

## SECTION 093000

**TILING**

## 1. GENERAL

1.01 GENERAL CONDITIONS The General Conditions, Supplementary General Conditions and all Sections of Division 1 shall apply to each and every contract and contractor, person or persons supplying material, labor or entering into the work directly or indirectly.

1.02 SCOPE This section includes all labor, materials, equipment and related services necessary for the fabrication, delivery and installation of the work shown on the drawings and or specified herein, including but not limited to the following:

- A. Ceramic mosaic tile floors.
- B. Glazed ceramic tile floors.
- C. Glass wall tile (unspecified- See Allowances)

1.03 QUALITY ASSURANCE

A. Reference Standards:

- 1. American National Standards Institute (ANSI): A108.1 Installation of Glazed Wall Tile, Ceramic Mosaic Tile, Quarry Tile and Paver Tile with Portland Cement Mortar.
- 2. American Society for Testing and Materials (ASTM): C 144 Aggregate for Masonry Mortar; and C 150-77 Portland Cement.
- 3. Federal Specifications (FS): TT-S-00227E (3) Sealing Compound Elastomeric Type, Multi-Component (for Caulking, Sealing and Glazing in Buildings and other Structures).
- 4. Tile Council of America, Inc. (TCA): TCA 137. Recommended Specifications for Ceramic Tile.

1.04 ALTERNATES: Refer to Division 1 to determine the extent to which work of this Section will be affected by any Alternates, Allowances or Unit Prices.

1.05 SUBMITTALS

- A. Submit two sample tiles for each color, pattern and type to be used. Obtain approval of job sample submittals before delivering any products to job site.
- B. Furnish manufacturer's instructions for use of mortars, adhesives and grouts.
- C. Extra Stock: Supply extra 2% of each tile used in clean, marked cartons.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver all products to job site in manufacturers original unopened containers with grade seals unbroken and labels intact.
- B. Keep tile cartons dry.
- C. Manufactured mortars and grouts to contain hallmarks certifying compliance with reference standards and be types recommended by the manufacturer for application.

- D. Deliver dry set mortar in sealed, moisture proof containers.
- E. Store materials under cover in manner to prevent damage or contamination.

## 1.07 JOB CONDITIONS

- A. Environmental
  - 1. Set and grout tile when ambient temperature is at least 50°F and rising.
  - 2. Maintain temperature at 50°F minimum for 7 days after completion.
  - 3. Vent temporary heaters to outside to avoid carbon dioxide damage to new tile work.
- B. Protection: Protect adjoining work surfaces before tile work begins.

## 2. PRODUCTS

### 2.01 TILE PRODUCTS

- A. Standard grade meeting requirements of TCA 137.1
- B. Acceptable manufacturer: Dal Tile.
- C. Porcelain paver floor tile, CT-1:
  - 1. Product: "City View" by Dal Tile .
  - 2. Colors to be selected by Architect from stock colors.
  - 3. Size: 12"x 24", 12"x 12" in pattern
  - 4. Grout Joint: 3/16"
  - 5. Bullnose and Base accessory tiles as required.
- E. Unglazed ceramic mozaic floor tile, CT-2:
  - 1. Product: "Keystone Shapes" by Dal Tile
  - 2. Size: 1" Rounded Corners Brickwork Pattern
  - 3. Colors: To be selected by Architect from Price Group 1 and 2
  - 4. Base and Cove accessory tiles to form 4" nominal base.

### 2.02 SETTING MATERIALS

- A. General: Setting materials used shall be in conformance with the recommendations set forth in the Tile Council of America's Handbook for Ceramic Tile Installation.
- B. Dry-Set Mortars: ANSI A118.1, American Olean thin set mortar (white).

### 2.03 GROUTING MATERIALS

- A. Ceramic Tile Wall and Floors: American Olean sanded floor grout latex portland cement. Color selected by Architect from standard range of colors.

## 3. EXECUTION

### 3.01 INSPECTION OF SURFACES

- A. Inspection:
  - 1. Examine surfaces to receive ceramic tile, setting, beds or accessories before tile installation begins for:
    - a. Defects or conditions adversely affecting quality and execution of tile installation.

- b. Deviations beyond allowable tolerance of surfaces to receive tile.
  - (1) Dry-set mortar method:
    - (a) Maximum variation in sub-floor surface: 1/8" in 10'.
    - (b) Maximum variation in wall surface: 1/8" in 8'.

B. Condition of surfaces to receive tile:

- 1. Surfaces to be firm, dry, clean and free of oily or waxy films.
- 2. Grounds, anchors plugs, hangers, bucks, electrical and mechanical work in or behind tile to be installed prior to proceeding with tile work.

3.02 INSTALLATION

A. Ceramic wall tile:

- 1. Organic adhesive set.
- 2. Install in accordance with TCA W242.
- 3. ANSI A108.4

B. Ceramic Floor Tile:

- 1. Latex portland cement.
- 2. Install in accordance with TCA F113.
- 3. ANSI A118.4

3.03 PROTECTION

- A. Protection from construction dirt: cover all tile floors with heavy duty, non-staining construction paper, masked in place.
- B. Protection from traffic: Prohibit all foot and wheel traffic from using newly tiled floors for at least 3 days, preferably 7 days. Place large flat boards in walkways where use of newly tiled floors is unavoidable.

END OF SECTION