SECTION 09310

CERAMIC TILE

PART 1 - GENERAL

1.01 SUMMARY

A. Provide ceramic tile where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.

B. Related work:
1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
2. Section 06600 – Solid Surface Fabrication.

C. Codes: Materials and work shall conform to the governing Building Code. In case of conflict between these specifications, the standard specifications, and the Building Code, the more stringent shall govern.

1.02 SUBMITTALS

A. Comply with pertinent provisions of Section 01300.

B. Product data: Within 30 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
1. Materials list of items proposed to be provided under this Section.
2. Manufacturers' specifications and other data needed to prove compliance with the specified requirements.
3. Samples of each type, class, and color of ceramic tile required, not less than one unit size as called for on Drawings, (for example: submit 12" square samples of a 12" tile, 2" square samples of a 2" tile) mounted on plywood or hardboard backing, and grouted as specified.

C. Except when specifically exempted by the Architect, submit Master Grade Certificates for each shipment of ceramic tile prior to arrival of the shipment at the job site.

1.03 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B. Provide manufacturer's Master Grade Certificate stating type and location of each tile material in this Section.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Comply with pertinent provisions of Section 01600.

PART 2 - PRODUCTS

2.01 CERAMIC TILE

A. Provide ceramic tile and accessories complying with Tile Council of America Specification 137.1, in colors and patterns selected by the Architect from standard colors and patterns of the following manufacturers.
   1. Dal-Tile, 17511 Valley View Street, Cerritos, CA 90703 (714) 521-5224.

B. Floor tile:
   1. Provide coefficient of friction not less than 0.50 when tested in accordance with ASTM F489, ASTM F609, and the National Bureau of Standards Technical Note 895.
   2. Provide unglazed or glazed floor tiles in sizes and types as noted on the Drawings.
   3. T10B to be used as contrast band @ 2" per Architect's detail.

C. For wall surfaces, provide matte or glazed units in sizes and types as noted on the Drawings and Specifications.

D. Provide standard accessory shapes and trim as required.

E. Provide caulking or sealants which match the material color.

2.02 SETTING MATERIALS

A. Comply with pertinent recommendations contained in the Tile Council of America "Handbook for Ceramic Tile Installation".

B. On walls and floors of rooms where ceramic tile is called for on the Drawings, use dry set mortar:
   1. Provide a commercially prepared mixture of Portland cement, sand, and additives imparting water-retentivity, for use as a bond coat for setting tile.
   2. Comply with ANSI A118.1 and ANSI 108.5; except where specifically indicated on the Drawings or directed in advance by the Architect, provide conductive dry-set mortar complying with ANSI A118.2.

2.03 GROUT

A. Comply with pertinent recommendations contained in the Tile Council of America "Handbook for Ceramic Tile Installation" in colors selected by the Architect from standard colors available from the approved manufacturers shown on the Drawings as G1, G2, G3.

B. Dry-set grout:
   1. Provide a commercially prepared mixture of Portland cement and additives producing water-retentivity, and suitable for grouting all walls and floors subject to ordinary use.
   2. Provide a product licensed by the Tile Council of America, and bearing that license symbol.
   3. Comply with all provisions of ANSI A108.10 and ANSI A118.6.

2.04 OTHER MATERIALS

A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

B. Test for moisture content of concrete slab and walls prior to installation to verify moisture content meets minimum level as recommended by the manufacturer, and complying with all provisions of ANSI A108.10 and ANSI A118.6.

3.02 INSTALLATION

A. General:
1. Comply with ANSI A108.1, ANSI A108.2, and the "Handbook for Ceramic Tile Installation" of the Tile Council of America, except as otherwise directed by the Architect or specified herein.
2. Maintain minimum temperature limits and installation practices recommended by materials manufacturers.
3. Do not install tile floors over membrane until the membrane has been tested and accepted.

B. Limits of tile:
1. Extend tile into recesses and under equipment and fixtures to form a complete covering without interruptions.
2. Terminate tile neatly at obstructions, edges, and corners, without disruption of pattern or joint alignment.

C. Joining pattern:
1. Lay tile in grid pattern unless otherwise indicated on the Drawings or directed by the Architect. See wall and floor patterns shown on Drawings.
2. Align joints when adjoining tiles on floor, base, trim, and walls are the same size.
3. Layout tile work, and center the tile fields both directions in each space or on each wall area.
4. Adjust to minimize tile cutting.
5. Provide uniform joint widths.

D. Provide expansion and control joints where shown on the Drawings, and where otherwise recommended by the "Handbook for Ceramic Tile Installation" of the Tile Council of America, sealing in accordance with Section 07920 of these Specifications.

E. Cleaning:
   1. Upon completion of placing and grouting, clean the work of this Section in accordance with recommendations of the manufacturers of the materials used.
   2. Protect metal surfaces, cast iron, and vitreous items from effects of acid cleaning.
   3. Flush surfaces with clean water before and after cleaning.

F. Provide tile surfaces clean and free from cracked, broken, chipped, unbonded, and otherwise defective units.

G. Provide required protection of tile surfaces to prevent damage and wear prior to acceptance of the Work by the Owner.

END OF SECTION - 09310