# SECTION 066119

# QUARTZ SURFACING FABRICATIONS

## GENERAL

### SUMMARY

#### Section Includes:

##### Quartz Surfacing

###### Kitchen Countertops

#### Related Sections:

##### Division 1 – Administrative, Procedural and Temporary Work Requirements

##### Division 5 – Section Metal Fabrication for Blocking

##### Division 6 – Section Rough Carpentry for Blocking

##### Division 6 –Solid Surface Fabrications

##### Division 7 – Section Joint Sealers

##### Division 9 – Ceramic Tiling

##### Division 15 – Plumbing Fixtures

### REFERENCES

#### ASTM International

##### ASTM C97 – Absorption and Bulk Specific Gravity of Dimension Stone

##### ASTM C99 – Modulus of Rupture of Dimension Stone

##### ASTM C170 – Compressive Strength of Dimension Stone

##### ASTM C482 – Bond Strength of Ceramic Tile to Portland Cement

##### ASTM C531 – Linear Shrinkage and Coefficient of Thermal Expansion of Chemical Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes

#####  ASTM C880 – Flexural Strength of Dimension Stone

##### ASTM C1028 – Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method

##### ASTM D256 – Izod Pendulum Impact Resistance of Plastics

##### ASTM E84 – Surface Burning Characteristics of Building Materials

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

##### ANSI Z124.6 – Stain Resistance

##### ANSI/N 42.14 – Radiation

### SUBMITTALS

#### Submit “Letter of Conformance” in accordance with Section 01 33 00 (01330) with the following supporting data:

##### Submit manufacturer’s product data, and fabrication and installation instructions

##### Accessories: Submit manufacturer’s product data and installation instructions.

#### Shop Drawings Identify color[s] and finish[es] , and show the following

##### Field-verified dimensions

##### Quartz surfacing dimensions

##### Locations and dimensions of cutouts

##### Required locations of support and blocking members;

#####  Edge profiles

##### Installation details and methods

#### Samples

##### Indicate full range of color and pattern variation.

##### Samples for Color Selection: Submit one set of manufacturer’s standard colors and finishes 10 x 10 inches, (250 x 250 mm) of each color and finish selected.

#### Closeout Submittals: Submit completed warranty form

#### Product Certificates: For each type of product, provide product certificates signed by product manufacturer.

#### Maintenance Data: Submit manufacturer’s care and maintenance data. Include in project closeout documents

### QUALITY ASSURANCE

#### Applicable Standards

##### Standards of the following, as referenced herein:

###### American National Standards Institute (ANSI)

###### American Society for Testing and Materials (ASTM)

###### National Electrical Manufacturers Association (NEMA)

###### NSF International e. International Organization for Standardization (ISO)

##### Fire Test response characteristics

###### Provide with the following Class A (Class 1) surface burning characteristics as evidenced by testing identical products against ASTM E84 (UL 723) or another testing and inspecting agency acceptable to authorities having jurisdiction.

###### Flame Spread Index: 25 or less

###### Smoke Developed Index: 450 or less

#### Allowable Tolerances

##### Variation in component size ± 1/8” (3mm) over a ten (10) foot length

##### Location of openings: ± 1/8” (3mm) from indicated location

##### Maximum 1/8” (3mm) clearance between quartz surfaces and each wall

### DELIVERY, STORAGE, AND HANDLING

#### Packaging, Shipping, Handling, and Unloading

##### Observe manufacturer’s recommendations and handle accordingly in order to prevent breakage or damage

##### Brace parts if necessary.

##### Transport in the near-vertical position with finished face turned toward finished face.

##### . Do not allow finished surfaces to rub during shipping or handling.

#### Storage and Protection

##### Store in racks in near-vertical position.

##### Prevent warpage and breakage.

##### Store inside away from direct exposure to sun.

##### Store between 25ºF and 130ºF (-4 ºC and 54ºC).

##### Store with finished face turned toward finished face

### WARRANTY

#### Provide manufacturer’s Limited Commercial 10-Year Warranty against product defects when fabricated and installed by a CaesarStone certified fabricator.

## PRODUCTS

### MANUFACTURERS

#### Qualifications: Manufacturer shall be ISO 9002 and ISO 14001 certified.

#### Acceptable Manufacturer: Provide CaesarStone Quartz Surfacing distributed by U.S. Quartz Products Inc. (CaesarStone U.S.A., Inc.); Van Nuys, CA; phone 877-9-QUARTZ (978.2789); www.caesarstoneus.com.

### QUARTZ SURFACING

#### Composition: 93 percent crushed quartz aggregate combined with resins and pigments and fabricated into slabs using a vacuum vibro-compaction process.

#### Dimensions

##### Thickness: 3cm

##### Size: as indicated on drawings

#### Identification: Material shall be labeled with a batch number and imprinted with a manufacturer’s identifying mark on the back.

Color and Finish: Tier 1 (6 units)

203, 204, 205, 303, 304 and 305

Owners to select from the following COLORS: Classico Blizzard 2141. Classico Ginger 4330, Classico Concrete 2003

Tier 2 (16 Units)

201, 202, 206, 301, 302, 306, 401, 402, 403, 404, 406, 501, 502, 503, 504

506

Owners to select from the following Caesarstone COLORS: Classico Blizzard 2141. Classico Ginger 4330, Classico Concrete 2003 AS WELL AS Granite Options: Via Lactea Honed, Supreme White, Antique Gold and Wild West Green

Tier 3 (2 Units)

601, 602

Product TBD -Provide allowance for installation and carry $7,500 for kitchen and vanity countertops

#### Edges: Square

### ACCESSORIES

#### Mounting Adhesives

##### Provide structural-grade silicone or epoxy adhesives as recommended by manufacturer for application and per conditions of use.

##### Acceptable Silicone Manufacturers

###### Dow Corning®

###### GE Sealants and Adhesives

##### Acceptable Epoxy Manufacturers

###### Akemi North America

###### Bonstone Materials Corporation

###### Tenax U.S.A.

##### Provide spacers, if required, of type recommended by adhesive manufacturer

#### Stone Adhesive

##### Provide epoxy or polyester adhesive of type recommend by manufacturer for application and conditions of use.

##### Acceptable Manufacturers

######  Akemi North America

###### Bonstone Materials Corporation

###### Tenax U.S.A

##### Color: Adhesive that will be visible in finished work should be tinted to match quartz surfacing.

#### Joint Sealant

##### Clear silicone sealant as recommended by manufacturer for application and per conditions of use

##### Provide anti-bacterial type in Bathrooms and kitchenettes

##### Acceptable Manufacturers

###### Dow Corning®

###### GE Sealants and Adhesives

#### Solvent: Product recommended by adhesive manufacturer to clean surface of quartz surfacing to assure adhesion of adhesives [and sealants].

#### Cleaning Agents: Non-abrasive, low pH cleansers.

### FABRICATION

#### Fabricator: Firm shall have five years’ experience fabricating architectural stone and shall have water-cooled cutting tools.

#### Shop Assembly: Observe proper safety procedures and comply with manufacturer’s instructions.

#### Inspect Material

##### Inspect material for defects prior to fabrication.

#####  Color Match

##### a. Materials used throughout the project shall be from the same batch and bear labels with the same batch numbers.

##### b. Visually inspect materials to be used for adjacent pieces to ensure acceptable color match.

##### c. Inspect in lighting conditions similar to those existing at the jobsite.

##### Variation in distribution of aggregates in quartz surfacing that is within manufacturer’s tolerances is not a defect.

#### Tools: Cut and polish with water-cooled power tools.

#### Cutouts As with any type of stone, smaller radii increase potential for crack propagation at inside corners; in no case should radius less than 3/8 inch be used.

##### Cutouts shall have 3/8 inches (10 mm)minimum inside corner radius. Inside corners shall be reinforced in an acceptable manner to prevent cracking.

##### Polish edges where they will be exposed in finished work.

## EXECUTION

### ACCEPTABLE INSTALLER

#### Installer: Firm shall have five years’ experience installing architectural stone

### EXAMINATION

#### Site Verification

##### Verify dimensions by field measurements prior to fabrication.

##### Verify that substrates supporting quartz surfaces are plumb, level, and flat to within 1/16 inch in ten feet (1.6 mm in 3000 mm), and that necessary supports and blocking are in place.

##### Base Cabinets: Cabinet units shall be securely fixed to adjoining units and back wall.

#### Materials Review

##### Inspect finished surfaces for damage.

##### Do not install until damaged materials have been repaired or replaced in an acceptable manner.

### PREPARATION

#### General

##### Protect finished surfaces against scratches.

##### Apply masking where necessary.

##### Guard against grit, dust, and other potentially abrasive dirt or residue.

### INSTALLATION

#### General

##### Install materials in accordance to manufacturer’s recommendations.

##### Lift and place carefully to avoid breakage.

#### Preliminary Installation and Adjustment

##### Position materials to verify correct sizing and preparation.

##### Make necessary adjustments.

##### If cutting, grinding, or polishing is required at the jobsite, use water-cooled tools.

##### Protect jobsite and surfaces against dust and water.

##### Perform work away from installation site, if possible

#####  Allow gaps for expansion of not less than 1/16 inch (1.5 mm) per five feet when installed between walls or other fixed conditions.

##### Drainage: Adjacent to sinks and where drainage is required, shim countertops slightly to ensure positive drainage.

#### Permanent Installation

##### After verifying fit:

###### Remove quartz surfacing from position.

###### Clean substrates of dust and contamination.

###### Clean quartz surfacing back side and joints with solvent.

##### Apply sufficient quantity of mounting adhesive in accordance with adhesive manufacturer’s recommendations to provide permanent, secure installation

##### Install surfacing plumb, level, and square and flat to within 1/16 inch in ten feet (1.6mm in 3000 mm).

#### Joints

##### Joints between adjacent pieces of quartz surfacing

###### Joints shall be flush, tight fitting, level, and neat.

###### Securely join with stone adhesive.

###### Fill joints level with quartz surfacing.

###### Clamp or brace quartz surfacing in position until adhesive sets.

##### Joints between backsplashes and countertops - Seal joints with silicone sealant.

### REPAIR

Repair or replace damaged material in a satisfactory manner

### CLEANING

Remove masking and excess adhesives and sealants. Clean exposed surfaces.

### PROTECTION

Protect surfacing from damage by other Sections

# END OF SECTION