**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**ARCHITECTURE, ENGINEERING AND CONSTRUCTION**



ARCHITECTURE & ENGINEERING

326 East Hoover, Mail Stop B

Ann Arbor, MI 48109-1002

Phone: 734-764-3414

Fax: 734-936-3334

DOCUMENTS

SPECIFICATION DIVISION 9

NUMBER SECTION DESCRIPTION

DIVISION 09 FINISHES

SECTION 093000 - TILING

END OF CONTENTS TABLE

1. DIVISION 09 FINISHES
   1. SECTION 093000 - TILING

this section has been pre-edited to apply ONLY to SMALL RENOVATION projects USING UNGLAZED CERAMIC TILE. EDIT THIS SECTION USING THE TCA HANDBOOK (OR WEBSITE). Use AIA Masterspec section OF SAME NAME AND NUMBER FOR complex projects.

* + 1. GENERAL
       1. SUMMARY
          1. Extent of ceramic tile is shown on Drawings.
          2. Types of ceramic tile include:

Unglazed ceramic mosaic tile.

* + - 1. SUBMITTALS
         1. Product Data: Mfr's product data and installation instructions for tile work.
         2. Samples for Initial Selection: Submit 1 sample card for each type of ceramic tile, showing full range of manufacturer's standard colors, textures and patterns.

DELETE BELOW IF NO COLORED GROUT.

Provide color sample kit for tinted grout.

* + - 1. QUALITY ASSURANCE
         1. Standards: Comply with referenced ANSI and ASTM materials standards, and with referenced installation methods and materials of referenced Tile Council of America (TCA) Handbook numbers.
    1. PRODUCTS
       1. ACCEPTABLE MANUFACTURERS
          1. Manufacturers: Subject to compliance with specified performance requirements, provide product of one of the following:

American Olean Tile.

Dal-Tile.

Mannington.

Winburn Tile Mfg. Co.

BELOW FOR UNGLAZED PORCELAIN CERAMIC TILE ONLY. CONSULT MANUFACTURER'S LITERATURE FOR OTHER TILE CHOICES.

* + - 1. UNGLAZED CERAMIC MOSAIC TILE
         1. Factory-mounted flat tile and as follows:

Type: Porcelain.

Tile Grade: "Standard".

Wearing Surface: Without abrasive content.

Face: Plain with all purpose edges.

Size and Thickness: Modular 2 inch by 2 inch square; 1/4 inch thick.

Trim: Continuous cove base at floor perimeter; bullnose and cove trim where around projections.

Trim Shapes: Same material, size, color, and texture as field tile.

Colors, Textures, and Patterns: Selected by Architect from mfr's standard smooth texture, solid color range.

DELETE FOLLOWING IF NOT REQUIRED. BRASS STRIP AVAILABLE FOR SAME PURPOSE IF DESIRED.

* + - 1. THRESHOLDS
         1. Marble Thresholds: Group "A"; ASTM C 503, for exterior use with minimum hardness of 10.0 per ASTM C 241; white with honed finish, unless otherwise indicated.
      2. MORTAR AND GROUT MATERIALS

THE FOLLOWING MATERIALS ARE EXAMPLES ONLY - FIRST EDIT PART 3 TO DETERMINE TCA INSTALLATION METHODS AND THEN EDIT THIS PORTION TO INCLUDE APPROPRIATE MATERIALS.

* + - * 1. Comply with the following requirements:

Portland Cement: ASTM C 150 Type 1

Sand: ASTM C 144

Water: Potable

also consider using proprietary product such as mapei or laticrete, as applicable.

Mortar: As follows:

Floors: Latex-portland cement conforming to ANSI A118.4.

Walls, and single unit shower stall floors: Job mixed, material proportions as indicated.

Bond Coat: Dryset mortar or latex-modified portland cement as determined by TCA recommendations.

Grout: ANSI A118.6, Latex modified portland cement.

* + - * 1. For indicated application, provide the following additional materials:

Walls:

Membrane: 4 mil polyethylene.

Lath: Galvanized or painted metal.

Lime: ASTM C 206, type S; or ASTM C 207, type S.

Single unit Shower Stalls:

Reinforcing: ASTM A82 and A185, 2 inch by 2 inch by 16/16 gage welded wire mesh.

* + 1. EXECUTION

include below for thinset tile.

* + - 1. preparation
         1. In presence of Installer, inspect substrate conditions for compliance with ceramic tile manufacturer's requirements, and suitability for indicated TCA installation method. Report, in writing, deleterious conditions to Owner's Representative.

usually include below.

Obtain Architect's written approval before beginning installation.

* + - 1. INSTALLATION
         1. In general, strictly comply with current Tile Council of America Handbook methods as follows:

EDIT FOLLOWING WITH TCA BOOKLET.

Over new and existing masonry walls: TCA Method W222.

Over new and existing concrete floors: TCA method F113.

In single shower stall floors: TCA method B414.

* + - * 1. Joint Pattern: Use grid pattern with 1/16" wide joints.

Floor Installations: Align parallel and perpendicular to walls.

Wall Installations: Align vertical and level.

* + - * 1. Install marble thresholds where shown on Drawings, and whether or not shown on Drawings as follows:

At edges of ceramic tile installation abutting dissimilar flooring materials (e.g. concrete, carpet, and quarry tile).

* + - 1. CLEANING AND PROTECTION
         1. Clean tile in accordance with applicable ANSI standard for type of tile and method of installation used and mfr's instructions.
         2. Apply heavy kraft paper or other heavy protective covering to prevent surface damage during construction operations.

END OF SECTION 093000