SECTION 09310 - CERAMIC TILE

PART 1 - GENERAL

SUMMARY

This Section includes the following:

Adjust list below to suit Project.

Quarry tile.

Stone thresholds installed as part of tile installations.

Waterproof membrane for thin set tile installations.

Crack-suppression membrane for thin-set tile installations.

SUBMITTALS

Product Data: For each product indicated.

Shop Drawings: Show locations of each type of tile and tile pattern. Show widths, details, and locations of expansion, contraction, control, and isolation joints.

EXTRA MATERIALS

Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed, for each type, composition, color, pattern, and size indicated.

PART 2 - PRODUCTS

MANUFACTURERS

In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:

Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

TILE PRODUCTS

Manufacturers:

American Olean; Div. of Dal-Tile International Corp.

ANSI Ceramic Tile Standard: Provide Standard grade tile that complies with ANSI A137.1, "Specifications for Ceramic Tile," for types, compositions, and other characteristics indicated.

Products:

American Olean Quarry Natural, 6"x6".

Unglazed Quarry Tile: Square-edged flat tile as follows:

Wearing Surface: Nonabrasive, smooth.

Facial Dimensions: 6 by 6 inches (152 by 152 mm).

Thickness: 3/8 inch (9.5 mm).

Face: Plain.

Quarry Tile Trim Units: Matching characteristics of adjoining flat tile and coordinated with sizes and coursing where applicable.

Base: Coved with surface bullnose top edge, facial dimensions 8 by 3-7/8 inches (203 by 98 mm).

ACCESSORY MATERIALS

Thresholds: Fabricate to provide transition between adjacent floor finishes. Bevel edges at 1:2 slope, limit height of bevel to 1/2 inch (12.7 mm) or less, and finish bevel to match face of threshold.

Marble Thresholds: ASTM C 503 with a minimum abrasion resistance of 10 per ASTM C 1353 or ASTM C 241 and with honed finish.

Description: Uniform, fine- to medium-grained white stone with gray veining.

Waterproofing and Crack Suppression Membranes Thin-Set Tile Installations: Manufacturer's standard product that complies with ANSI A118.10 selected from the following:

Chlorinated-Polyethylene-Sheet Product: Nonplasticized, chlorinated polyethylene faced on both sides with nonwoven polyester fabric, 0.030-inch (0.76-mm) nominal thickness.

Product: Noble Company (The); Nobleseal TS.

PVC-Sheet Product: Two layers of PVC sheet heat-fused together and to facings of bondable nonwoven polyester, 0.040-inch (1.01-mm) nominal thickness.

Product: Compotite Corporation; Composeal Gold.

Polyethylene-Sheet Product: Polyethylene faced on both sides with fleece webbing, 0.008-inch (0.203-mm) nominal thickness.

Product: Schluter Systems L.P.; KERDI.

Corrugated-Polyethylene Product: Polyethylene with dovetail-shaped corrugations and with anchoring webbing on the underside, 3/16-inch (4-mm) nominal thickness.

Product: Schluter Systems L.P.; DITRA.

Fabric-Reinforced, Modified-Bituminous Sheet Product: SBS-modified-bituminous sheet with woven reinforcement facing, 0.040-inch (1.01-mm) nominal thickness.

Product: National Applied Construction Products, Inc.; Strataflex.

SETTING AND GROUTING MATERIALS

Manufacturers:

Atlas Minerals & Chemicals, Inc.

Boiardi Products Corporation.

Bonsal, W. R., Company.

Bostik.

C-Cure.

Custom Building Products.

DAP, Inc.

Jamo Inc.

LATICRETE International Inc.

MAPEI Corporation.

Southern Grouts & Mortars, Inc.

Summitville Tiles, Inc.

TEC Specialty Products Inc.

Dry-Set Portland Cement Mortar (Thin Set): ANSI A118.1.

Latex-Portland Cement Mortar (Thin Set): ANSI A118.4.

Prepackaged dry-mortar mix combined with liquid-latex additive.

Organic Adhesive: ANSI A136.1, Type I.

Standard Sanded Cement Grout: ANSI A118.6, gray.

MISCELLANEOUS MATERIALS

Elastomeric Sealants: Elastomeric sealants of base polymer and characteristics indicated that comply with applicable requirements in Division 7 Section "Joint Sealants."

Multipart, Pourable Urethane Sealant for Use T: ASTM C 920; Type M; Grade P; Class 25; Uses T, M, A, and, as applicable to joint substrates indicated, O.

Products:

Bostik; Chem-Calk 550.

Mameco International, Inc.; Vulkem 245. Pecora Corporation; NR-200 Urexpan.

Tremco, Inc.; THC-900.

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

Grout Sealer: Manufacturer's standard product for sealing grout joints that does not change color or appearance of grout.

PART 3 - EXECUTION

PREPARATION

Remove coatings, including curing compounds and other substances that contain soap, wax, oil, or silicone, that are incompatible with tile-setting materials.

Fill cracks, holes, and depressions with trowelable leveling and patching compound according to tile-setting material manufacturer's written instructions.

Remove protrusions, bumps, and ridges by sanding or grinding.

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

Field-Applied Temporary Protective Coating: Where indicated under tile type or needed to prevent grout from staining or adhering to exposed tile surfaces, precoat them with continuous film of temporary protective coating, taking care not to coat unexposed tile surfaces.

INSTALLATION, GENERAL

ANSI Tile Installation Standards: Comply with parts of ANSI A108 Series "Specifications for Installation of Ceramic Tile" that apply to types of setting and grouting materials and to methods indicated in ceramic tile installation schedules.

TCA Installation Guidelines: TCA's "Handbook for Ceramic Tile Installation." Comply with TCA installation methods indicated in ceramic tile installation schedules.

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.

Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Grind cut edges of tile abutting trim, finish, or built-in items. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

Jointing Pattern: Lay tile in grid pattern, unless otherwise indicated. Align joints when adjoining tiles on floor, base, walls, and trim are same size. Lay out tile work and center tile fields in both directions in each space or on each wall area. Adjust to minimize tile cutting. Provide uniform joint widths, unless otherwise indicated.

Install waterproofing to comply with ANSI A108.13 and waterproofing manufacturer's written instructions to produce waterproof membrane of uniform thickness bonded securely to substrate.

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

Install tile on floors with the following joint widths:

Quarry Tile: 1/4 inch (6.35 mm).

Stone Thresholds: Install stone thresholds at restroom doors; set in same type of setting bed as abutting field tile, unless otherwise indicated.

FLOOR TILE INSTALLATION SCHEDULE

Interior floor installation on concrete: thin-set mortar: TCA F113.

Thin-Set Mortar: Latex - portland cement mortar.

Grout: Standard sanded cement grout.

Interior floor installation on wood; organic adhesive; TCA F142.

Grout: Polymer-modified sanded grout.

END OF SECTION 09310