

National Terrazzo & Mosaic Association (NTMA)
RESTORATION OF TERRAZZO
(Guide Specification) (7-2021)

MasterFormat is the specifications-writing standard for most commercial building design and construction projects in North America. MasterFormat lists titles and section numbers for organizing data about construction requirements, products, and activities. By standardizing such information, MasterFormat facilitates communication among architects, specifiers, contractors and suppliers, which helps them meet building owners' requirements, timelines and budgets. The numbers and titles presented here are the same as contained in the MasterFormat® 2016 publication for the Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC).

This NTMA **guide specification** is for repair, restoration and re-finishing of terrazzo floors. Terrazzo floors are either a cement or epoxy matrix (binder) with a variety of aggregates. Color matching existing aggregates in floors may not be exact, as these are mined products and may alter over time. A meeting to clarify the extent of repairs and expectations is recommended. This includes mapping out cracks and clarifying various repair options. Once mock-ups are approved, expectations should be better understood. It may be necessary for the contractor to reevaluate conditions once substrates are uncovered, or unknown conditions arise.

Sealers come in all types and finishes. Some are “proprietary” and may require additional processes to maintain warranties. These additional steps should be clarified before attempting any repairs.

NOTE: All staining in existing terrazzo may not be possible to remove when restoring terrazzo.

Section 09 01 60 91
(Floor Restoration-Terrazzo)

PART 1: GENERAL

1.01 SECTION INCLUDES

- A. Refinishing terrazzo floors.
- B. Provide all labor, material, and equipment necessary to complete the following terrazzo repair work
- C. Preparation of all surfaces to receive patching compound
- D. Repairs to delaminated areas
- E. Repair of cracks (as per NTMA recommendations)
- F. Placement of patching compounds/terrazzo matrix
- G. Finish and curing of terrazzo

1.02 REFERENCE STANDARDS

- A. NTMA – Terrazzo Specifications; The National Terrazzo and Mosaic Association, Inc.; current edition located at www.ntma.com

1.03 SUBMITTALS

- A. Product Data: Provide manufacturers technical data for sealer and cleaner and grout.
- B. Cleaning products to be used and Terrazzo Maintenance Data/Protocols for facility managers
- C. Submit letter clearly identifying the terrazzo system (Epoxy, Cement, etc) and that the products are suitable/compatible

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing the work of this section with not fewer than 5 years of documented experience.
 - 1. Installer shall be a contractor member of NTMA in good standing and shall perform all work in accordance with NTMA standards
 - 2. Use only skilled journeyman who are familiar and experienced with the materials and methods specified shall be used for terrazzo restoration/refinishing.
 - 3. Crack Repair: Prepare a sample area for each type of crack repair required (Hairline cracks 1/64” to 1/16” in size; Cracks and voids larger than 1/8”) Repair shall demonstrate methods and quality of workmanship of crack repair.
 - 4. Patching: Prepare on-floor, a sample of patching. Patch shall demonstrate methods and quality of workmanship of patch repair

PART 2: PRODUCTS

2.01 MATERIALS

- A. Cleaner: Potable water, free of iron, all cleaners (optional) must be pH neutral
- B. Sealer: Liquid type to completely seal matrix surface; not detrimental to terrazzo components.
- C. Grout: Color to match existing matrix.
- D. Matrix: Pigmented epoxy to match sample submitted
- E. Aggregates: Aggregates to match architects approved sample

2.02 EQUIPMENT

- A. All work shall be executed with conventional terrazzo grinding equipment according to NTMA published trade practice.

PART 3: EXECUTION

3.01 GENERAL

- A. Perform work in accordance with NTMA recommendations as posted on the NTMA website (www.ntma.com)

3.02 PREPARATION

- A. Cover and protect all adjacent finished surfaces during restoration process.

3.03 CRACK REPAIR

A. Determination

- 1. The owner and contractor shall walk the entire floor and identify cracks and agree on
 - a. NA (No Action) RC (Repair Crack) or RT (Replace Terrazzo)
 - b. Hairline cracks are classified as less than 1/32" (0.030)
 - c. Replacement (RT) shall be from architectural break to architectural break

B. RC - Repair Crack

- 1. Clean crack of loose material, dirt or sealer
- 2. Fill with resin/to match existing. Use aggregate in the crack if crack is wider than ¼ inch.

3.04 RT- Relace Terrazzo (if repair is not to architectural break or existing terrazzo divider strip, the joining edge shall be a saw tooth (jagged edge)

- A. Remove areas to be replaced
- B. Clean area and prepare concrete for new terrazzo
- c. Repair concrete, fill cracks in concrete substrate as needed. Fill cracks in concrete with hardening epoxy
 - Optional upgrade: Employ the use of a mesh (isolation membrane) to cover crack with liquid applied membrane (epoxy systems only)
- e. Fill area with epoxy or cement /cement matrix and approved aggregate mixture/blend

3.04 INITIAL GRINDING

- A. Wet or dry grind with appropriate medium diamonds/Stones

3.05 GROUTING

- A. Cleanse floor with clean water and rinse. Wet grind with 50 or higher abrasive grit medium diamonds.
- B. Remove excess water and machine or hand grout with cement or epoxy material to fill as needed.

3.06 CURING GROUT

- A. Allow grout to cure a minimum of 12 hours. Maintain ambient air temperature between 70°F (21°C) and 80°F (27°C)

3.07 FINE (Final) GRINDING

- A. Grind with 120 grit carborundum or 200 grit resin bond diamond until grout has been removed from the terrazzo surface.

3.08 CLEANING AND SEALING:

- A. Rinse with clean water and allow too thoroughly dry.
- B. Seal: Apply sealer per sealer manufacturer's written directions
- C. Remove protection and clean any adjacent surfaces effected by the refinishing process.

3.09 PROTECTION

- A. General Contractor shall protect the finish floor from all site activity until Substantial Completion.

END OF SECTION