

**SECTION 09300 – CERAMIC AND STONE TILING**

**PART 1 GENERAL**

**INTRODUCTION**

The section covers ceramic and stone tiles.

**GENERAL REQUIREMENTS**

Slip Resistance: Floor tile shall be laboratory or field tested in accordance with ASTM C1028 to verify that it has required minimum wet and dry coefficient of friction for both level and ramped surfaces. If sealer is to be used, tile shall be tested with sealer applied. Special patterns and layouts shall be shown on the Drawings.

Coordinate requirements for extra materials quantities and delivery after completion with the Project Manager.

**SUBMITTALS**

Master grade certificates for each shipment, type, and composition of tile, signed by the manufacturer and installer.

**GREEN BUILDING**

This section may allow for LEED-CI v2.0 credit in the following categories: MR 1.2, MR 1.3, MR 2.1, MR 2.2, MR 3.1, MR 3.2, MR 4.1, MR 4.2, MR 5.1, MR 5.2, EQ 4.1, EQ 4.2 and ID 1.  
*<http://www.usgbc.org/DisplayPage.aspx?CMSPageID=145>*

**PART 2 PRODUCTS**

**MATERIALS**

General: Tile shall conform to ANSI A137.1 "Standard Grade" requirements.

Environmental Criteria:

Preference shall be given to reused or reclaimed ceramic or stone tiles which are in fair and usable condition.

Ceramic, glass, ceramic/glass composite, and terrazzo-type tiles shall contain a minimum of 50% (combined) post-industrial/post-consumer recycled content.

The specified percentage is based upon the weight of the component materials.

Glazings used for the glazed tiles shall be lead-free.

Adhesives and Sealants:

The VOC content of adhesives, sealants and sealant primers must be less than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule 1168 and all

sealants used as fillers must meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51. <http://www.aqmd.gov/rules/reg/reg11/r1168.pdf>; <http://www.baaqmd.gov/dst/regulations/rg0851.pdf>

Aerosol adhesives must meet the VOC limits of the “Green Seal Environmental Standard for Certification of Commercial Adhesives” (GS-36) of Green Seal, Inc. <http://www.greenseal.org/certification/standards/commercialadhesives.cfm>

All adhesives, sealants and sealant primers must be free of the prohibited chemicals as defined in GS-36.

**Mortars/Grouts:**

The VOC content of mortars or grouts for ceramic tile installations shall not be in excess of 150 grams/liter, less water and less exempted compounds.

**Metal Edging or Stone Threshold:** Provide where tile flooring terminates at dissimilar floor material.

Waterproofing membrane shall be provided under tile at wet areas and Restrooms above grade.

Use of epoxy grout on floors of Restrooms is recommended but shall be reviewed and accepted by Project Manager prior to being specified.

Cement backer board at wet locations shall conform to ANSI A118.9. Use fire-rated backer board at rated partitions to maintain rating of partition.

Sealers shall be used on unglazed floor tile only after review with Project Manager and impact on Project Budget.

**Protective Paper:** Nonstaining laminated and reinforced Kraft paper with bituminous or latex binder.

**PART 3 EXECUTION**

**INSTALLATION**

**Allowable Tolerances of Surfaces to Receive Tile:**

Maximum Variation in Vertical Surfaces: 1/8 inch in 8 feet.

Maximum Variation in Horizontal Surfaces: 1/8 inch in 10 feet.

Surface preparation, setting of tile, grouting, and cleaning shall be in accordance with applicable requirements of ANSI standards for selected setting methods.

**Recommended Installation Methods:**

TCA Methods are referenced. Coordinate final system selection on wall or partition construction, location in building, and anticipated abuse.

Wall Tile at Dry Areas: TCA Method W243.

Wall Tile at Showers: TCA Method B415 and W244.

Floor Tile at Shower: TCA Method B420.

Floor Tile at Restrooms: TCA Method F122.

Protective paper shall be applied over floor tile for minimum of 3 days after grouting is completed to prevent escape of moisture, cure grout, and provide protection until acceptance.

**SITE ENVIRONMENTAL PROCEDURES**

Waste Management: As specified in Section 01 74 19 – Construction Waste Management and Disposal and as follows:

Coordinate with manufacturer(s) for take-back program for collection of construction scrap, unused material, demolition scrap, and packaging material.

Where feasible, separate demolition waste, construction waste, and recycling to further utilize waste reduction programs.

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