

**SECTION 09 9313  
PORCELAIN TILE FLOATING FLOOR SYSTEM**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Floating porcelain tile system consisting of porcelain tile adhered to a interlocking tray with a non-skid, rubberized sound-deadening grid that is a self-leveling and crack isolating system.
  - 2. Flexible grout.
- B. Related Requirements:
  - 1. Section 09 09300 - Tiling
  - 2. Division 23: In-floor heating system.

**1.02 SUBMITTALS**

- A. Comply with Section 01 3300.
- B. Product data indicating compliance with specified requirements.
- C. Installation instructions.
- D. Samples.

**1.03 MAINTENANCE**

- A. Maintenance Instructions: Include precautions against cleaning materials and methods that may be detrimental to finish and performance.

**1.04 QUALITY ASSURANCE**

- A. Mock-ups: Prepare mock-ups for Architect's review and to establish requirements for substrate finish and final application.
  - 1. Install mock-up in area designated by Architect.
  - 2. Correct areas, modify method of application/installation as directed by Architect to comply with specified requirements.
  - 3. Maintain mock-ups accessible to serve as a standard of quality for this Section.
  - 4. Installer: Experienced in installing floating tile systems.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials in original factory wrappings and containers, clearly labeled with manufacturer and brand name.
- B. Store materials in original undamaged packages and containers inside a well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.

**1.06 SITE CONDITIONS**

- A. Maintain ambient temperature within building at not less than 68 deg F minimum 72 hours prior to beginning of installation.
- B. Provide adequate light to properly inspect tile and grout installation.

**1.07 WARRANTY**

- A. Manufacturer's 5 year limited material warranty.

## PART 2 - PRODUCTS

### 2.01 SYSTEMS

- A. Manufacturer: **Avaire**® by CoMc, 13423 F Street, Omaha, NE 68137, 866-416-7627
  - 1. E-Mail: info@avairefloors.com
  - 2. Web: www.avairefloors.com

### 2.02 PERFORMANCE CRITERIA

- A. Performance Characteristics:
  - 1. ASTM C627 (Robinson Test): [Light Commercial] [Heavy Residential]
  - 2. Impact Insulation Class (IIC): 58.
  - 3. Water Absorption: Less than 0.5% per ASTM M373.
  - 4. Co-efficient of Friction: Greater than 0.6.
  - 5. Porcelain Enamel Institute (PEI) rating: 4.

### 2.03 MATERIALS

- A. Porcelain Tile: Manufacturer's interlocking, non-skid grid type.
  - 1. 12x12-inch
    - a. Color: As selected from Manufacturer's standard colors.
  - 2. 6x6-inch
    - a. Color: As selected from Manufacturer's standard colors.
- B. Adhesive: Eclectic E-6000.
- C. Grout: Manufacturer's standard flexible type.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine areas and conditions in which porcelain tile floating floor system will be installed.
  - 1. Complete finishing operations, including painting, before beginning installation.
  - 2. Do not proceed with installations until unsatisfactory conditions have been corrected.

### 3.02 PREPARATION

- A. Remove existing carpeting, padding, base or moldings.
- B. Undercut door casings and jambs. Cut or plane the bottom of the door to accommodate the change in floor height.
- C. Sub-floor: Flat within a tolerance of 1/4-inch in 10-feet or 1/8-inch in 6-feet. Plane or sand high spots. Fill low spots portland cement based leveling compound.
- D. Minimum sub-floor thickness:
  - 1. 23/32" (3/4") for wood sub-floors with 16" or 19.2 OC joist spacing.
  - 2. 27/32" (7/8") for wood sub-floors with 24" OC joist spacing.
  - 3. Deflection: 1/360 of span.
- E. Sub-floor: Clean, smooth, dry, and structurally sound before installing tile.
- F. Complete casework installation prior to tile installation.

### 3.03 INSTALLATION

- A. Comply with manufacturers printed installation instructions.
- B. Installation:
  - 1. Start installation at the center of the room or at a wall.
  - 2. Assemble tiles in sequence - do not install a tile between two other tiles.
  - 3. Install tiles in any direction.
  - 4. Ensure tabs are fully interlocked and grout intersections are aligned.
  - 5. Maintain 1/4-inch expansion joint at perimeter.
  - 6. Cut tile with a wet saw, tile cutter, or angle grinder with a diamond blade designed for cutting porcelain tile.
- C. Grouting:
  - 1. Grout floor immediately following tile installation.

2. Apply grout using a sharp-edged rubber grout float. With a float at a 45 degree angle, fully pack grout joints. With float at a 90 degree angle, remove excess grout using the float like a squeegee.
3. Remove grout haze as grouting progresses. Use water and a sponge to clean grout every 9-12 sq ft. Lightly wipe grout joints in a circular motion, loosening grout residue while smoothing grout. Wipe loosened grout residue in diagonal streaks, rinsing sponge after every pass.
4. Check grout as cleaning progresses. Repair low spots.
5. Use manufacturers recommended cleaner to remove persistent grout haze from tiles.

#### 3.04 PROTECTION

- A. Protect installed product and finish surfaces from damage during construction.
- B. Wait 24 hours before allowing light traffic.
- C. Wait 72 hours before allowing heavy traffic.
- D. Do not expose grout to stains or cleaners for 7 days.
- E. Do not seal grout.

END OF SECTION