

Precast Cement Terrazzo Specification-Treads, Base, Stringers and other amenities

Section 09 66 00

Part 1 – General

1.01 SUMMARY

- A. Types of Precast Terrazzo work included:
 - 1. Precast Terrazzo Stairs
 - 2. Precast Terrazzo Base
 - 3. Precast Terrazzo Sills
 - 4. Precast Terrazzo Copings
 - 5. Precast Terrazzo Other
- B. Setting material, grouts, sealants and caulks
- C. Installation of precast terrazzo stairs, base, sills, etc.
- D. Related work not specified under this section
 - 1. Installation of steel stairs to receive precast terrazzo

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM C-150
 - 2. ASTM C-33
 - 3. ASTM C-140
 - 4. ASTM C-293
 - 5. ASTM C-1028
- B. National Terrazzo and Mosaic Association Inc. (NTMA)
- C. Federal Register Part III
 - 1. 28 CFR Part 36

1.03 SUBMITTALS

- A. Shop Drawings
 - Submit shop drawings of all precast terrazzo items showing detail sections and profile for all precast items. Details shall show all reinforcing and special hardware for fastening.
- B. Samples:
 - 1. Submit maximum of 3 samples 3" x 6" size for all color.
 - a. Color to be selected from Wausau Tile color pallet.
 - 2. Submit two copies of NTMA maintenance literature.
 - 3. Quality Assurance and Procedure Program
- C. Performance Requirements:
 - 1. Compressive Strength 4000 p.s.i.
 - 2. Flexural Strength 600 p.s.i.
- D. Certification:
 - 1. Suppliers shall furnish certification attesting that materials meet specification requirements.

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1.04 QUALITY ASSURANCE

- A. NTMA Standards: Comply with specified provisions and recommendations of the National Terrazzo & Mosaic Association, Inc. (NTMA).
- B. Manufacturer's Instructions: In addition to specified requirements, comply with precast terrazzo manufacturer's instructions and recommendations for substrate preparation, materials storage, mixing and application, finishing and curing.
- C. Qualifications: Precast Terrazzo Manufacturer and Trade Contractor must have a minimum of 5 years of successful experience on projects of similar magnitude and complexity to that indicated project. Manufacturer and contractor to be prequalified by Architect prior to bidding. Failure to prequalify will void bid.
- D. Manufacturer to supply a written Quality Assurance Program and Procedure manual.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Packaging and Shipping: Precast terrazzo to be palletized and shrink wrapped, delivered in original unopened packaging with legible manufacturer identification, including size, piece number, quantities, manufacturer date and inspector initials.
- B. Storage and Protection: Precast terrazzo to be stored indoors, in a climate-controlled environment, sheltered from moisture in original packaging. Protect from damage by other trades.
- C. Report all damage due to shipment immediately. Customer is required to sign the Bill of Lading slip noting damaged product. Picture proof is required.

1.06 WARRANTY

A. Manufacturer/Installer shall warrant installed system for a period of 1 year from date of substantial completion against failure of workmanship and materials.

Part 2 - Products

2.01 MANUFACTURERS

- A. Acceptable Manufacturer:
 - 1. Wausau Tile, Inc.
- B. Clarification Note: Drawings and specifications are based on manufacturer's proprietary literature from Wausau Tile, Inc. Other manufacturers shall comply with minimum levels of material specifications and detailing indicated on the drawings of specified herein.

2.02 MATERIALS

- A. Portland Cement: ASTM C-150 Specifications for Portland Cement.
- B. Aggregates: All aggregates to meet ASTM C-33 specifications, cleaned and properly graded to size. Aggregate shall be blended to meet individual project requirements.
- C. Marble chips, size to conform with NTMA gradation standards.
- D. Coloring; Pigments used shall be inorganic, resistant to alkalinity and used per manufacturer's recommendations.
- E. Reinforcement and Hardware:
 - 1. To conform with NTMA and Manufacturer's design.

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- 2. Reinforce precast with deformed rods or wire mesh or both as recommended by precast terrazzo manufacturer.
- F. Abrasive Inserts: Shall consist of silica carbide and black epoxy. Specify one to three lines.
- G. Caulks & Sealants:
 - 1. Urethane or Polyurethane Sealant
 - 2. Color to be selected by Architect from standard color pallet.
- H. Cleaner: Liquid neutral chemical cleaner, with pH factor between 7 and 8, of formulation recommended by sealer manufacture for type of precast terrazzo used and complying with NTMA requirements.
- I. Sealer: Colorless, slip and stain-resistant penetrating sealer with pH factor between 7 and 8, that does not affect color or physical properties of precast terrazzo surface. Flash point (ASTM D56): 80 degrees F, Minimum.

2.03 MANUFACTURED UNITS

- A. Sizing Tolerances:
 - 1. All units to conform to shop drawings with a 1/16" tolerance in dimension.
- B. Precast Surfaces and Edges:
 - 1. All exposed edges to be ground and polished with a minimum of 1/16" bevel.
 - 2. All finished surfaces to be ground and polished, free of holes and to have overall uniformity in matrix and aggregate.
 - 3. All precast terrazzo finished surfaces to be sealed with a sealer approved by manufacturer.

Part 3 - Execution

3.01 INSPECTION

- A. Examine areas to receive precast terrazzo for the following:
 - 1. Defects in existing work.
 - 2. Deviations beyond allowable tolerances for the substrate.
- B. Start work only when all defects have been corrected by others.

3.02 INSTALLATION

- A. Setting:
 - 1. Setting methods will vary per product. Set accurately as shown on the approved shop drawings. Contact your setting material manufacturer with any questions on proper bonding of all materials.

Setting methods are:

- a. Cement based setting materials: Contact your selected manufacturer as recommended or specified. Setting materials can change without notice.
- b. Epoxy based setting materials: Contact your selected manufacturer as recommended or specified. Setting materials can change without notice.
- c. Weld attachment: Contact Wausau Tile for recommended welding guidelines as provided by the structural engineer. DO NOT run a continuous weld when attaching terrazzo to avoid over-heating and cracking of the terrazzo.

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- 2. All thinset materials, whether cement or epoxy based, will require a full setting bed be applied to all appropriate surfaces of the precast terrazzo, vertical and horizontal, where contact is made with the substrate or structural base.
- 3. Alignment of precast should be straight and true to all dimensions. It may not vary more than 1/8" in length, height or width.
- 4. Install anchors as shown on details, if required.
- 5. Fill joints between with manufacturer approved caulk or as specified.

B. Protection:

- 1. Upon completion, the work shall be ready for final inspection and acceptance by owner or owner agent.
- 2. General Contractor shall protect the finished work from the time the terrazzo contractor completes the work.
- C. Finish: All precast cement terrazzo finished surfaces to be sealed with a sealer approved by manufacturer.

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