending on the temperature. **CAUTION:** Contact with water will cause whitish, cloudy spots if the epoxy is not fully cured.

4. **Top Coat:** The Top Coat is a three-component material. Using a Jiffy mixer blade and a 1/4-inch variable speed drill, mix part A with part B. Mix for two minutes at high speed. Then add Part C and mix for one minute. Spread Topcoat evenly onto the deck at a rate of 350 square feet per gallon using a short nap roller. It is important to remove any loose hair from the roller before the installation. Make sure to roll the material evenly and **DO NOT** go back over an area that has been down for more than a couple of minutes. (This may reduce the gloss level in that area) Do not install the Top Coat at more than 5 mils, the material will become cloudy and physical properties as well as cure time will be effected. Material will go down milky white but will become clear as it cures.

Note: Allow 12-16 hours cure time at 75°F (24°C) before opening to light foot traffic. Open to full service in 24 hours. Ultimate cure is 72 hours. Cure times are based on 75°F (24°C) and 50% relative humidity. Additional deck protection can be provided through the final cure by covering the deck surface with fire-rated kraft paper. This will prevent premature scratching of the deck surface.

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