

## **SHORT FORM GUIDELINE SPECIFICATION**

### SECTION 09300 CERAMIC TILE

#### **PART 1 - GENERAL**

- 1.1 Qualified Labor (Because tile is a permanent finish, the lowest bid should not be the deciding factor but rather, but who is the most qualified to perform the scope of the work being specified. See TCNA Handbook for a list of recognized programs).
- 1.2 Pre-Installation Meeting. Field mock-up recommended scaled to appropriate size of the scope of the work \_\_\_\_\_ sq ft (Insert).
- 1.3 Large format tile defined by TCNA Handbook as tiles with at least one edge 15” in length or greater in combination narrow grout joints may require improvement of the substrate.

#### **PART 2 – PRODUCTS**

- 2.1 Porcelain or ceramic tile shall be of standard/first grade quality as manufactured by Crossville Inc. of Tennessee, and shall conform to requirements of ANSI A-137.1-2012.  
Type: Porcelain tile surface shall be (Insert)  
Size: Porcelain tile shall be manufactured to specific size after firing and shall be Nominal- (Insert) all measurements are in inches unless otherwise specified.  
Thickness: Porcelain tile shall be manufactured to specific thickness after firing and shall be nominal ([8.0 mm or greater] for large unit tile or [6.0 mm or greater] for mosaics).  
Color: Porcelain tile shall be furnished in (Insert Crossville color name and number)  
Trim: According to availability, provide matching trim shapes such as bullnose corners, cove base and borders when specified.
- 2.2 Setting Materials: Use appropriate installation mortars according to ANSI A118-2014.
- 2.3 Grouting Materials: Select grouting materials according to the following types: Tile setting and grouting epoxy: A118.6-2010 Standard Cement Grout, A118.7-2010, High Performance Cement Grout or A118.8-2010, Modified Epoxy Emulsion Grout. Provide grout in colors selected by the Architect from standard colors available from the approved manufacturers.
- 2.4 Waterproofing/Anti Fracture Membrane: Select per ANSI A118.10-2010 as required.
- 2.5 Jobsite Blending: Blend tiles before installing in accordance with reference standards to produce an even range and distribution of color and finish.

## **PART 3 – EXECUTION**

### **3.1 EXAMINATION**

- A. Examine substrates where tile will be installed for compliance with requirements for installation tolerances and other conditions effecting performance of installed tile. Before tiling concrete surfaces saturated dry (SSD), free of standing water verify that substrates for setting tile are well cured, structurally sound dry, clean, and free from oil or waxy films, curing compounds or other coatings and surface treatments. Nonstructural shrinkage cracks should be pretreated with a crack suppression membrane (to prevent telegraphing of cracks through the finished tile installation) ANSI A118.12.
- B. Do not proceed with installation until unsatisfactory conditions have been corrected. Commencement of work signifies acceptance of substrate and installation conditions.

## **PART 4 - INSTALLATION**

### **4.1 Acceptability of Surfaces**

- A. Before tiling, verify that all surfaces to be tiled are structurally sound true to plane, and fall within maximum variations shown below:

Walls	Floors
1/4" in 10'*	1/4" in 10'

\* When using large format defined by TCNA Handbook as tiles with at least one edge 15" in length or greater; a more stringent tolerance 1/8" in 10' or 1/16" in 24" when measure from the high points on the surface is required.

Report all unacceptable surfaces to the architect in writing, and do not tile such surfaces until they are leveled enough to meet above requirements.

- B. Before tiling, all surfaces must be free of curing compounds, oil, grease, wax, dirt, dust, form releases or other substances that would interfere with proper bond of setting materials.
- C. Illuminate the work area during installation providing the same level and angle of illumination as will be available for final inspection. The use of grazing or cove type lighting where lights are located either at the wall/ceiling interface, or mounted directly to the wall prompts the light to strike the tile finish at a straight down angle, creating unwanted shadows from grout lines giving the tile layout an un-flat irregular appearance. Installing overhead lighting at a wide downward angle 18"-24" away from the tiled wall, will optimize a flatter more uniform appearance to the tiled surface.

## 4.2 Setting Methods

Comply with appropriate ANSI A108-2014 specification and current Tile Council of North America Handbook (TCNA) for appropriate method of installation for each specification. For thin set adhesive mortar application use following technique:

- With the flat side of trowel, key mortar into substrate.
- Using the appropriate size trowel, comb mortar in one direction with notched side of the trowel.
- Set tile with a sliding motion, perpendicular to the mortar ridges.
- Obtain as near 100% coverage as possible of mortar to tile.
- Mortar coverage shall be no less than 85% and shall be sufficiently distributed to give full support under all corners and edges of the tile.
- Note: 95-100% coverage is mandatory for wet and exterior areas. Periodically, remove sheets or individual tiles to assure proper bond coverage consistent with industry specifications.

Ensure there is a minimum 1/8" of mortar between tile and substrate after proper bedding. Installer must periodically remove sheets or individual tiles to assure proper bond coverage consistent with industry specifications. If coverage is found to be insufficient, use a larger size notch trowel.

For running bond/brick joint patterns utilizing tiles (square or rectangular) where the side being offset is greater than 18" (nominal dimension), the running bond offset will be a maximum of 33% unless otherwise specified by the tile manufacturer. If an offset greater than 33% is specified, specifier and owner must approve mock-up.

## 4.3 Expansion Joints

Install architecturally designed expansion joints as per current TCNA Detail EJ171. Prefabricated expansion joint strips can also be used when suitable.

## 4.4 Grouting Methods

Follow exactly grout manufacturer's instructions and comply with appropriate ANSI A108-2014 specification depending on type of grout selected. Grouting is not complete until all grout haze and residues are removed from the surface of the tile.

## 4.5 Cleaning and Protection

- A. Leave finished installation free of cracked, chipped, broken, un-bonded or otherwise defective tile work.
- B. Protect all floor tile installations with clean construction paper or other heavy covering during construction period to prevent staining or damage. No foot or wheel traffic permitted on floor for at least 3 days after grouting. Owner/specifier is responsible for

protecting tile from damage including allowing sufficient time for installed materials to cure properly typically 30-45 days is required for full cure of thin set bonding mortars.

NOTE: This specification is provided as a guide and should be edited as required for project, product and method selection. Long-Form Specification is available upon request.

Inquiries – Crossville Incorporated – Technical Services

(931) 484-2110

(931) 484-8418 Fax

E-MAIL [crossc@crossvilleinc.com](mailto:crossc@crossvilleinc.com)