

CSTA BONDED TERRAZZO

PART 1 – GENERAL

1.01 SUMMARY

Bonded terrazzo minimum of 1-3/4 inches thick (1/2 inch nominal terrazzo topping thickness over 1-1/4 inch nominal underbed.)

A. Work included in this Section

1. Portland Cement terrazzo, bonded type, horizontal
2. Portland Cement terrazzo, bonded type vertical base (optional)
3. Underbed, Portland Cement base

B. Related work in other Sections

1. Furnish and installation of concrete slab with moisture vapor barrier
2. Furnish and setting of floor drains
3. Metal lath and Portland Cement plaster
4. Joint sealants installed with terrazzo
5. Sufficient water, temporary heat and light, and adequate electric power connected with outlets within 100 feet of work area

1.02 QUALITY ASSURANCE

A. Acceptable suppliers

1. Suppliers shall be Associate members of the Central States Terrazzo Association (CSTA) and the National Terrazzo & Mosaic Association (NTMA) and shall supply materials in accordance with the standards and specifications of the CSTA and NTMA.
2. Marble chip aggregates shall be standard colors and gradated sizes as supplied by Associate CSTA member suppliers.

B. Acceptable installers

Terrazzo installation contractor shall be current Contractor members of the CSTA/NTMA and shall perform all work in accordance with NTMA specifications and standards. (See <http://centralstateterrazzo.com/contactus.htm> for information on regional Contractor Members)

1.03 SUBMITTALS

A. Product Data

Submit product data for all related materials including divider strips, expansion strips, membranes, sealers and cleaners.

B. Samples

1. Submit (2) 6" square samples for each color and type of terrazzo specified or selected.
2. Submit (2) 6" lengths of each divider of expansion strip required.

C. Certification

Submit certification letter from CSTA that terrazzo installation contractor is current member in good standing of the CSTA and the NTMA.

D. Maintenance

Submit NTMA Owners Guide For Recommended Maintenance For New Terrazzo Floors.

1.04 DELIVERY, STORAGE AND HANDLING

A. Delivery of materials

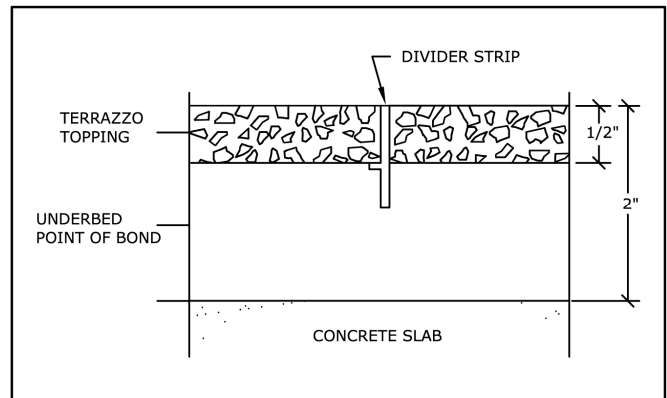
Deliver materials in a manner to prevent damage or contamination to containers or bags of materials.

B. Storage of materials

Store materials in a clean, dry location, heated to minimum 50 degrees, furnished by others.

1.05 Guarantee/Warranty

Terrazzo materials and installation shall be guaranteed for a period of (1) year from date of substantial completion. Guarantee shall be limited to the repair and/or replacement of materials or workmanship found to be defective per NTMA standards and specifications.



PART 2 – PRODUCTS

2.01 MATERIALS

- A. Portland Cement: ASTM C150.
- B. Sand: Clean, washed, locally available sand.
- C. Marble Chips; Standard color marble chips as distributed by CSTA Associate member suppliers. Size per NTMA gradation standards, aggregate per NTMA guidelines.
- D. Divider Strips: Zinc, Aluminum, or Brass, in thickness as specified on drawings as supplied by Manhattan American Terrazzo Strip Co., National Metal Shapes and/or authorized distributors.
- E. Colorants: Alkali resistant color stable pigments per NTMA Design Guide Standards.
- F. Terrazzo Cleaner: PH Factor between 7 and 10, biodegradable and phosphate free.
- G. Sealer: Water base or solvent base penetrating sealer.

2.02 MIXES

A. Terrazzo Selection:

1. Terrazzo type shall be Bonded Rustic Terrazzo per sample.

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2. Color shall be CSTA or NTMA color plate or custom matrix as produced by CSTA Contractor member – Sample(s) Designation # _____.

B. Proportion:

1. Underbed: One part Portland Cement to four parts sand and sufficient water to provide workability.
2. Terrazzo Topping: One 94 pound bag of Portland cement per 200-200 pounds of marble chips, color pigment if required and sufficient potable water to produce a workable mix.

C. Mixing:

Underbed: Charge and mix sand and Portland cement, add water and mix.

Terrazzo Topping: Charge and mix marble chips, Portland cement and color pigment if required. Add water and mix to a uniform workable consistency.

PART 3 – EXECUTION

3.01 INSPECTION

Examine areas to receive terrazzo for:

1. Defects in existing work that affect proper execution of terrazzo work. Notify contractor of any defects in concrete or other related work for correction.
2. Start only when all defects have been corrected by others.

3.02 INSTALLATION

A. Underbed:

1. Thoroughly saturate concrete subfloor with water, slush and broom with neat cement paste.
2. Place underbed mix.
3. Screed underbed to elevation ½” below finished floor elevation.
4. Install divider strips per approved layout in semi-plastic underbed and trowel along edges.
6. Install control joint strips if required, taking care that control joint is full depth of underbed.

B. Placing Terrazzo:

1. Saturate underbed with water.
2. Place terrazzo mixture in panels formed by divider strips and trowel mixture to top of strips.
3. Seeding of additional chips is optional.
4. Roll and compact surface until all excess cement and water have been extracted.
5. Trowel to a dense uniform flat surface disclosing lines of divider strips.

C. Curing:

1. After completing placement of terrazzo and composition has sufficiently set, cure properly using polyethylene sheeting, if needed.
2. Cure until topping develops sufficient strength to prevent lifting or pulling of terrazzo 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, if needed to properly grout the floor.
2. Grouting:
 - a. Cleanse floor with clean water and rinse
 - b. Remove excess rinse water and machine or hand-apply grout, taking care to fill voids.
 - c. Grout may be left on terrazzo until all heavy or messy work in project is complete.
3. Fine Grinding:
 - a. Grind with #80 or #120 grit finer stones until all grout is removed from surface.
 - b. Upon completion, terrazzo shall show a minimum of 70% marble chips.

E. Cleaning and Sealing:

Apply penetrating sealer in accordance with manufacturer's directions.

F. Protection:

Upon completion, the work shall be ready for final inspection and acceptance by owner or agent. The General Contractor shall protect the finished floor upon completion.

END