



## Sections 09 30 19 Paver Tiling

*Guide Specification; for installation of Marion Ceramics, Thin Brick Tiles; Flooring, Veneer*

### **PART 1 GENERAL**

#### **1.1 SUMMARY**

- A. Related Documents: General and Supplementary Conditions of Contract, Division 1 General Requirements, and Drawings are applicable to this Section.
- B. Section Includes:
  - 1. Waterproofing Membrane
  - 2. Thin-brick Paver Tiling Installed using the Thinset or Mortar bed method.
  - 3. Cementitious Grout
  - 4. Concrete Repair

#### **1.2 REFERENCES**

- A. American National Standards Institute (ANSI);
  - 1. A108.01 - General Requirements: Subsurfaces and Preparations by Other Trades
  - 2. A108.02 - General Requirements: Materials. Environment, and Workmanship.
  - 3. A118.4 - Latex-Portland Cement Mortar
  - 4. A118.6 - Standard Cement Grout
  - 6. A118.7 - Polymer Modified Cement Grout
  - 6. A118.10 - Load Bearing, Bonded, Waterproof Membranes
  - 7. A118.12 - Crack Isolation Membranes for thin set
- B. INTERNATIONAL STANDARDS ORGANIZATION (ISO)
  - 1. ISO 13007- Part 1:2004, Ceramic tiles - Grouts and adhesives specifies the values of performance requirements for all tile adhesives,
  - 2. ISO 13007- Part 2:2005, Ceramic tiles - Grouts and adhesives  
Test methods for adhesives.
  - 3. ISO 13007- Part 3:2005, Ceramic tiles - Grouts and adhesives.  
Terms, definitions and specifications for grouts.
  - 4. ISO 13007-Part 4: 2005, Ceramic tiles - Test methods for grouts.
    - a. Adhesives Categories:
      - 1. (C) = Cementitious Adhesives
      - 2. (D) = Dispersion (Mastic) Adhesives
      - 3. (R) = Reactive Resin (Epoxy and Urethane) Adhesives
    - b. Grout Categories:
      - 1. (CG) = Cementitious Grouts
      - 2. (RG) = Reactive Resin (Epoxy and Urethane) Grouts

c. Performance Categories:

1. (1) = Normal Adhesive
2. (2) = Improved Adhesive

d. Optional Characteristics:

1. (F) = Fast-Setting
2. (T) = Slip-Resistant (non-sag)
3. (31) = Uetormablilty (Comentitious Adhesives)
4. (S2) = Superior Deformabilit
5. (P1) = Adhesion to Exterior Grade Plywood
6. (P2) = Superior Adhesion to Exterior Grade Plywood
7. (A) = High Abrasion Resistance (Grout)
8. (W) = Reduced Water Absorption (Grout)

C. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

1. Current Test Methods

D. TILE COUNCIL OF NORTH AMERICA (TCNA)

1. Current Edition

E. LEEDS STANDARDS;

1. New Construction (I FFD-NC)
2. Existing Building Operations (LEED-EB)
3. Commercial Interiors Projects (LEED-CI)
4. Core and shell projects (LEED-CS)
5. Homes (LEED-H)
6. Neighborhood development (LEED-ND)

### 1.3 QUALITY ASSURANCE

- A. All Tiles shall be from a single source to Insure compatibility and manufacturers written limited warranties.
- B. All Mortars, Grouts, Adheslves and Membranes shall be from a single source to insure compatibility and manufacturers written limited warranties.

### 1.4 SUBMITTALS

- A. Submit shop drawings, product data, and samples under provisions of Section 01300.
- B. Shop Drawings:
  1. Indicate tile layout, patterns, color arrangement, perimeter conditions, and junctions with dissimilar materials, thresholds, and setting details-
  2. Locate and detail expansion and control joints following EJ 171.
- C. Submit product data, specifications, and Instructions for using mortars, adhesives, waterproof membrane, crack isolation and grouts.
- D. Samples:
  1. Submit color samples illustrating full color range of each type tile.
  2. Submit representative color samples of each type grout.

### 1.5 PRE-INSTALLAT10N CONFERENCE

- A. Convene one week prior to commencing work ofthte sactlon,
- B. Require attendance of Installation material manufacturer, tile supplier, tile Installer and installers of related work. Review installation procedures and coordination required with related work.
- C. Meeting agenda includes but Is not limited to:
  1. Surface preparation.
  2. Tile and installation material compatibility.
  3. Waterproofing membrane.
  4. Crack isolation membrane
  5. Maintenance and cleaning products

## **1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Comply with requirements of Section.
- B. Deliver materials in manufacturer's unopened containers, fully Identified with name, brand, type, and grade.
- C. Protect materials from contamination, dampness, freezing, or overheating in accordance with manufacturer's instructions.
- D. Protect mortal and grout materials against; freezing, moisture, soiling, or staining.

## **1.7 ENVIRONMENTAL REQUIREMENTS**

- A. Comply with requirements of referenced standards and recommendations of material manufacturers for environmental conditions before, during, and after Installation,
- B. Do not begin installation until building is completely enclosed and HVAC system is operating and maintaining temperature and humidity conditions consistent with "after occupancy" conditions for a minimum of 2 weeks,
- C. Maintain continuous and uniform building temperatures of not less than 50 degrees F during Installation.
- D. Ventilate spaces receiving tile in accordance with material manufacturers instructions.

## **1.8 MAINTENANCE DATA**

- A. Include cleaning methods, cleaning solutions recommended; stain removal methods, and polishes and waxes approved for use by Tile, Stone and Installation manufacturers.

## **PART 2 PRODUCTS**

### **2.1 PRODUCTS, GENERAL**

- A. ANSI Standard for Tile; Comply with ANSI A137.1
- B. ANSI Standard for Tile Installation Materials: Comply with ANSI standard referenced with products and materials indicated for setting and grouting.
- C. Colors, Textures, and Patterns: Where manufacturers standard products are Indicated for tile, grout, and other products requiring selection of colors, surface textures, patterns, and other appearance characteristics, provides specific products or materials complying with the following requirements;
  - 1. Match Architect's sample.

### **2.2 TILE**

- A. Acceptable Manufacturers: Subject to compliance with requirements herein, provide products from one of the following manufacturers.
  - 1. Marion Ceramks. 800 845.4010. [www.marionceramics.com](http://www.marionceramics.com).

### **2.3 MORTAR, GROUT, AND ADHESIVE MANUFACTURERS**

- A. Acceptable Manufacturers: Subject to compliance with requirements herein, provide products from one of the following manufacturers.
  - 1. MAPEI Corporation, Deerfield Beach, FL. (954) 246-8888

### **2.4 MORTAR REPAIR**

- A. Fast-Setting Horizontal, Vertical and Overhead One-Component Repair Mortar
  - 1. MAPEI Planitop XS
  - 2. For Freeze-thaw applications add Planicrete AC
- B. Vertical and Overhead One-Component Repair Mortar
  - 1. MAPEI, Planitop 12

## **2.5 MORTAR MATERIALS**

- A. Medium-Build, One-Component, Fast-Setting Mortar;
  - 1. MAPEI, Mapecem 102
- B. Mortar Additive
  - 1. MAPEI, Plancrete AC

## **2.8 WATERPROOFING MEMBRANE**

- A. All-Climate, flexible cementitious membrane for concrete waterproofing and protection
  - 1. Mapelastic Smart
- B. Flexible Cement-Based Waterproofing Membrane
  - 1. MAPEI Mapelast315
  - 2. MAPEI Mapelaslic Finerglass Mesh

## **2.7 QUICK-SETTING THIN-SET MORTAR**

- A. Fast setting, second generation, two-component mortar consisting of latex additive and mortar; comply with ANSI A118.4. Cures completely with no residual moisture in 24 hours.
  - 1. MAPEI, Orani/Rapid System consisting of Grani/Rapid powder and latex additive.
  - 2. ISO 13007 Classification: C2FS2P2

## **2.8 TWO COMPONENT, THIN-SET MORTAR**

- A. Two component system; factory prepared second generation high bond strength dry-set mortar and liquid polymer additive; complying with ANSI A118.4
  - 1. MAPEI, Keralastic System consisting of Keralastic polymer additive Kenbond dry-set mortar.
  - 2. ISO 13007 Classification; C2ES2P2

## **2.9 FAST SETTING, COLOR CONSISTENT, POLYMER-MODIFIED GROUT**

- A. Polymer-modified grout complying with ANSI A118.7 requirements. and
  - 1. MAPEI, Ultracolor, fast-setting, polymer-modified, color consistent, nonshrinking, efflorescence-free grout.
  - 2. ISO 13007 Classification: CO-2WAF
  - 3. Color:

## **2.10 POLYMER-MODIFIED SANDED GROUT**

- A. Polymer-Modified Sanded Grout complying with ANSI A118.6 requirements
  - 1. MAPEI, Keracolor S
  - 2. ISO 13007 Classification: CG-2WAF
  - 3. Color:

## **2.11 POLYMER-MODIFIED SANDED GROUT**

- A. Polymer-Modified Sanded Grout complying with ANSI A118.6 requirements
  - 1. MAPEI, Keracolor S
  - 2. ISO 13007 Classification; CO-2WA
  - 3. Color:

## **2.12 POLYMER-MODIFIED UNSANDED GROUT**

- A. Polymer-Modified Unsanded Grout complying with ANSI A118.8 requirements
  - 1. MAPEI, Keracolor U
  - 2. ISO Classification: CG-2WA
  - 3. Color:

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Examine substrates for compliance with requirements for conditions affecting performance of the work.
- B. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and, foreign deposits that might interfere with adhesion of floor tile,
- C. Proceed with installation only after unsatisfactory conditions have been corrected, Installation of flooring materials indicates acceptance of substrate.
- D. ANSI A 108.01

### **3.2 INSTALLATION**

- A. Follow all manufacturer's written recommended procedures and Industry standards be followed to ensure a successful Installation.
- B. Tile set on a mortar bed which is still workable (Wet-Set Method);
  - 1. ANSI A108.1A
- C. Tile set on a cured mortar bed with dry-set or latex-portland cement mortar;
  - 1. ANSIA108.1B
- D. Tile set with contractor option; installation with wet-wet with Portland cement - or - Installation on a cured portland cement mortar setting bed with dry-set or latex portland cement;
  - 1. ANSH08.1C
- E. Tile set with dry-set portland cement mortar or latex-port] and cement mortar on prepared concrete, masonry, cementitious backer board units or other Cementitious underlayment and backer units certified by the manufacturer as suitable for Intended use;
  - 1. ANSIA108.5
- F. Installation of Tile Grout
  - 1. ANSIA108.10
- G. Tile set over a waterproof membrane;
  - 1. ANSIA108.13

### **3.3 PROTECTION**

- A. Protect Installed tile work during the construction period to prevent damage.

### **END OF SECTION**