

Guide Specifications for Precast Epoxy Terrazzo Treads, Risers, Base, and Other Specified Precast Epoxy Terrazzo Products

Section 09

**Part 1 – General**

* 1. Related Work Specified in Other Sections

*Note: Delete non-applicable items*

1. Installation of concrete substrate to receive terrazzo stairs

Section \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Installation of metal stairs, either pan type or supporting tubular stringers

Section \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Backup walls of metal lath or masonry to receive precast terrazzo items

Section \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Sufficient water, temporary heat and light, and adequate electric power with suitable outlets connected and distributed use within 100 feet of any working space. *Note: Ambient temperature should remain at 50 degrees Fahrenheit*
2. Broom clean area to receive precast terrazzo of all loose chips, laitance, and all foreign matter.
	1. – Quality Assurance
3. NTMA Compliance: Comply with all recommendations and standards of the National Terrazzo and Mosaic Association.
4. Acceptable supplier
5. Materials furnished shall meet NTMA supplier specifications.
6. Installer Qualifications
7. Installer shall be a contractor member of the NTMA and shall perform all work in accordance with NTMA standards.
8. If the installer is not a contractor member of the NTMA, the installer shall submit a list of completed projects of a similar magnitude and complexity for review.

1.3 – Submittals

 A. Section 01330 – Submittal Procedures: Submittal Procedures B. Shop drawings: 1. Submit shop drawings of all precast terrazzo items showing detail sections and profile of all precast items. 2. Large-scale details of precast terrazzo shall show jointing and edge conditions, anchorage details, and reinforcing and special hardware for fastening rails.

 C. Samples: 1. Submit maximum of 3 samples, 6”x6” in size for each color identified, illustrating color, chip size and variation, chip gradation, and matrix color. 2. Submit two copies of NTMA maintenance literature or product maintenance literature from NTMA associate member suppliers. D. Certification: 1. Suppliers shall furnish certification attesting that materials meet specification requirements.

1.4 – Delivery, Storage, and Handling A. Section 01600 – Product Requirements: Product storage and handling requirements. B. Delivery of materials: 1. Precast terrazzo materials shall be protected and palletized for delivery, and the manufacturer will identify item, quantity, and date.

 C. Storage of materials: 1. Precast terrazzo must be stored indoors in a dry environment maintaining a minimum temperature of 55 degrees Fahrenheit and a maximum temperature of 85 degrees Fahrenheit. D. Handling: 1. Report any damage during shipment immediately upon delivery with picture proof.

1.5 – Guarantee

 A. One year from date of substantial completion of terrazzo installation.

**Part 2 – Products**

2.1 – Manufacturers

 A. Acceptable manufacturer: 1. Venosa Precast Terrazzo

2.2 – Products

A. Base: Epoxy matrix, precast of the same terrazzo as selected floor, specify height in inches, minimum thickness 3/8”, straight or cove type with top profile.

B. Stair treads and risers: Epoxy matrix with desired number of abrasive strips, inlays, or inserts at desired thickness.

 C. Materials: 1. Epoxy matrix: Two component resin and epoxy hardener with mineral filler and color pigment, non-volatile, thermo-setting. Epoxy resin mixed according to manufacturer’s recommendation and tested without aggregate added. The product shall meet the following requirements:

 PROPERTY TEST METHOD REQUIREMENT

Hardness ASTM D2240 using Shore D Durometer 60-85

Tensile strength ASTM D638 run at .2” min. Specimen made 3000 psi min.

 Using die listed in ASTM D412

Compressive Strength ASTM D695, Specimen B cylinder 10,000 psi min.

Chemical Resistance ASTM D1308, 7 days at room temperature by

 Immersion method has no deleterious effects

 The following contaminants used:

 Distilled Water 1% Soap Solution

 Mineral Water 10% Sodium Hydroxide

 Isopropanol 10% Hydrochloric Acid

 Ethanol 30% Sulfuric Acid

 .025 Detergent Solution 5% Acetic Acid

2. Aggregate: Marble, glass, mother of pearl, metal chips, or a combination of indicated in percentages in screed sizes 0, 1, and 2 of standard gradation and uniform color.

3. Sealer: Colorless, non-yellowing, penetrating liquid type to completely seal matrix surface; not detrimental to terrazzo components, biodegradable and phosphate free.

 D. Terrazzo cleaners: 1. Ph factor between 7 and 10 where applicable. 2. Biodegradable and phosphate free.

2.3 – Manufactured Units A. Shape and size exactly as indicated on drawings. B. Reinforce precast with deformed rods or wire mesh or both if required.

**Part 3 – Execution**

3.1 – Inspection A. Examine areas to receive terrazzo for: 1. Defects in existing work that affect proper execution of terrazzo. 2. Deviations beyond allowable tolerances for the substrate.

3.2 – Installation A. Setting: 1. Set accurately as shown on drawings. Contact the material manufacturer for any questions concerning proper bonding of materials. Setting methods are: a. Mud set b. Thin set c. Weld d. Bolt 2. Alignment of precast should be straight and true to all dimensions. It may not vary more than 1/16” in length, height, or width. 3. Install anchors as shown on details.

3.3 – Protection A. Section 01700 – Execution Requirements: Protecting installed construction B. The General Contractor shall protect the finished work from the time that the terrazzo contractor finishes the work. Do not permit anything other than pedestrian traffic over finished terrazzo surfaces.