

## SECTION 09 30 13

### CERAMIC TILING

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Tile for floor applications.
- B. Tile for wall applications.
- C. Cementitious backer board as tile substrate.

##### 1.02 RELATED REQUIREMENTS

- A. Section 09 21 16 - Gypsum Board Assemblies: Installation of tile backer board.

##### 1.03 REFERENCE STANDARDS

- A. TCNA (HB) - Handbook for Ceramic, Glass, and Stone Tile Installation; 2013.1.

##### 1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by all affected installers.

##### 1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
- C. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 01 60 00 - Product Requirements, for additional provisions.
  - 2. Extra Tile: 2 percent of each size, color, and surface finish combination.

##### 1.06 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing tile installation, with minimum of 5 years of documented experience.

##### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

##### 1.08 FIELD CONDITIONS

- A. Do not install solvent-based products in an unventilated environment.
- B. Maintain ambient and substrate temperature of 50 degrees F during installation of mortar materials.

#### PART 2 PRODUCTS

##### 2.01 PORCELAIN TILE

- A. Manufacturers: As indicated on the Finish Schedule on the drawings.
  - 1. Substitutions: None.

##### 2.02 CERAMIC TILE

- A. Manufacturers: As indicated on the Finish Schedule on the drawings.
  - 1. Substitutions: None.

##### 2.03 SETTING MATERIALS

- A. Provide setting materials made by the same manufacturer as grout.
- B. Latex-Portland Cement Mortar Bond Coat: ANSI A118.4.

1. Application(s): Use this type of bond coat where indicated and where no other type of bond coat is indicated.

#### **2.04 ADHESIVE MATERIALS**

- A. Manufacturers:
  1. Bonsal American, Inc: [www.sakrete.com](http://www.sakrete.com)
  2. Bostik Inc: [www.bostik-us.com](http://www.bostik-us.com).
  3. Mapei Corporation: [www.mapei.com](http://www.mapei.com).
  4. Substitutions: See Section 01 60 00 - Product Requirements.

#### **2.05 GROUTS**

- A. Manufacturers:
  1. Custom Building Products: [www.custombuildingproducts.com](http://www.custombuildingproducts.com).
  2. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Standard Grout: ANSI A118.6 standard cement grout.
  1. Applications: Use this type of grout where indicated and where no other type of grout is indicated.
  2. Use sanded grout for joints 1/8 inch wide and larger; use unsanded grout for joints less than 1/8 inch wide.
  3. Color(s): As scheduled.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.
- C. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of setting materials to sub-floor surfaces.
- D. Verify that concrete sub-floor surfaces are ready for tile installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by tile manufacturer and setting materials manufacturer.
- E. Verify that required floor-mounted utilities are in correct location.

#### **3.02 PREPARATION**

- A. Protect surrounding work from damage.
- B. Vacuum clean surfaces and damp clean.
- C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
- D. Install backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of setting material to a feather edge.

#### **3.03 INSTALLATION - GENERAL**

- A. Install tile and thresholds and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and The Tile Council of North America Handbook recommendations.
- B. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints.
- C. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout.
- D. Form internal angles square and external angles bullnosed.

- E. Install thresholds where indicated.
- F. Sound tile after setting. Replace hollow sounding units.
- G. Keep expansion joints free of adhesive or grout. Apply sealant to joints.
- H. Prior to grouting, allow installation to completely cure; minimum of 48 hours.
- I. Grout tile joints.
- J. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.

#### **3.04 INSTALLATION - WALL TILE**

- A. Over cementitious backer units on studs, install in accordance with The Tile Council of North America Handbook Method W244.
- B. Over interior concrete and masonry install in accordance with TCA Handbook Method W202, thin-set with dry-set or latex-portland cement bond coat.

#### **3.05 CLEANING**

- A. Clean tile and grout surfaces.

#### **3.06 PROTECTION**

- A. Do not permit traffic over finished floor surface for 4 days after installation.

**END OF SECTION**