

Section 09400
MASTERTOP®
MONORRAZZO POLYACRYLATE THINSET TERRAZZO
FLOORING SYSTEM

NOTE TO SPECIFIER

The purpose of this suggested specification is to assist the specifier in developing a specification for the use of Master Builders MASTERTOP *MONORRAZZO POLYACRYLATE THINSET TERRAZZO FLOOR SYSTEM*. Questions regarding the selection, installation, or intended end use of Master Builders materials should be directed to a Master Builders technical representative. This specification is prepared to be a part of a complete project specification.

PART 1.0 - GENERAL

1.01 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this section.

1.02 Summary

- A. This section specifies a highly decorative, seamless polyacrylate flooring system utilizing marble, glass or granite chips to provide an aesthetic and durable wearing surface.
- B. MASTERTOP MONORRAZZO flooring is a thin, lightweight, breathable terrazzo installed at 3/8" (9.5 mm) thickness. The aggregate consists of marble, glass or granite chips depending upon the *agreed to* requirements of this project.

1.03 References

ASTM C 413-88	Test Method for Absorption of Chemical Resistant Mortars, Grouts and Monolithic Surfaces
ASTM C 531-90	Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical Resistant Mortars, Grouts and Monolithic Surfaces
ASTM C 579-91	Test Method for Compressive Strength of Chemical Resistant Mortars, Grouts and Monolithic Surfaces
ASTM C 580-90	Test Method for Flexural Strength and Modulus of Elasticity of Chemical Resistant Mortars, Grouts and Monolithic Surfaces
ASTM D 1864-88	Test Method for Moisture in Mineral Aggregates
ASTM D 4263-88	Test Method for Capillary Moisture in Concrete by Plastic Sheet

1.04 System Performance Requirements

A. Provide a polyacrylate terrazzo flooring that, when cured, produces the following typical properties:

<u>PROPERTY</u>	<u>TEST METHOD</u>	<u>RESULT</u>
Compressive Strength	ASTM C 579	5,400 psi (37.2 MPa)
Tensile Strength	ASTM C 307	760 psi (5.2 MPa)
Flexural Strength	ASTM C 580	1,000 psi (6.9 MPa)
Curing Shrinkage (Meets ASTM C 881-87)	ASTM D 2566	<.005 “/”
Curing Shrinkage, Mortar	ASTM C 531	5×10^{-4} “/”
Water Absorption	ASTM C 413	2.2%

1.05 Submittals

- A. Submit manufacturer's data sheet and product literature indicating that the products comply with specified requirements.
- B. Submit two mock-up sample coupons that are representative of the finished floor surface, texture and color.

1.06 Quality Assurance

- A. Installer Qualification: Use only an installer that is certified in writing by the flooring preparation of substrate, possible delamination areas, crack and joint repair and complete flooring installation.
- B. Mock-up: On site, fabricate a panel approximately 100 sq. ft. (10 sq. m.) to demonstrate quality of finished floor system, complying with manufacturer's instructions. Install panel where directed by architect/engineer. Maintain panel as a standard of quality for all installations.

1.07 Delivery, Storage and Handling

- A. Deliver product in factory packages, clearly marked with manufacturer's identification, instructions, lot numbers and shelf life expiration date for each component.
- B. Store materials at 50 to 90 degrees F (10 to 32 degrees C) in a dry environment away from sunlight, heat or other hazards.

1.08 Project Conditions

- A. Maintain minimum concrete temperature of 55 degrees F (12 degrees C) for a minimum of 48 hours before, during and after installation, or until cured.
- B. Concrete must be free of hydrostatic, capillary or moisture vapor pressure. Substrates in contact with ground must have a properly installed, effective vapor barrier to help prevent potential problems resulting from hydrostatic, capillary or moisture vapor pressure. Concrete must contain less than 3% moisture when tested per ASTM D 1864.
- C. Concrete to receive MASTERTOP MONORRAZZO floor material should have been designed and installed as approved by architect/engineer to minimize random cracking, curling, slab deflections and shall contain well designed control and isolation joints as approved by architect/engineer.
- D. Do not apply sealers or membrane curing agents to concrete. Moisture curing of concrete is recommended.
- E. Concretes containing lightweight aggregates are not recommended substrates.
- F. Provide ventilation, lighting and clean, drinkable water supply.
- G. Advise other trades of fixtures and fittings not to be installed until floor is cured, such as: radiators, painting, decorating, floor-supported equipment or cabinetwork, caulking, plumbing, fixtures, etc.
- H. Floors shall be kept free of traffic and no trades shall be permitted in rooms during the application and curing of the coating.
- I. Protect the adjacent surfaces from damage resulting from work of this trade. If necessary, mask and/or cover adjacent surfaces, fixtures, equipment, etc. by suitable means.

PART 2.0 - PRODUCTS

2.01 Materials

- A. Polyacrylate thinset terrazzo flooring: MASTERTOP MONORRAZZO POLYACRYLATE TERRAZZO by Master Builders, Inc.
- B. (OPTIONAL) Elastomeric Membrane: NEO V II C by Master Builders, Inc. for water protection and to reduce reflective cracking from the substrate.

PART 3.0 - EXECUTION

3.01 Inspection

- A. Before starting work, ensure that environmental and site conditions are suitable for application and curing.
- B. Inspect surfaces for acceptability of levelness, moisture content, pitch to drains and other critical factors.
- C. Report in writing to architect/engineer, with copy to manufacturer, of deficiencies that could impair work. Surfaces must be approved by the Certified Contractor prior to application of flooring.

3.02 Surface Preparation

- A. Prepare surfaces in accordance with manufacturer's instructions.
- B. Remove concrete laitance by surface shotblasting, gritblasting or other method approved by manufacturer.
- C. Surface must be clean, sound and dry prior to application.
- D. Prefill surface irregularities, holes and cracks in accordance with manufacturer's recommendations.

3.03 Mixing

- A. Comply with manufacturer's instructions for mixing procedures.
- B. Premix each component before every batch to ensure uniformity.
- C. Carefully measure and mix the components together.

3.04 Installation

- A. Follow manufacturer's written instructions.
- B. (OPTIONAL) Apply stretch coat of NEO V II C to minimum width of 3 inches (75 mm) wide and 20 mils (0.4 mm) dry thickness over cracks in substrate.
- C. (OPTIONAL) Embed Pennflex tape or similar reinforcing fabric in NEO V II C over cracks in substrate.
- D. (OPTIONAL) Install elastomeric membrane in multiple coats to a dry film thickness of 20 to 30 mils (0.4 to 0.6 mm).
- E. (OPTIONAL) Install cove and/or base in accordance with manufacturer's instructions.
- F. Prime entire surface with recommended primer.
- G. Apply polyacrylate terrazzo matrix in accordance with manufacturer's instruction to a total thickness of 3/8 inch (9.5 mm).
- H. After curing, grind to expose to surface all stop and divider strips and approximately 70% of aggregate.
- I. Apply polyacrylate grout coat(s) at recommended coverage to fill surface voids.
- J. Polish surface, then apply the Master Builders Sealon product at the recommended coverage rate.
- K. Allow proper cure time for each installation procedure.
- L. If necessary, use temporary protection until flooring is fully cured.

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