

**TILE****PART ONE: GENERAL****1.1 Description**

1.1.1 Work of this Section, as shown or specified, shall be provided by the Interior Contractor and shall be in accordance with the requirements of the Contract Documents.

1.1.2 Work includes providing, coordinating and installing all as indicated on drawings and specifications and as specified herein, including all labor, materials and equipment related to the complete installation. Work shall include, but not be limited to the following:

- a. Synthetic or agglomerated marble floor and wall Tile.
- b. Ceramic glazed or unglazed floor or wall Tile and base.
- c. Quarry Tile floor and matching base.
- d. Setting beds, grout and sealant.
- e. Marble saddles and agglomerated marble saddles.

1.1.3 Related work in other sections:

- a. Carpet Section 09680
- b. Painting Section 09920

**1.2 Submittals**

1.2.1 All submittals shall be made according to Section 01300 and as specified herein.

1.2.2 Submit the following to the Consultant for approval prior to delivery of Tile to job site.

- a. Two (2) full-size sample panels, approximately

12" x 12" (300 x 300 mm), mounted on hardboard back-up for each type, color, and pattern required, representative of the expected range of color and pattern variation. Sample submittals will be reviewed for color, texture and pattern only. Compliance with all other requirements is the exclusive responsibility of the Contractor.

- b. Submit 6" (150 mm) length of marble saddles.

### 1.3 Quality Assurance

1.3.1 Qualifications of installers: For cutting, installing and grouting of Tile, use only thoroughly trained and experienced journeyman Tile setters who are completely familiar with the requirements of this work, and the recommendations contained in the referenced standards.

1.3.2 Codes and standards: In addition to complying with all pertinent codes and regulations, comply with the following:

- a. Manufacturing of all ceramic tile to follow the Standard Grade Requirements of ANSI 136.1.
- b. Install all ceramic Tile in accordance with the recommendations contained in Handbook for Ceramic Tile Installation of the Tile Council of America, Inc., latest edition.

1.3.3 All work and materials shall conform to the drawings and specifications; any changes or deviations in materials or methods must be approved by the Consultant.

1.3.4 The Interior Contractor shall be responsible for taking accurate job site measurements for all dimensions related to the work prior to placing orders for Tile.

1.3.5 The Interior Contractor will not change brands of materials during the course of the work, unless approved by Consultant.

1.3.6 The Interior Contractor shall examine all conditions pertaining to the installation of Tile and shall provide all coordination as required to achieve the proper and timely completion of the installation.

#### **1.4 Product Handling**

1.4.1 Delivery and storage:

- a. Deliver all materials of this Section to the job site in their original unopened containers with all labels intact and legible at time of use.
- b. Store all materials under cover in a manner to prevent damage and contamination; store only the specified materials at the job site.

1.4.2 Protection: Maintain environmental conditions and protect the materials and work of this section before, during and after installation to comply with referenced standards and Manufacturer's printed recommendations and protect the installed work and materials of all other trades.

1.4.3 Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Owner and with no additional cost to the Owner.

### **PART TWO: PRODUCTS**

#### **2.1 Tile**

2.1.1 Provide Tile, base, saddles, and accessories from Manufacturer(s) in the styles, colors, sizes, and thickness specified herein and on drawings or from all approved equal (see Section 0100).

2.1.2 Provide trim, cove base and special shapes as required for complete installation. Unless otherwise shown on drawings or specifications base shall be of material, size, color and finish as follows:

- a. Same as wall Tile when both floor Tile and wall Tile are used.
- b. Same as floor Tile when only floor Tile is used and no wall Tile is used.
- c. In areas where floor Tile is used with some walls having wall Tile and some walls having another finish, base shall be verified with the Consultant.
- d. Submit proposed base Tile Condition to Consultant for approval prior to purchase of tile.

2.1.3 Provide external and internal corners, trim shapes at openings, and all other trim and special shapes to match the Tile Specified herein, as required by field conditions and drawing details.

2.1.4 Provide synthetic or agglomerated marble saddles of same marble as synthetic or agglomerated marble floor tile. Cut saddle to fit jamb profile, honed finish.

2.1.5 All quarry tiles shall come with a factory applied temporary wax coating to facilitate grout removal.

## **2.2 Setting Beds and Grout**

2.2.1 Setting beds and grout shall be as recommended by Tile Manufacturer for Tile type, location, and expected functional use.

## **2.3 Sealant**

2.3.1 Sealant shall be as recommended by Tile Manufacturer for Tile type, location and expected functional use.

2.3.2 Joint backing and bond breaker to be as recommended by sealant Manufacturer.

## **PART THREE: EXECUTION**

### **3.1 Inspection**

3.1.1 It is the responsibility of the Interior Contractor to see that the surface is properly prepared to receive Tile as specified.

3.1.2 Installation of Tile shall not commence if any unsatisfactory conditions for the proper installation have not been corrected.

### **3.2 Conditions of Surfaces**

3.2.1 Allowable variations in substrate levels:

- a. Floors: plus/minus 1/8" (3 mm) in 10'-0" (3 M) distance and 1/4" (6 mm) total maximum variation from levels shown.

3.2.2 Grind or fill concrete and masonry substrates as required to comply with allowable variations.

### **3.3 Preparation**

3.3.1 Treat each concrete substrate as may be required to remove curing compounds or other substances that would interfere with proper installation of Tile. Clean substrate of all traces of such treatment.

3.3.2 Perform moisture tests on concrete slabs to determine that concrete surfaces are sufficiently cured and are ready to receive tile installation.

3.3.3 When present, remove protection board from membrane waterproofing prior to Tile installation. Check membrane for holes, punctures, and defects.

3.3.4 Seal substrate with sealer as recommended by Manufacturer of mortar or adhesive. Apply concrete slab primer if recommended by Manufacturer, prior to application of the adhesive. Apply in compliance with Manufacturer's directions

### **3.4 Joints in Tile Work**

3.4.1 Joint widths, unless otherwise shown on drawings or specifications, shall be:

- a. 1/4" (6 mm) wide in quarry Tile.
- b. 1/16" (2 mm) wide in ceramic Tile.
- c. 1/8" (3 mm) wide in marble Tile

3.4.2 Alignment: Wall, base and floor joints shall align through the field and trim. Direction and location of all joints shall be as directed by Consultant.

3.4.3 Provide expansion joints as required and in accordance with TCA "Handbook for Ceramic Tile Installation". Notify Consultant of all expansion joints for proper detailing prior to installation.

### **3.5 Installation**

3.5.1 Allowable variations in finished work: Do not exceed the following deviations from level and plumb, and from elevations, locations, slopes and alignment shown.

- a. Floors: 1/8" (3 mm) in 10'-0" (3 M) run, any direction; 1/32" offset at any location.
- b. Walls: 1/8" (3 mm) in 8'-0" (2.4 M) run, any direction; 1/8" (3 mm) at any location; offset at any location, 1/32" (1 mm).
- c. Joints: +1/32" (1 mm) joint width variation of any location: 1/16" (2 mm) in 3'-0" (1 M) run deviation from plumb and true.

3.5.2 Comply with the following installation standards:

- a. Wall Tile using organic adhesive - ANSI A108.4.
- b. Wall Tile over masonry or concrete using dry set mortar - TCA Method W 213.

- c. Floor Tile using dry set mortar - ANSI A108.5.
- d. For quarry Tile - ANSI A108.6 and TCA Detail F-132.

3.5.3 Provide minimum temperature limits and installation practices as recommended by mortar and grout materials Manufacturers.

3.5.4 Handle, store, mix and apply setting and grouting materials in compliance with the Manufacturer's instructions.

3.5.5 Extend Tile work into recesses and under equipment and fixtures, to form a complete covering without interruptions. Terminate work neatly at obstructions, edges and corners without disruption of pattern or joint alignment.

3.5.6 Accurately form intersections and returns. Perform cutting and drilling of Tile without marring visible surfaces. Carefully grind cut edges of Tile abutting trim, finish, or built-in items for straight, aligned joints. Fit Tile closely to electrical outlets, piping and fixtures so that plates, collars, or covers overlap Tile.

3.5.8 Unless otherwise shown in drawings or specs, lay Tile in grid pattern and center Tile fields both directions in each space or on each wall area. Adjust to minimize Tile Cutting.

3.5.9 Install marble saddles cut to profiles and sizes shown, accurately fitted to jambs, coped at stops, set in full bed of mortar herein specified, and with grouted edge joints as specified for floor Tile.

3.5.10 Maintain reference markers, holes, or openings that are in place or plainly marked for future cutting by repeating on the finished Tile as marked in the subfloor. Use chalk or other non-permanent marking devices.

### **3.6 Cleaning and Protection of Tile**

3.6.1 Upon completion of placement and grouting, clean all

Tile surfaces so they are free of foreign matter, including any temporary wax coating.

- 3.6.2 Use cleaning materials and methods as recommended by tile and grout Manufacturer. Protect metal surfaces, cast iron and vitreous plumbing fixtures from effects of acid cleaning. Flush surface with clean water before and after cleaning.
- 3.6.3 Apply sealer finish to Tile as recommended by Tile Manufacturer. Apply to all clean completed Tile walls and floors a protective coating of neutral cleaner solution, 1 part cleaner to 1 part water, as recommended by tile and grout manufacturers.
- 3.6.5 Protect installed flooring from damage by use of covering as recommended by manufacturer during construction period to prevent damage and wear. Prohibit foot and wheel traffic from using Tiled floors for at least 3 days after grouting is completed. Before final inspection, remove protective coverings and rinse neutral cleaner from Tile surfaces.

**END OF SECTION**