SECTION 093013 - CERAMIC TILING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product data and Samples of each tile product, accessory trim.

B. Obtain tile of each type and color or finish from same production run for each contiguous area.

C. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use.

PART 2 - PRODUCTS

2.1 CERAMIC TILE

A. Ceramic tile that complies with ANSI A137.1.

B. Ceramic Tile Type: Refer to Interior drawing series for selected porcelain tile and accessories, ***PT-1, PT-2, PT-3, B2, B3*** and transition trim **EP1, EP2** and **EP3**; similar quality equals may be submitted for review and approval by Interior Designer and Architect, based on the level of material quality identified in drawing series.

1. Manufacturers: Subject to compliance with requirements, provide products by the following:

   a. Based on Happy Floors *Baltimore* series.
   b. Approved similar equal products.

2. Composition: Porcelain.
3. Surface: Slip resistant, with abrasive admixture.
4. Module Size: Based on representative sizes indicated in Interior series of drawings.
5. Finish: Based on representative sizes indicated in Interior series of drawings
6. Color and Pattern: As selected.
7. Grout Color: As selected.
8. Trim Units: Coordinated with sizes and coursing of adjoining flat tile and matching characteristics of adjoining flat tile. Refer to accessory products indicated in Interior series of drawings and material notes.

2.2 INSTALLATION MATERIALS

A. Cementitious Backer Units: ANSI A118.9 or ASTM C 1325, 1/2 inch (12.7 mm) thick.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Custom Building Products.
b. Georgia-Pacific Gypsum LLC.
c. USG Corporation.

B. Fiber-Cement Underlayment: ASTM C 1288, 1/2 inch (12.7 mm) thick.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. CertainTeed Corporation.
b. Custom Building Products.
c. James Hardie Building Products, Inc.

C. Low-Emitting Materials: Adhesives and fluid-applied waterproofing membranes shall comply with Section 018113.16 - Sustainable Design Requirements - LEED 2009 for Commercial Interiors.

D. Waterproofing Membranes for Thinset Installations: ANSI A118.10, fabric-faced chlorinated polyethylene, PVC, or polyethylene sheet product.

E. Setting and Grouting Materials: Comply with material standards in ANSI's "Specifications for the Installation of Ceramic Tile" that apply to materials and methods indicated.

1. Portland Cement Mortar (Thickset) Installation Materials: ANSI A108.02; use white cement unless otherwise indicated.
2. Thinset Mortar Type: Improved modified dry-set, ANSI A118.15 mortar; white, unless otherwise indicated.

a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1) Bonsal American, an Oldcastle company.
2) Bostik, Inc.
3) Custom Building Products.
4) MAPEI Corporation.

3. Thinset Mortar Type for Wood Subfloors: EGP (exterior glue plywood) latex-portland cement mortar, ANSI A118.11.

a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1) Bonsal American, an Oldcastle company.
2) Bostik, Inc.
3) Custom Building Products.
4) MAPEI Corporation.

4. Water-Cleanable, Tile-Setting Epoxy:

a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1) ARDEX Americas.
2) Custom Building Products.
3) MAPEI Corporation.

5. Organic Adhesive: ANSI A136.1, Type I.

a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1) ARDEX Americas.
2) Custom Building Products.
3) MAPEI Corporation.

6. Grout Type: Water-cleanable epoxy, unless otherwise indicated.

a. Manufacturers: Subject to compliance with requirements, provide products similar to *Custom Building Products* **GR1** & **GR2**, indicated in the Interior series of drawings

1) Custom Building Products, Inc.
2) ARDEX Americas.
3) MAPEI Corporation.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of ANSI A108 Series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, are specified in tile installation schedules, and apply to types of setting and grouting materials used.

B. 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.

C. Lay tile in grid pattern unless otherwise indicated. Align joints where adjoining tiles on floor, base, walls, and trim are the same size.

D. Install cementitious backer units, and treat joints according to ANSI A108.11.

E. Install waterproofing to comply with ANSI A108.13.

F. Do not install tile over waterproofing until waterproofing has cured and been tested to determine that it is watertight.

G. Install stone thresholds in same type of setting bed as adjacent floor unless otherwise indicated. At locations where mortar bed (thickset) would otherwise be exposed above adjacent floor finishes, set thresholds in modified dry-set mortar (thinset).

H. Interior Floor Tile Installation Method(s):

1. Over Concrete Subfloors: TCNA F113; thinset mortar and for Shower Room: TCNA F116; water-cleanable, tile-setting epoxy.
2. Over Wood Subfloors: TCNA F143; water-cleanable, tile-setting epoxy, epoxy grout TCNA F144; thinset mortar on cementitious backer units or fiber-cement underlayment.
3. Over Waterproof Membranes on Wood Subfloors: TCNA F144; water-cleanable, tile-setting epoxy on cementitious backer units or fiber-cement underlayment.

I. Interior Wall Tile Installation Method(s):

1. Over Concrete and Masonry: TCNA W202; thinset mortar.
2. Over Waterproof Membrane on Concrete and Masonry: TCNA W221; cement mortar bed on metal lath.
3. Over Wood or Metal Studs or Furring: TCNA W244C or TCNA W244F; thinset mortar on cementitious backer units or fiber-cement underlayment over vapor retarder membrane.
4. Bathtub/Shower Wall Installations, Wood or Metal Studs or Furring: TCNA B412; water-cleanable, tile-setting epoxy on cementitious backer units or fiber-cement underlayment over vapor retarder membrane.
5. Shower Receptor and Wall Installations: TCNA B415; water-cleanable, tile-setting epoxy on waterproof membrane over cementitious backer units or fiber-cement underlayment.

END OF SECTION 093013