

SECTION 09 30 00

TILING

PART 1 - GENERAL

1.01 SCOPE:

- A. Provide all of the labor, materials, equipment and services to furnish and install the porcelain tile and accessories as indicated on the Drawings and as specified herein.

1.02 SUBMITTALS:

- A. Prior to installation, submit to the Architect for review the following:
 - 1. Physical samples:
 - a. Tile and tile accessory pieces: Minimum 8 by 8 inches (203.2 by 203.2 mm) in size illustrating pattern, color variations, and grout joint size variations.
 - b. Grout for selection of color.
 - 2. Master Grade Certificate, signed by an officer of the firm manufacturing the tile used, and issued when the shipment is made, stating the grade, kind of tile, identification marks for tile containers, and the name and location of the Project.
- B. Maintenance and operation manual: Submit tile manufacturer's maintenance guides for Owner's use in maintaining all tile herein specified.
- C. Certification that all standards and requirements have been met. These shall include, but not be limited to:
 - 1. Delivery.
 - 2. Storage.
 - 3. Conditions under which the materials were installed.

1.03 QUALITY ASSURANCE:

- A. In addition to complying with all pertinent codes and regulations, comply with the following:
 - 1. "Handbook for Ceramic Tile Installation" (latest edition) as published by the Tile Council of America, Inc.
 - 2. "Recommended Standard Specifications for Ceramic Tile" (TCA 137.1-1976) as published by the Tile Council of American, Inc.
 - 3. ANSI Specifications: American National Standard Specification for Installation of Ceramic Tile - A108.1-1976; A108.4-1976; A108.5-1976; A108.6-1976; A108.7-1967 (R1976); A118.1-1976; A118.2-1967 (R1976); A136.1-1967 (R1972).

1.04 DELIVERY, STORAGE, AND HANDLING:

- 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. Prevent damage or contamination to materials by water, freezing, foreign matter and other causes.

1.05 PROJECT CONDITIONS:

- A. Maintain environmental conditions and protect work during and after installation to comply with referenced standards and manufacturer's printed recommendations.

- B. Vent temporary heaters to exterior to prevent damage to tile work from carbon dioxide buildup.
- C. Maintain temperatures at 50 deg. F or more in tiled areas during installation and for 7 days after completion, unless higher temperatures are required by referenced installation standard or manufacturer's instructions.

PART 2 – PRODUCTS

2.01 TILE

- A. Manufacturers:
 - 1. Basis of Design: Crossville Tile: www.crossvilleinc.com/#sle
 - 2. Substitutions: Not permitted unless product matches basis of design in color, texture, and is approved by the architect.
- B. Porcelain Tile – Full Body Porcelain: ANSI A137.1 standard grade.
 - 1. Moisture Absorption: 0 to 0.5 percent as tested in accordance with ASTM C373.
 - 2. Size: As indicated on drawings.
 - 3. Thickness: As indicated on drawings.
 - 4. Surface Finish: As indicated on drawings.
 - 5. Color(s): As indicated on drawings.
 - 6. Pattern: As indicated on drawings.
 - 7. Products:
 - a. As indicated on drawings.
 - b. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 TRIM AND ACCESSORIES

- A. Ceramic Trim: Matching bullnose ceramic shapes in sizes coordinated with field tile.
 - 1. Floor to Wall Joints where floor receives porcelain tile and wall is painted gypsum: bullnose base.
 - 2. Manufacturer: Same as for tile
- B. Metal Trim: Brushed stainless steel, style and dimensions to suit application, for setting using tile mortar or adhesive.
 - 1. Applications:
 - a. Floor transitions
 - b. Borders and other trim as indicated on drawings.
 - 2. Manufacturers:
 - a. Schluter-Systems: www.schluter.com/#sle.
 - b. Substitutions: See Section 01 60 00 - Product Requirements.

2.03 SETTING MATERIALS

- A. Provide setting and grout materials from same manufacturer.
- B. Manufacturers:
 - 1. ARDEX Engineered Cements: www.ardexamericas.com.
 - 2. Bostik Inc: www.bostik-us.com.
 - 3. Custom Building Products: www.custombuildingproducts.com.
 - 4. LATICRETE International, Inc: www.laticrete.com/sle.
 - 5. ProSpec, an Oldcastle brand: www.prospec.com.
 - 6. Substitutions: See Section 01 60 00 - Product Requirements.
- C. Latex-Portland Cement Mortar Bond Coat: ANSI A118.4.
 - 1. Applications: Use this type of bond coat where indicated, and where no other type of bond coat is indicated.
 - 2. Products:

- a. Custom Building Products; ProLite Premium Rapid Setting Large Format Tile Mortar, with Multi-Surface Bonding Primer:
www.custombuildingproducts.com/#sle.
 - b. H.B. Fuller Construction Products, Inc; TEC Ultimate Large Tile Mortar:
www.tecspecialty.com/#sle.
 - c. LATICRETE International, Inc; 257 TITANIUM: www.laticrete.com/#sle.
 - d. Substitutions: See Section 01 60 00 - Product Requirements.
- D. Mortar Bed Materials: Pre-packaged mix of Portland cement, sand, latex additive, and water.
 - 1. Products:
 - a. LATICRETE International, Inc; LATICRETE 3701 Fortified Mortar Bed:
www.laticrete.com/#sle.
 - b. Proflex Products, Inc; MSI - Mud Set Installation: www.proflex.us/#sle.
 - c. Substitutions: See Section 01 60 00 - Product Requirements.

2.04 GROUTS

- A. Provide setting and grout materials from same manufacturer.
- B. Manufacturers:
 - 1. Mapei, www.mapei.com/#sle.
 - 2. Substitutions: See Section 01 60 00 - Product Requirements.
- C. Epoxy Grout: ANSI A118.3 chemical resistant and water-cleanable epoxy grout.
 - 1. Applications: All floor tile.
 - 2. Color(s): As selected by Architect from manufacturer's full line.
 - 3. Products:
 - a. Mapei, www.mapei.com/#sle.
 - b. LATICRETE Internations, Inc.; www.laticrete.com/#sle.
 - c. Substitutions: See Section 01 60 00 - Product Requirements.

2.05 ACCESSORY MATERIALS

- A. Concrete Floor Slab Crack Isolation Membrane: Material complying with ANSI A118.12; not intended as waterproofing.
 - 1. Crack Resistance: No failure at 1/8 inch gap, minimum.
 - 2. Fluid or Trowel Applied Type:
 - a. Material: Synthetic rubber or Acrylic.
 - b. Thickness: 20 mils, maximum.
 - c. Products:
 - 1. LATICRETE International, Inc; LATICRETE Blue 92 Anti-Fracture Membrane: www.laticrete.com/#sle.
 - 2. Merkrete, by Parex USA, Inc; Merkete Fracture Guard:
www.merkrete.com/#sle.
- B. Waterproofing Membrane at Showers: Specifically designed for bonding to cementitious substrate under thick mortar bed or thin-set tile; complying with ANSI A118.10.
 - 1. Fluid or Trowel Applied Type:
 - a. Material: Synthetic rubber.
 - b. Material: Acrylic.
 - c. Thickness: 25 mils (0.6 mm), minimum, dry film thickness.
 - d. Products:
 - 1. ARDEX Engineered Cements; ARDEX 8+9:
www.ardexamericas.com/#sle.
 - 2. LATICRETE International, Inc; LATICRETE HYDRO BAN:
www.laticrete.com/#sle.
 - 3. USG Corporation; Durock Brand Liquid Waterproofing Membrane:
www.usg.com/#sle.

PART 3 - EXECUTION

3.01 TCA INSTALLATION METHODS:

- A. Tile shall be installed in accordance with the following TCA Installation Methods:
 - 1. Tile set with waterproof membrane: F-122.

3.02 LAYOUT:

- A. Determine location of all movement joints prior to beginning work.
- B. Layout all tile work so as to avoid cuts of less than one-half tile size.
- C. Locate cuts in both so as to be the least conspicuous.
- D. Align all wall joints to give straight uniform grout lines, plumb and level.
- E. Align floor tile joints square with walls, and make them uniform in width.
- F. Caulk expansion joints wherever tile butts a perpendicular surface.

3.03 CLEAN-UP:

- A. Remove debris daily while work is in progress. At completion of this work, leave entire work area in neat and work like condition satisfactory for receipt of other related items of work which are to be installed as part of other sections.
- B. Remove all grout haze, observing tile manufacturer's recommendations as to use of mild solution of muriatic acid and chemical cleaners. Rinse tile work thoroughly with water before and after using chemical cleaners.

- END OF SECTION -