SECTION 12 36 40

STONE COUNTERTOPS

PART 1 - GENERAL

- 1.01 DESCRIPTION
 - A. This Section describes the requirements for furnishing and installing stone counter tops, splashes, and surrounds.
 - B. Related Sections:
 - 1. Architectural wood casework is specified in Section 06 41 00.

1.02 SUBMITTALS

- A. Shop Drawings: Furnish cutting and setting drawings showing sizes, dimensions, sections, profiles and provisions for jointing and other details. Dimensions shall be based on field measurements.
- B. Samples:
 - 1. Stone: Minimum four 12-inch x 12-inch x full thickness of each type of stone required with edges finished, sealed with proposed sealer. Where required, furnish range of samples showing the range of exposed color and texture to be expected in the completed work.
 - 2. Grout: Grout samples for verification of selected colors.
- C. LEED Submittals:
 - 1. IEQ Credit 4.1: Product data for adhesives and sealants used inside the weatherproofing system indicating VOC content of each product used. Indicate VOC content in g/L calculated according to 40 CFR 59, Subpart D.
 - a. Furnish LEED Online Credit Template listing the adhesives and sealants used in the building and declaring that they meet the specified LEED requirements.
 - b. Required Audit Documentation:
 - 1) Product data sheets and MSDS for each adhesive/sealant used on the interior, with the VOC content in g/L circled and indicating VOC content of each product used.
 - 2) Summary table comparing credit VOC requirements and actual VOC levels for each product.

1.03 QUALITY ASSURANCE

- A. Obtain stone from quarry with consistent color range and texture throughout the work.
- B. Stone fabricator shall have minimum 5-years experience fabricating stone of the type required for this Project.
- C. Stone counter tops shall comply with applicable provisions of the Marble Institute of America (MIA).

1.04 ENVIRONMENTAL QUALITY ASSURANCE

- A. IEQ Credit 4.1: Adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the following reference standards:
 - 1. Adhesives, Sealants and Sealant Primers: Comply with South Coast Air Quality Management District (SCAQMD) Rule #1168. VOC limits as follows:

Architectural Applications	VOC Limit g/L less water	Specialty Applications	VOC Limit g/L less water
Indoor Carpet Adhesives	50	PVC welding	510
Carpet pad adhesives	50	CPVC welding	490
Wood flooring adhesives	100	ABS welding	325
Rubber floor adhesives	60	Plastic cement welding	250
Subfloor adhesives	50	Adhesive primer for plastic	550
Ceramic tile adhesives	65	Contact adhesive	80
VCT and asphalt adhesives	50	Special purpose contact adhesive	250
Drywall and panel adhesives	50	Structural wood member adhesive	140
Cove base adhesives	50	Sheet applied rubber lining operations	850
Multipurpose construction adhesives	70	Top and trim adhesive	250
Structural glazing adhesives	100		
Substrate Specific Applications	VOC Limit g/L less water	Sealants	VOC Limit g/L less water
Metal to Metal	30	Architectural	250
Plastic foams	50	Nonmembrane roof	300
Porous material (except wood)	50	Roadway	250
Wood	30	Single-ply roof membrane	450
Fiberglass	80	Other	420
Sealant Primers	VOC Limit (g/L less water)		
Architectural, nonporous	250		
Architectural, porous	775		
Other	750		

- B. Applicable LEED Credits:
 - 1. Credit IEQ 4.1 Low-Emitting Materials Adhesives and Sealants.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Handle material to prevent chipping, breakage, soiling or other damage.
- B. Protect edges of materials with wood or other rigid materials.
- C. Lift with wide belt type slings wherever possible; if required, use wood rollers and provide cushion at end of wood slides.
- D. Store stone on wood skids and pallets. Place and stack skids and units to distribute weight evenly and to prevent breakage or cracking. Protect stored stone from weather with waterproof, non-staining covers or enclosures allowing air to circulate around units.

PART 2 - PRODUCTS

- 2.01 MATERIALS
 - A. Stone: Marble to match stone toilet compartments.
 - B. Grout: Latex-portland cement grout, custom color to be selected by the County' s Representative.
 - C. Provide anchors, dowels, cramps, and other devices required for anchorage of stone.
 - D. Sealer: Penetrating sealer as recommended by stone supplier, to prevent staining from citric acid and alcohol.

- E. Adhesives, Grout, Sealants and Stone Accessories:
 - 1. Water-Cleanable Epoxy Adhesive: ANSI A118.3.
 - 2. Stone Adhesive: 2-part epoxy or polyester adhesive, formulated specifically for bonding stone to stone, with an initial set time of not more than 2-hours at 70-deg. F.
 - 3. Sealant: As specified in Section 07 92 00.

2.02 FABRICATION

- A. Verify dimensions by field measurements before preparation of shop drawings and fabrication of stone.
- B. Coordinate fabrication schedule to avoid delay of work.
- C. Fabricate stone counter tops as indicated on reviewed shop drawings and in compliance with the recommendations of the Marble Institute of America (MIA).
- D. Provide holes and sinkages cut or drilled for anchors, fasteners and supports as required to secure counter tops and splashes in place.
- E. Cut and back check as required for proper fit and clearance.
- F. Cut stone to size and dimensions indicated on reviewed shop drawings. Comply with fabrication tolerances of MIA. Dress joints straight and at 90-degree angle to face.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Do not use pieces with chips, cracks, voids, discoloration or other defects which might be visible or cause staining in finished work.
- B. Install stone with skilled installers; make necessary field cuts as required.
- C. Set stone in accordance with reviewed shop drawings. Provide anchors, supports, fasteners and other attachments necessary to secure stone in place.
- D. Shim and adjust as required for a level installation.
- E. Install stone with butted joints; grout lines shall be kept to a minimum.
- F. Install stone counter tops on neoprene setting blocks where recommended by fabricator or installer.

3.02 CLEANING

- A. Remove and replace stone pieces that are broken, chipped, stained or otherwise damaged. Provide new units where directed and install in a manner to eliminate evidence of replacement.
- B. Clean stone after installing; use procedures by stone fabricator.
- C. Provide protective covering where required.

END OF SECTION