SECTION 09 30 00
TILING

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Ceramic tile.
2. Crack isolation membrane.
3. Metal edge strips.

1.02 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples:
1. Each type and composition of tile and for each color and finish required.
2. Assembled samples, with grouted joints, for each type and composition of tile and for each color and finish required.
3. Edge trim in 6-inch lengths.

1.03 EXTRA MATERIALS

A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering and identified with labels describing contents.
1. Quantity: One box.

PART 2 - PRODUCTS

2.01 TILE PRODUCTS

A. Tile:
1. Manufacturer and Style: Crossville; Mountain Stone.
2. Color: Blue Ridge AV36.
3. Size: 12 by 12 inches.
4. Base: 4 by 12 inches, cove.

2.02 CRACK ISOLATION MEMBRANE

A. Fabric-Reinforced, Fluid-Applied Membrane: System consisting of liquid-latex rubber or elastomeric polymer and fabric reinforcement.
1. Products: Subject to compliance with requirements, provide one of the following:
a. Boiardi Products; a QEP company; Elastiment 344 Reinforced Waterproofing and Anti-Fracture/Crack Suppression Membrane.
b. Prospec; B 6000 Waterproof Membrane with Glass Fabric.
c. Custom Building Products; 9240 Waterproofing and Anti-Fracture Membrane.

d. Laticrete International, Inc.; Laticrete 9235 Waterproof Membrane.
e. MAPEI Corporation; Mapelastic L (PRP M19).

2.03 SETTING MATERIALS

A. Latex-Portland Cement Mortar (Thin Set): ANSI A118.4.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
a. Boiardi Products; a QEP company.
b. Prospec.
c. Custom Building Products.
d. Laticrete International, Inc.
e. MAPEI Corporation.
2. Prepackaged, dry-mortar mix combined with liquid-latex additive.

2.04 GROUT MATERIALS

A. Polymer-Modified Tile Grout: ANSI A118.7.
1. Basis-of-Design: Subject to compliance with requirements, provide Mapei; Ultracolor, color #19 Pearl Gray, or comparable product by one of the following:
a. Boiardi Products; a QEP company.
b. Prospec.
c. Custom Building Products.
d. Laticrete International, Inc.
2. Polymer Type: Liquid-latex form for addition to prepackaged dry-grout mix.

B. Grout Sealer: Manufacturer's standard product for sealing grout joints and that does not change color or appearance of grout. Provide product manufactured by or recommended by manufacturer of grout.

2.05 MISCELLANEOUS MATERIALS

A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.

B. Metal Edge Strips: Schluter; AETK-100; satin anodized aluminum.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of installed tile.
1. Verify that substrates for setting tile are firm, dry, clean, free of coatings that are incompatible with tile-setting materials including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.

3.02 PREPARATION

A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with thin-set mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.

B. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot toward drains.

C. Blending: For tile exhibiting color variations, use factory blended tile or blend tiles at Project site before installing.

3.03 INSTALLATION

A. Comply with TCA's "Handbook for Ceramic Tile Installation" for TCA installation methods specified. Comply with parts of the ANSI A108 Series "Specifications for Installation of Ceramic Tile" that are referenced in TCA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.
   1. For installations including tile 8 inches or larger in any dimension, follow procedures in the ANSI A108 Series of tile installation standards for providing 95 percent mortar coverage:
   2. Tile Installation Method: Thin-set mortar on crack isolation membrane; TCA F125A.
      a. Thin-Set Mortar: Latex-portland cement mortar.
      b. Grout: Polymer-modified sanded grout.

B. Install crack isolation membrane to comply with ANSI A108.17 and manufacturer's written instructions to produce membrane of uniform thickness and bonded securely to substrate.
   1. Partial Coverage: Treat cracks in substrate 1/32 inch wide or greater.

C. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.

D. 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, fixtures, and other penetrations so plates, collars, or covers overlap tile.

E. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.

F. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
   1. Paver Tile: 1/4 inch.

G. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated. Form joints during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.

1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them.
2. Prepare joints and apply sealants to comply with requirements in Division 07 Section "Joint Sealants."

H. Metal Edge Strips: Install where exposed edge of tile flooring meets carpet, wood, or other flooring that finishes flush with top of tile.

I. Grout Sealer: Apply grout sealer to grout joints in tile floors according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

END OF SECTION 09 30 00