DESCRIPTION

Surface Epoxy Terrazzo supplied and installed by Dancer Concrete Design is a nominal ⅜” mixture of stone, glass, and other aggregates with an epoxy binder matrix.

<https://dancerconcrete.com/surface-terrazzo/>

**Durability.** Longest lasting and lowest maintenance floor available.

**Design.**  Unlimited aggregates and color combinations. Ability to add branded logos.

**Investment.** Distinguish your space with terrazzo flooring.

**CAST.** Ability to cast stairs, panels, and architectural products that match your design choices.

**Additional Options**

* Exotic Blends. Upgrade your space with glass, mirror, and mother-of-pearl.
* Strip Layout. Zinc and brass options available.
* Embedded Logos. Create your brand’s legacy.
* Rubberize Membranes. For multi-story installations.

LIMITATIONS: New concrete will be poured with moisture reduction admixture and/or relative humidity readings below 75% measured by the Wagner RH meter. Not for use in areas subject to hot tire or plastic wheeled traffic.

QUICK SPEC

SURFACE EPOXY TERRAZZO, DANCER CONCRETE DESIGN

Samples and color blending options provided by Dancer Concrete Design.

Contact: Nick Dancer, 260-415-1951

Dancer Concrete Design offers AIA Accredited Courses for Polished Concrete, Epoxy Coatings, and Terrazzo Flooring in your office or ours. <https://dancerconcrete.com/continuing-education/>

Please contact us for budget pricing, samples, or design considerations.

Nick Dancer. [nickdancer@dancerconcrete.com](mailto:nickdancer@dancerconcrete.com) c. 260-415-1951.

PART 1 – GENERAL

1.1    SUMMARY

1. Section includes products and procedure for an epoxy terrazzo floor topping for designated area as specified herein as indicated on drawings.

1.2    SUBMITTALS

1. Product Data: Manufacturer’s technical literature for each product indicated, specified, or required.
2. Samples: For each type of exposure, finish, or color. Sample size 6” x 6”.

1.3    QUALITY ASSURANCE

1. Qualifications: Company experienced in performing work similar in design, products, and extent to scope of this project; with a record of successful in-service performance; and with sufficient production capability, facilities, and personnel to produce specified work.
2. Manufacturer Qualification: Approved by the manufacturer of epoxy terrazzo products.

1.4    FIELD CONDITIONS

1. Pre installation Conference: The General Contractor shall conduct a conference at the project site before Dancer Concrete Design begins installation.
2. The General Contractor shall invite Dancer Concrete Design, the Architect and representatives of the Owner.
3. Review methods and procedures related to terrazzo including, but not limited to, the following:
4. Inspect and discuss condition of substrate and other preparatory work performed by other trades.
5. Review and finalize construction schedule and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
6. Review terrazzo mixes and patterns.
7. Coordination with the work of other installers.

1.5    ACTION SUBMITTALS

1. Product Data: Dancer Concrete Design shall submit Product Data for each type of product required for installation including:
2. Strip materials.
3. Sealer.
4. Shop Drawings: Dancer Concrete Design shall prepare and submit Shop Drawings that include plans, elevations, sections, component details and attachments to other work. Include terrazzo installation requirements. Show layout of the following:

Specifier’s Note: Retain only those items which apply to Project in the following listing.

1. Divider strips.
2. Expansion joint strips.
3. Accessory strips.
4. Abrasive strips.
5. Stair treads, risers and landings.
6. Terrazzo patterns.

1.6    PROJECT CONDITIONS

1. Maintain the room and floor temperature at 55F, or above for a period extending from 72 hours before, during and after floor installation. Concrete to receive surfacing shall have cured for at least 28 days and be free of all curing compounds.
2. Pre-job meeting between General Contractor, Architect, and Dancer Concrete Design shall be held to discuss concrete substrate, location of joints and/or saw cuts to minimize subfloor cracking and locations of control joints and strips in terrazzo surface.
3. Acceptable Substrates
4. Level tolerance: Concrete subfloor shall be level with a maximum variation from level of ¼” in 10 feet non-cumulative. Any irregularity of the surface requiring patching and/or leveling shall be done using material approved by Dancer Concrete Design.
5. Concrete floor shall receive a light broom brush finish.
6. No curing agents are to be used in areas to receive terrazzo.
7. Concrete slab shall have an efficient puncture-resistant, reinforced moisture vapor barrier 10 mils thick minimum placed directly under the concrete slab (for slab on grade). Do not use vapor barriers manufactured with recycled material. Testing must be done to verify that the moisture vapor emission rate of the slab does not exceed that as recommended by Dancer Concrete Design at time of installation of the flooring or at any future date. Moisture vapor emission and moisture content testing must conform with the requirements of ASTM F-2170 (Relative Humidity Probe Test). If test results show excessive levels of moisture above 75% relative humidity content, apply Dancer Concrete Design’s recommended moisture vapor emission control material (MMS 950) based upon the highest test reading. If moisture levels are above 95% of relative humidity, please contact Dancer Concrete Design.
8. Saw cutting of control joints must be done between 12 and 24 hours after placement of the concrete slab.

1.7 WARRANTY

1. Dancer Concrete Design warrants that material and installation is free from defects and will perform substantially.
2. Dancer Concrete Design’s liability with respect to this warranty covers labor and material of the installation for a period of two years.

PART 2 – PRODUCTS

2.1    ACCEPTABLE MANUFACTURES

1. Basis of Design: for products and materials specified from Surface Terrazzo Floor System installed by Dancer Concrete Design, Fort Wayne, Indiana. Products of the manufactures are approved provided compliance with all technical requirements as specified herein:
2. Dancer Concrete Design, Surface Terrazzo Floor System, Fort Wayne, IN. Contact Nick Dancer, 260-415-1951, [nickdancer@dancerconcrete.com](mailto:nickdancer@dancerconcrete.com)
3. Key Resin, Key Epoxy Terrazzo
4. Terrazzco, EZPour Terrazzo System

2.2    FLOOR PRODUCTS

1. Terrazzo Bonding Primer
2. Enhances the adhesion between concrete and terrazzo matrix.
3. Flexible Membrane
4. Prevention of substrate cracks. Install over control joints for floors on-grade. Installed over the whole surface for multi-story floors.
5. Flexible Membrane installed over cracks: use fiberglass.
6. Moisture Mitigation System
7. Retarder against moisture vapor transmission for concrete slabs having a relative humidity of 75-95%.
8. ⅜” Thin-Set Epoxy Matrix
9. 1. Blended mix of epoxy resins, crushed limestone, and marble, glass, and/or shells.
10. Divider Strips
11. Select from: Zinc, Aluminum, Brass
12. Expansion T, ¼” width, Black Neoprene with 16 gauge sides, to honor any isolation joints through the installed system.
13. Heavy Top L Angle, ¼” width, for anywhere the terrazzo stops or color changes in the floor.
14. Thin L Angle, 16 gauge, for placement lines as marked on the Shop Drawings.
15. Sealer
16. Color-enhancing, penetrating stain repellent from oil- and water-based stains.

2.3    PRECAST PRODUCTS

1. Base and/or Stairs to be fabricated in such a way that it matches the floor installation.
2. Grip Strips, thickness, and/or structural details to be provided on Prints.

2.3    MIXES

1. Terrazzo Selection

Refer to the Terrazzo Mix Design for the Project below (certain glass, mirror, and mother-of-pearl shell aggregates to increase cost over marble-only aggregate blends):

1. DCD Sample #\_\_\_\_\_\_\_
2. DCD Sample #\_\_\_\_\_\_\_
3. DCD Sample #\_\_\_\_\_\_\_
4. DCD Sample #\_\_\_\_\_\_\_

PART 3 - EXECUTION

For more detailed steps please call Nick Dancer with Dancer Concrete Design at 260-415-1951 or by email at [nickdancer@dancerconcrete.com](mailto:nickdancer@dancerconcrete.com). Finishing steps vary depending on the job site conditions or concrete.

3.1 EXAMINATION

1. Examine areas to receive terrazzo for:
2. Defects in existing substrate that affect proper performance of terrazzo system.

Note: Untreated cracks in substrate will usually be transmitted through topping to surface. Flexible Membrane over cracks shall be used to minimize chance of subfloor cracks transferring to the terrazzo surface. In areas with cracks, use fiberglass.

1. Deviations beyond allowable tolerances for the concrete slab work.

Note: Subfloor not to vary more than ¼” from the true plane in 10’. Epoxy thin-set terrazzo, as specified, is not intended to level substrate and will only follow the contour of the concrete slab. Any work required to eliminate nonconformity of subsurface specifications is the responsibility of others. Any materials used to correct nonconformity must be compatible with the terrazzo system selected and be approved by Dancer Concrete Design.

3.2 GENERAL

1. Apply materials in accordance with manufacturer's instructions.

3.3 PREPARATION

1. Prepare substrate to receive epoxy terrazzo in accordance with manufacture’s recommendations.

B. Install divider strips over all concrete joints as recommended in NTMA Technical Bulletin #111, “Crack Detailing and Joint Treatments for Thin Set Terrazzo.”

1. Install divider strips as shown on Prints.

3.4    POURING TERRAZZO

1. If required, install moisture vapor control material before other terrazzo system materials.
2. Place terrazzo mixture and trowel to a dense flat surface to the top of divider strips

3.5 FINISHING

1. Rough Grinding:
2. Grind with 24 or finer grit stones or with comparable diamond segments.
3. Follow initial grind with 80 or finer grit stones or with comparable diamond plates.
4. Grouting:
5. Cleanse floor with clean water and rinse.
6. Remove excess rinse water, dry, and apply epoxy grout to fill voids.
7. Cure Grout:
8. Note: Grout may be left on terrazzo until all heavy and messy work in the project is completed.
9. Fine Grinding:
10. Grind with 80 or finer grit stones or with comparable diamond segments until all grout is removed from the surface. Continue polishing to specified grit level to match the approved sample(s).

3.6 CLEANING

1. Surface to be cleaned and allowed to dry before final sealing.

3.7 SEALER

1. Application of final sealer.

3.8 PROTECTION

1. Upon completion, the work shall be ready for final inspection and acceptance by the Owner or their representatives.
2. The installation of the terrazzo floor protection must be acceptable to the terrazzo installer and maintain such protection responsibility of others.

PART 4 - PRECAST INSTALLATION

4.1 INSTALLATION

1. Install precast products based on recommendations by the National Terrazzo and Mosaic Association. Contact the manufacturer or Dancer Concrete Design for further details.

END OF SECTION 09 66 23