

Hi-Tek Polymers 201T-Poxy Epoxy Terrazzo Floor

**Description:** Hi-Tek Polymers 201T-Poxy Epoxy Terrazzo Floor is a decorative thin-set epoxy system of 1/4" (6,3mm) to 3/8 "(MM) which meets all the standards set by the NTMA (National Terrazzo and Mosaic Association and the TTMAC (Terrazzo, Tile and Marble Association of Canada). It is a thin set epoxy resin system incorporating marble, granite, glass, Mother of Pearl and/or other aggregates to create a terrazzo floor. It can also form an integral, sanitary coved base. The use of terrazzo dividing strips provides intended design requirements in an epoxy terrazzo system. 201T-Poxy Epoxy Terrazzo Flooring System is a two part 100% solid matrix consisting of a 5:1 ratio, Part A Resin to a Part B Hardener. When mixed, T-Poxy offers outstanding durability and provides a low life cycle costs relative to other decorative flooring systems. The finished surface is easy to maintain, virtually odor free, chemical resistant and does not support bacterial growth.

<b>Advantages:</b> Advantages include:
A. Provide seamless decorative flooring including an integral base.
B. Provide a light-weight system.
C. Provide unlimited color and design possibilities.
D. Cost effective relative to design and color selection
E. Provides Quick curing time for fast project turnaround
F. Provides Light Weight System compared to conventional cement terrazzo: suitable for multi-story buildings, elevator cabs and vertical applications.
G. Is Extremely durable and provides lowest life cycle cost available for decorative flooring
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H. Provides properties of Chemical and high traffic wear resistance
I. Is Environmentally friendly, zero VOC content
I. Resists bacterial and fungal growth

**Coverage:**

**Concrete Substrate Preparation:**

1. Concrete slab shall have an efficient moisture/vapor barrier (suggested minimum: 15 mils thickness = .4 mm) directly under the concrete slab.
2. Allow substrate to cure a minimum of 28 days.
3. Sub-floor should be level (maximum variation not to exceed 1/4" in 10 feet = 6.4 mm in 3.1 m).
4. Test concrete substrate to determine acceptable moisture levels prior to installation. Testing should be conducted according to ASTM F2170 (determining relative humidity in concrete slabs using in situ probes).
5. Concrete surface shall be prepared mechanically by shot blasting. Surface preparation results should achieve a CSP3-CSP5 profile according to ICRI Guideline No. 03732.
6. Surface to receive terrazzo should have a steel trowel finish.
7. Substrate should not be treated with a curing agent as this may prevent bonding. If curing agent present, surface must be shot blasted to remove all contaminants from the floor.

**Installation Instructions:**

**A. Mixing**

Set divider strips in accordance with architectural specifications. Divider strips shall be permanently bonded to substrate utilizing 100% solid epoxy resin as suggested by 201T-Poxy System. Priming the substrate with Hi-Tek Terrazzo Primer is recommended. Allow to set for a minimum of 30 minutes before applying 201 T-Poxy Terrazzo Epoxy Matrix. Mix Matrix Part A Resin and Part B Hardener at a ratio of 5:1 by volume for 3 minutes; Add the specified aggregates.

**APPLICATION:**

<p>A. General: Apply each component of epoxy matrix terrazzo flooring system according to <b>Hi-Tek Polymers'</b> manufacturer's directions to produce a uniform monolithic flooring surface of thickness indicated.</p>
<p>B. Bond Coat: Apply epoxy bond coat over prepared substrate at manufacturer's recommended spreading rate.</p>
<p>C. Divider Strips: Set divider strips as indicated on plans. Strips shall be set in a full bed of epoxy adhesive and allowed to cure before proceeding with the work.</p>
<p>D. Body Coat: Over bond coat surface trowel apply epoxy matrix terrazzo to thickness of _____. (Note to Specifier: Epoxy matrix terrazzo is typically applied in either 1/4" or 3/8" thickness. Specification of 3/8" thickness provides floor which helps fair off undulations in concrete surfaces). Seed the surface with additional aggregate of the same blend as the trowel applied mortar. Work the aggregate into the surface to an even aggregate chip dispersion. Compact the matrix into a tight even compound.</p>
<p>E. Grinding: Grind floor using terrazzo grinding machines, mounting progressively finer grit stones to achieve flat surface with uniform exposure of marble chips.</p>
<p>F. Grouting and Finish Grind: Grout floor with epoxy resin and finish grind to remove grout.</p>
<p>G. Sealing Coats: Apply sealing coats of type recommended by manufacturer to produce finish matching approved samples. Finished floor shall be _____ thick (Note to specifier: Indicate desired thickness).</p>
<p><b>3.04CURING, PROTECTION AND CLEANING</b></p>
<p>A. Cure epoxy matrix terrazzo flooring materials according to manufacturer's directions, taking care to prevent contamination during application stages and before completing curing process. Close application area for a minimum of 24 hours.</p>

Terrazzo Floor Thickness Approximate Coverage per Blended Gallon

1/4” Thickness 11-13 sqft

3/8” Thickness 8-10 sqft

Terrazzo Floor Thickness Approximate Coverage per 3.8 Blended Liters

6.4 mm Thickness 3.4 - 4 sqm

9.5 mm Thickness 2.5 - 3.0 sqm

Cure Time

18-24 Hours prior to grinding.

**Technical Data:** Hi-Tek Polymers 201T-Poxy Epoxy Terrazzo Floor

1. Hardness: Shore D Durometer, Hardness of 60-85 when tested in accordance with ASTM D 2240.
2. Tensile Elongation: 5 percent when tested in accordance with ASTM D 638, test rate 0.2.
3. Flexural Strength: When tested in accordance with ASTM D 790:
a. Flexural Yield Strength: 4,000 psi minimum.
b. Tangent Modulus of Elasticity: $2.3 \times 10^3$ psi minimum.
4. Fading Resistance: No discoloration of physical changes when tested in accordance with ASTM E 188, method A, 48 hours.
5. Chemical Resistance: No effects when tested in accordance with Federal Test Method Standard 406, Method 7011, immersion for seven days.
7. Indentation: No indentation when tested in accordance with MIL-D-313F, Section 4.74, using a 4 inch x 6 inch x 1/4 inch ground finished epoxy terrazzo specimen.

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8. Bond Strength: 300 psi tensile strength when tested in accordance with Field Test Method of the ACI Committee No. 403, Bulletin Title No. 59-43.
9. Tensile Strength: 3,000 psi when tested in accordance with ASTM D 638, test rate 0.2.
10. Compressive Strength: 10,000 psi when tested in accordance ASTM D 695, specimen b cylinder.
11. Linear Shrinkage: .001 inches per inch maximum when tested in accordance with ERF-64.
12. Abrasive Resistance: 0.1 grams loss of epoxy resin per 5 gallons of silica sand when tested in accordance with ASTM D 968.
13. Flammability: Self-extinguishing, extent of burning 0.25 inches maximum when tested in accordance with ASTM D 635.

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