

SECTION 123640

STONE COUNTERTOP

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Granite Countertops
  2. Granite Splashes

1.2 REFERENCES

- A. ASTM: American Society for Testing and Materials International
- B. AWI: Architectural Woodwork Institute
- C. AWMAC: Architectural Woodwork Manufacturers' Association of Canada.
- D. MIA: Marble Institute of America
- E. NBGQA: National Building Granite Quarries Association, Inc.
- F. WI: Woodwork Institute (Formerly: WIC - Woodwork Institute of California)

1.3 SUBMITTALS

- A. Product Data: Provide data on stone units.
- B. Shop Drawings
1. Indicate facing layout and sizes.
  2. Indicate counter top dimensions and installation methods.
- C. Samples for Initial Selection:
1. Stone Samples: Submit three stone samples 6 by 6 inch (15.0 by 15.0 cm) in size, illustrating color range and texture, markings, and surface finish for each stone product and color required.
  2. Sealant Samples: Manufacturer's color chart indicating full range of standard sealant colors.
- D. Qualification Statements:
1. Fabricator's qualification statement.
  2. Installer's qualification statement.
- E. Operation and Maintenance Data: Indicate list of approved cleaning materials and procedures required; list of substances that are harmful to the component materials.

#### 1.4 QUALITY ASSURANCE

- A. Fabricator/Installer: Listed as an Approved Fabricators in Part 2 Products below.
  
- B. Fabricator: Company with experience in the [fabrication] [and] [installation] of work similar to that required for this project for a period of 3 years or more and meets the following requirements:
  - 1. Member of Marble Institute of America.
  - 2. Experience with wet fabrication techniques and has a shop capable of cutting and polishing granite in compliance with MIA Standards.

#### PART 2 PRODUCTS

##### 2.1 STONE MATERIALS

- A. Granite: ASTM C615; type, color, and surface texture as specified by Architect.
  - 1. Species: Uba Tuba
  - 2. Grade: Architectural

##### 2.2 COMPONENTS

- A. Granite Countertops:
  - 1. Dimensions: [As indicated on drawings.]
    - a. Thickness: As required by base cabinet depth indicated on drawings.
    - b. Width: As required by base cabinet depth indicated on drawings.
  - 2. Standard Edge Detail:
    - a. Straight with eased edge: 1/8 inch (0.30 cm), top and bottom
  
- B. Granite Backsplashes and End Splashes:
  - 1. Dimensions: As indicated on drawings.
    - a. Thickness: 3/4 inch (2.0 cm).
    - b. Height: As indicated on drawings.

##### 2.3 PERFORMANCE CRITERIA

A. Sustainability Characteristics: Maximum VOC content for field applied materials calculated according to 40 CFR 59, Subpart D (EPA Method 24):

1. Adhesives: 65 g/L.
2. Sealants: 250 g/L.
3. Sealers: 250 g/L.

## 2.4 FABRICATION

A. General:

1. Comply with the requirements of the following reference standards:
  - a. NBGQA's "Standard Specifications for Architectural Granite."
  - b. Marble Institute of America's "Dimension Stone Design Manual."
2. Cut edges, corners, intersections, openings square, true, and straight unless otherwise indicated.

3. Seam Width: 1/8 inch (0.30 cm) maximum.
4. Lippage Mismatch: 1/16 inch (0.15 cm) maximum.
5. Cut openings in shop and grind edges to remove cut marks.
  - a. Finish exposed edges of cut outs to match exposed finish of granite piece.

B. Layout:

1. Field verify dimension before fabricating components.
2. Layout work to minimize the number of seams.
3. Align seams with joints in cabinets and casework.
4. Do not locate seams at large openings, such as sinks.

C. Counter:

1. Sink Mount: Under-mount.
2. Cutouts: Coordinate size and location with other trades and comply with sink manufacturer's product specifications.
  - a. Accurately locate and size cutouts.
  - b. Polish edges of cutouts.
3. Corners Condition: Common seam with bullnose return corner.

D. Splashes:

1. Provide separate from countertops for field installation.
2. Corners Condition: Butt.

E. Seams:

1. Bonded Seams: Polyester resin or Epoxy Resin.
2. Sealant Filled Seams: As specified in Division 07 Section titled, "Joint Sealants."

F. Edge Condition: Cutout Edges:

1. Hand grind to create a sharp line of reprise.

- G. Finish:
  - 1. Polished finish.

## 2.5 MISCELLANEOUS MATERIALS

- A. Adhesive: DuPont™ Silicone Adhesive.
- B. Sealant: Manufacturer's recommended sealant.
  - 1. Color: As specified by Architect.

## 2.6 ACCESSORIES

- A. Attachments: Stainless steel.
- B. Fixture Mountings: Stainless steel, suitable for top and under counter mounting and countertop construction.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. General:
  - 1. Install items specified in this section according to countertop manufacturer's instructions and in compliance with the installation requirements of the following referenced standards:
    - a. MIA's "Dimension Stone Design Manual" Chapters 13 & 17.
    - b. NBGQA's "Standard Specifications for Architectural Granite"
    - c. Architectural Woodwork Standards, Section 11, Subparagraph 6.2.5 for installation of epoxy resin, natural/manufactured stone as published by AWI, WI, and AWMAC.
  - 2. Do not field cut stone unless otherwise indicated.
  - 3. "Dry assemble" pieces to verify fit before applying adhesives.
  - 4. Shim pieces as required to produce surfaces that are plumb, level, flush, aligned, and true.
  - 5. Apply adhesives only after final adjustments and corrections to fit have been made.
  - 6. Fill seams with sealants before final positioning.
- B. Countertop:
  - 1. Install countertop to plywood substrate with adhesive.
  - 2. Apply adhesive to seams and draw panels tight.
- C. Sealant: Apply sealant around fixtures and appliances set into panels and seams between granite units.

### 3.2 CLEANING

- A. Clean according to manufacturer's instructions, but not less than the following:
  - 1. Wash with clean, water suitable for drinking and neutral (pH 7), soapless cleaner approved by countertop manufacturer.
  - 2. Leave no streaks, smears, or stains.

### 3.3 PROTECTION

- A. Repair scratches and scars according to manufacturer's instructions.
- B. Provide protection according to countertop manufacturer's instructions, but not less than the following:
  - 1. Sealer: Apply according to sealer manufacturers instructions.
  - 2. Protective Covering: Cover granite surfaces with nonstaining kraft paper, clean fabric tarp, or 6 mil plastic film.
    - a. Remove protective covering at Substantial Completion.

END OF SECTION 123640