

# GUIDE SPECIFICATIONS FOR PRECAST VERTICAL TERRAZZO

Normally 1 inch thick (3/8" terrazzo topping) — See architectural details

## Section 09

### PART 1 - GENERAL

#### 1.01 Related work specified in other sections

Note: Delete nonapplicable items.

- A. Furnishing and/or installation of metal lath and scratch coat. Backing for terrazzo must be a cement board, concrete or concrete block. Section: \_\_\_\_\_
- B. Attachment of metal base beads and wood ground, Section: \_\_\_\_\_ Note: Delete in cases where jurisdiction permits terrazzo contractor to install.
- C. Sufficient water, temporary heat and light and adequate electric with suitable outlets connected and distributed for use within 100 feet of any working space. Note: Ambient temperatures shall be maintained at a minimum of 50° Fahrenheit.

#### 1.02 Quality assurance

- A. Acceptable supplier:
1. Materials furnished shall meet NTMA specifications.
- B. Installer qualifications:
1. Installer shall be a contractor member of NTMA and shall perform all work in accordance with NTMA standards.
  2. If installer is not a contractor member of NTMA, installer shall submit a list of completed projects of a similar magnitude and complexity.

#### 1.03 Submittal

- A. Samples:
1. Submit maximum of 3 samples, minimum 6" X 6" in size for each color and type of terrazzo.
  2. Submit 2—6" minimum lengths of each type and kind of divider strips.
- B. Maintenance literature:
1. Submit 2 copies of maintenance recommendations of NTMA or maintenance product members of NTMA.
- C. Certification:
1. Suppliers shall furnish certification attesting that materials meet specification requirements.

#### 1.04 Delivery, storage and handling

- A. Delivery of materials:
1. Deliver materials in a manner to prevent damage to containers and/or bags.
- B. Storage of materials:
1. Store materials in a clean, dry and heated (if necessary) location (50-90° Fahrenheit) furnished by others.

#### 1.05 Guarantee

One year from date of substantial completion of terrazzo installation.

### PART 2 - PRODUCTS

#### 2.01 Products

- A. Portland cement: ASTM C 150, Color \_\_\_\_\_ Note: Select and specify white or gray for terrazzo topping. White cement is uniform in color. Gray cement may not be uniform in color and may produce a variation of shade in the matrix. (See product information)
- B. Sand: Clean, washed locally available sand.
- C. Marble chips:
1. Size to conform with NTMA gradation standards. Note: See product information.
  2. Abrasion and impact resistance when testing in accordance with ASTM C 131-89 shall not exceed 40% loss.
  3. 24-hour absorption rate not to exceed 0.75 per cent.
  4. Chips shall contain no deleterious or foreign matter.
  5. Dust content less than 1% by weight.
- D. Strips:
1. Divider \_\_\_\_\_ (gauge) \_\_\_\_\_ (material) with a depth of \_\_\_\_\_ (inches) for a topping thickness of \_\_\_\_\_ (inches). Note: Select gauge, material and strip depth.  
GAUGE: 18, 16 or 14 B&S gauge or 1/8, 1/4 or 3/8 inch heavy top 1 inch depth.  
MATERIAL: White alloy of zinc, brass or plastic.  
DEPTH OF TOPPING: 3/8 inch for standard terrazzo. "K" or "L" strips may be used for aesthetic reasons and are anchored by nailing or adhesive directly on substrate.
- E. Colorants: Alkali-resistant color stable pigments. Note: Refer to NTMA information guide for further information.
- F. Curing Material: Water or polyethylene sheeting.
- G. Terrazzo cleaner:
1. Ph factor between 7 and 10 where applicable.
  2. Biodegradable and phosphate free.
- H. Sealer:
1. Ph factor between 7 and 10 where applicable.
  2. Shall not discolor or amber.
  3. Penetrating type specially prepared for use on terrazzo.
  4. Flash Point: ASTM D 56, 80° Fahrenheit minimum where applicable.
- I. Bonding agent: Neat portland cement, epoxy or acrylic

#### 2.02 Mixes

- A. Terrazzo selection:
1. Type: \_\_\_\_\_  
Note: Select color and design from NTMA information or color plates. Any deviation from NTMA plates must be clearly stipulated.  
Note: Since different installation techniques are required for vertical terrazzo, it may be difficult or impossible to match exactly the floor or base color. Where possible, a different color should be specified.



- B. Proportions:
1. Setting bed: One part portland cement to three parts sand and sufficient water to provide workability at as low a slump as possible.
  2. Terrazzo top: One 94 pound bag of portland cement per 125 pounds of marble chips, color pigment if required and sufficient potable water to produce a workable mix.
- C. Mixing:
1. Setting bed:
    - a. Charge and mix sand, aggregate and portland cement.
    - b. Add water and mix.
  2. Terrazzo topping:
    - a. Charge and mix marble chips, portland cement and color pigment if required.
    - b. Add water and mix to a uniform workable consistency.

## PART 3 - EXECUTION

### 3.01 Inspection

- A. Examine areas to receive terrazzo for defects in existing work that affect proper execution of Rustic terrazzo.
1. Defects in existing work that affect proper execution of terrazzo.
- B. Start work only when all defects have been corrected by others.

### 3.02 Installation

- A. Setting bed:
1. Apply bonding agent.
  2. Apply mortar setting bed to backing.
  3. Trowel setting bed to within 3/8" of finished wall line.
  4. Install divider strips as shown on drawings in semi-plastic setting bed. *Note: Vertical strips should not exceed 72 inches on center.*
- B. Placing terrazzo:
1. Wet setting bed and apply neat cement slurry same color as specified for the topping including pigment if contained in topping.
  2. Broom slurry into setting bed surface.
  3. Apply terrazzo mixture in panels formed by divider strips and trowel mixture to top of strips.
  4. Roll and compact surface until all excess cement and water has been extracted.
- C. Curing:
1. After completing placement of terrazzo, apply curing material.
  2. Cure until topping develops sufficient strength to prevent lifting or pulling of marble chips during grinding.
- D. Finishing:
1. Rough grinding:
    - a. Grind with 24 or finer grit stones or with comparable diamond plates.
    - b. Follow initial grind with 80 or finer grit stones.
  2. Grouting:
    - a. Cleanse terrazzo with clean water and rinse.
    - b. Remove excess rinse water and hand apply grout using identical portland cement, color pigments as used in topping, taking care to fill voids.
  3. Cure grout. *Note: Grout may be left on terrazzo until all heavy and messy work in project is completed.*
  4. Fine grinding:
    - a. Grind with 80 or finer grit stones until all grout is removed from surface.
    - b. Upon completion, terrazzo shall show a minimum of 70% marble chips.
- E. Cleaning and sealing:
1. Wash all surfaces with a neutral cleaner.
  2. Rinse with clean water and allow surface to dry.
  3. Apply sealer in accordance with manufacturer's directions.
- F. Protection:
1. Upon completion, the work shall be ready for final inspection and acceptance by the owner or his agent.
  2. The general contractor shall protect the finished work from the time that the terrazzo contractor completes the work.