

# SurroundStone™

## ARCHITECTURAL SPECIFICATION GUIDE

### SECTION 06 61 60 MARBLE AGGLOMERATE SURFACING FABRICATIONS

### SECTION 12 36 61 MARBLE AGGLOMERATE SURFACING COUNTERTOPS

## Part 1 – GENERAL

### 1.0 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including general and supplementary conditions and Division 1 Specification Sections, apply to this section.

### 1.1 SUMMARY

- A. Section includes marble agglomerate surfacing for (includes, but not limited to):

1. Countertops
2. Windowsills
3. Vanity Tops
4. Tabletops
5. Bar Tops
6. Seating
7. Hot and cold buffet surfaces
8. Interior steps
9. Interior wainscoat & wall cladding
10. Shower & bath enclosures

- B. Related Sections include the following:

1. Division 1 Section Administrative and Procedural.
2. Division 5 Section Metal Fabrication for blocking.
3. Division 6 Section Rough Carpentry for blocking.
4. Division 6 Section Solid Surface Fabrications.
5. Division 7 Section Joint Sealers.
6. Division 9 Section Stone Flooring.
7. Division 9 Section Solid Surface Wall Cladding.
8. Division 9 Section Quartz Surface Wall Cladding.
9. Division 10 Section Quartz Surface Toilet Partitions.
10. Division 15 Plumbing Fixtures.
11. Division 16 Wiring Devices.

## 1.2 REFERENCES

### A. ASTM International:

1. C616 Standard Specification for Marble Based Dimension Stone.
2. C97 Absorption and Bulk Specific Gravity of Dimension Stone.
3. C99 Modulus of Rupture of Dimension Stone.
4. C170 Compressive Strength of Dimension Stone.
5. C501 Abrasion Resistance of Dimension Stone.
6. C482 Bond Strength of Quartz Tile to Portland Cement.
7. C484 Thermal Shock Resistance of Quartz Tile.
8. C531 Linear Shrinkage and Coefficient of Thermal Expansion of Chemical Resistant Mortars, Grouts, Monolithic Surfacing and Polymer Concrete.
9. C648 Breaking Strength of Quartz Tile.
10. C1026 Resistance of Quartz Tile to Freeze Thaw Cycling.
11. C1028 Static Coefficient of Friction of Quartz Tile and Other Like Surfaces by the Horizontal Dynamometer Pull Meter Method.
12. E84 Surface Burning Characteristics of Building Materials.
13. E84 Density of Smoke Generated by Solid Materials.

### B. American National Standards Institute (ANSI):

1. ANSI Z124.6 Stain Resistance and Colorfastness.

## 1.3 SUBMITTALS

### A. Product Data:

1. Marble Agglomerate Surfacing; Submit manufacturer's product data.
2. Marble Agglomerate Surfacing; Submit manufacturer's care and maintenance data.

### B. Samples:

1. Submit two [\_\_\_\_x\_\_\_\_] inch quartz samples (showing available colors).

### C. Adhesive:

1. Submit two [\_\_\_\_x\_\_\_\_] samples of adhesive joint for each color quartz surface selected.

### D. Shop Drawings:

1. Drawings to include countertop layout, dimensions, required locations of support and blocking members, edge profiles, cutouts and attachments.

### E. Fabricator Qualifications:

1. Work of this section shall be performed by a experienced and appropriately licensed installer.

## 1.4 QUALITY ASSURANCE

### A. Mockup:

1. Construct mockup (if requested by Architect) [\_\_\_\_] feet wide, full depth with backsplash, skirt. In addition, include plumbing fixtures and trim.
2. Approved mockup shall remain as part of the work.

### B. Delivery, Storage and Handling:

1. Packaging, Shipping, Handling and Unloading; Observe manufacturer's recommendations and handle in a manner to prevent breakage. Brace parts if necessary. Transport in the

near vertical position with finished face toward finished face. Do not allow finished surfaces to rub during shipping and handling.

C. Storage and Protection:

1. Store in racks in near vertical position. Prevent warpage and breakage. Store inside away from direct exposure to sunlight. Sote between 25 and 130°F.

## 1.5 WARRANTY

A. Closeout Submittals:

1. Provide manufacturer's completed warranty form.
2. Provide maintenance & care data.

## Part 2 - PRODUCTS

### 2.1 MANUFACTURERS

A. Acceptable Manufacturer:

1. SurroundStone by Project Stone (basis of design).

B. Substitution

2. Insert manufacturers name.

### 2.2 MATERIALS

A. Material:

1. Homogenous mixture containing 94-97% pure marble agglomerate with additions of high performance polyester resin, pigments and special effects.

B. Thickness:

1. 1 cm
2. 2 cm
3. 3 cm

C. Color: [ ] to be selected from SurroundStone by Project Stone color range.

D. Finish: [ ] to be selected from SurroundStone by Project Stone surface options.

E. Exposed Edges and Corners:

1. Countertops profile [ ].
2. Backsplash profile [ ].
3. Other Surface applications profile [ ].

F. Performance:

1. Moisture Absorption: typical results 0.03-0.1%; ASTM C97
2. Compressive Strength: typical results 24,520 psi; ASTM C170
3. Abrasion Resistance: typical results 220; ASTM C501
4. Bond Strength: typical results 210 psi; ASTM C482
5. Thermal Shock: passes 5 cycles: ASTM 484
6. Coefficient of Thermal Expansion: typical results  $1.2 \times 10^{-5}$  inch/°F; ASTM C531
7. Breaking Strength of Tile: typical results 1,400 lbf; ASTM C648
8. Resistance to Freeze Thaw Cycling: unaffected 15 cycles; ASTM C1026

9. Coefficient of Friction Pull Method: .85 avg. dry / .55 avg. wet: ASTM C1028
10. Flame Spread: Class 1; ASTM E84
11. Smoke Density: Class A; ASTM E84

## 2.3 ACCESSORIES

### A. Mounting Adhesive:

1. Provide structural grade silicone or epoxy adhesive.
2. Acceptable silicone manufactures:
  - a. Dow Corning
  - b. GE Sealants & Adhesives
  - c. [\_\_\_\_\_]
  - d. [\_\_\_\_\_]
3. Acceptable epoxy manufactures:
  - a. Akemi North America

### B. Marble Agglomerate Surface Adhesive:

1. Provide epoxy or polyester adhesive of a type recommended for application and conditions of use.
2. Acceptable manufacturers:
  - a. Akemi North America
3. Adhesive which will be visible in finished work shall be tinted to match quartz surface.

### C. [Fasteners] [Grout] [Hardware]: [\_\_\_\_\_].

### D. Joint Sealant:

1. Clear sealant type recommended by manufacturer for application and use.
2. Provide anti-bacterial type in toilet, bath, food preparation, and [\_\_\_\_\_].
3. Acceptable manufacturers:
  - a. Dow Corning
  - b. GE Sealants
  - c. [\_\_\_\_\_]

### E. Solvent: Denatured alcohol for cleaning marble agglomerate surface to assure adhesion of adhesive and sealants.

### F. Cleaning Agents: Mild soap and water.

## 2.4 FABRICATION

### A. Fabricator:

1. Firm should have a minimum of 3 years experience in fabricating dimensional stone and comply with standards of the marble Institute of America (MIA).

### B. Layout:

1. Layout surface to minimize joints and avoid L-shaped pieces of marble agglomerate surfacing.  
Layout and fabricate with 'hairline' joints.

### C. Inspection of Materials:

1. Inspect materials for defects prior to fabrication.

### D. Tools: Cut and polish with water cooled powered tools.

### E. Cutouts:

1. Cutouts shall have a minimum of 3/8 inch (10mm) radius.
  2. Where edges of cutouts will be exposed In finished work; polish edges.
- F. Laminations:
1. Laminate layers of marble agglomerate surfacing required to create built up edges.

## Part 3 – EXECUTION

### 3.1 INSTALLER

- A. Firm should have a minimum of 3 years experience in installing dimensional stone.

### 3.2 PRE-INSTALLATION EXAMINATION

- A. Site Verification:
1. Verify dimensions by field measurements prior to installation.
  2. Verify that substrates supporting quartz surfaces are plumb, level and flat to within 1/8 inch in 10 feet and that all necessary supports and blocking are in place.
  3. [Base Cabinets shall be secured to adjoining units and back wall].
- B. Inspection of Marble Agglomerate Surfaces:
1. Inspect materials for defects prior to installation.

### 3.3 PREPARATION

- A. Prepare Surface:
1. Clean surfaces prior to installation.
- B. Protection of Marble Agglomerate Surfaces:
1. Protect finished surfaces from scratches. Apply masking where necessary. Take necessary precautions to prevent dirt grit dust and debris from other trades from contacting the surfaces.

### 3.4 INSTALLATION

- A. Install materials in accordance with the Marble Institute of America (MIA) and industry standards.
- B. Preliminary Installation;
1. Position materials to verify the correct size.
  2. If size adjustments, or additional fabrication is necessary, use water cooled tools. Protect jobsite and surface from dust and water. Perform work away from installation site if possible.
  3. Allow gaps for expansion of not less than 1/8 inch (1.5mm) per ten feet when installed between walls or other fixed structure.
- C. Permanent Installation:
1. After verification of fit and finish, clean substrate; remove loose and foreign matter which may interfere with adhesion. Clean marble agglomerate surface backside & joints with denatured alcohol.

2. Horizontal surface: Apply continuous bead of mounting adhesive around perimeter of structural substrate and supports.
  3. Vertical surface: Apply continuous bead of mounting adhesive around perimeter. In addition, apply ¼ inch mounting adhesive bead every 8 inches on vertical center.
  4. [Fasteners, Grout and Hardware].
  5. Install quartz surfacing plumb, level, square and flat to within 1/8 inch in ten feet, non-cumulative.
  6. Align adjacent pieces in same plane.
- D. Joints:
1. Joints Between Adjacent Pieces of Marble Agglomerate Surfacing:
    - a. Joints shall be flush, tight fitting, level and neat.
    - b. Securely join adjacent pieces with Two Part Acrylic Adhesive/
    - c. Fill joints level to polished surface.
    - d. Secure adjacent marble agglomerate surfaces with vacuum clamps until adhesive hardens.
  2. Joints Between Marble Agglomerate Surface and [backsplash, wall, tub, shower, other]:
    - a. Seal joints with silicone sealant.

### 3.5 REPAIR

- A. Repair or replace damaged material in a satisfactory manner.

### 3.6 CLEANING

- A. Remove masking, excessive adhesive and sealants. Clean exposed surfaces with denatured alcohol.

### 3.7. PROTECTION

- A. Protect installed fabrications with non-staining sheet coverings.

### 3.8. SCHEDULES

- A. [site and job specific].