

## SECTION 04731 QUARTZ SURFACE FABRICATION

### 1.1 SUMMARY OF THE QUARTZ SURFACE FABRICATION WORK

- A. The quartz surface fabrication work is comprised of the furnishing and installing of all quartz surface fabrications consisting of, but not limited to, sheet work, sink cutouts, shower walls, finished edges and accessory work, all as shown on the drawings and as required to complete the work in this contract. The quartz surface fabrication work includes the following:

1. Tub and shower walls
2. Wall cladding/wainscoting
3. Wall base
4. Window sills
5. Shower partitions
6. Specialty countertops
7. Reception area stations
8. Table tops
9. Bar tops
10. Kitchen countertops
11. Kitchen countertops with sink(s)
12. Kitchen island tops
13. Kitchen island tops with sink(s)
14. Vanity tops
15. Vanity tops with bowl(s)
16. Cold cafeteria surfaces
17. Hot cafeteria surfaces

### 1.2 BASIX<sup>®</sup> QUARTZ SURFACE FABRICATION SUBMITTALS

- A. Shop drawings shall be supplied by the quartz surface fabricator and shall include:
1. Scale and full size details for fabricated items
  2. Locations for cutouts
  3. Locations for faucet drillings
  4. Locations for accessories
  5. Edge details
  6. Requirements for blocking and/or other support
- B. LEED Submittals:
1. Provide manufacturer's product data to support LEED Credits
  2. Provide manufacturer's documentation of certifications relating to sustainable attributes
- C. Food service installations
1. Provide documentation of manufacturer's compliance with NSF/ANSI Standard 51

### 1.3 DELIVERY, STORAGE AND HANDLING OF QUARTZ SURFACE FABRICATION MATERIALS

- A. Deliver fabricated work in protective packing so as to minimize any potential damage to work prior to installation.
- B. Do not deliver any materials to the site until areas are ready to receive them for installation.

- C. Store all materials indoors in a dry area away from extreme temperatures and sunlight.
- D. Handle all quartz surface fabricated materials in such a way as to prevent damage to finished surfaces.

#### 1.4 QUALITY ASSURANCE FOR FABRICATION AND INSTALLATION OF BASIX® QUARTZ SURFACE FABRICATION MATERIALS

- A. Fabricator Qualifications: All work of this section shall be fabricated and installed by a fabrication professional who has been accredited by the Marble Institute of America or who has demonstrated proficiency in the types of work required by this project. The fabrication professional shall have a minimum of five (5) years of quartz surface fabrication experience and have completed a minimum of two (2) quartz surface fabrication projects of similar scope and size to the quartz surface fabrication and installation work of this project.
- B. Source Quality Control: Obtain and provide materials for all Basix® Quartz Surface fabrications from a single manufacturer of quartz surface materials with not less than five (5) years of successful experience in supplying principal materials for quartz surface fabrication installations. Provide secondary and/or alternate materials only as recommended by the manufacturer of the primary quartz surface materials.
  - 1. Pre-installation Conference: Approximately one week prior to the scheduled commencement of the Basix® Quartz Surface fabrication installation, a meeting shall be held at the project site with the accredited fabrication professional, the Owner and all other applicable trade representatives, to coordinate the quartz surface fabrication work.
  - 2. Applicable Standards:
    - a. American National Standards Institute (ANSI)
    - b. American Society for Testing Materials (ASTM)
    - c. National Electrical Manufacturers Association (NEMA)
    - d. Marble Institute of America
    - e. NSF International
  - 3. Allowable Tolerances:
    - a. Variation in component size: plus or minus 1/8" (3 mm).
    - b. Location of openings: plus or minus 1/8" (3 mm) from location indicated.

#### 1.5 WARRANTY FOR BASIX® QUARTZ SURFACE FABRICATION AND INSTALLATION

- A. The manufacturer shall provide a limited warranty that the materials provided under this Section shall not develop visible defects or otherwise failure due to manufacturing defects within the period of ten (10) years from the date of acceptance by the Owner.
- B. Conditions not covered by manufacturer warranty:
  - 1. Failure of joints, seams or of any adhesive, caulk or other accessory, failure or degradation of decorative edge treatments. Including seam appearance.
  - 2. Failure of solid surface fabricator and installer to comply with manufacturer's fabrication, installation instructions or use and maintenance instructions.
  - 3. Any products moved from it's original place of installation.

## BASIX® QUARTZ SURFACE FABRICATION PRODUCTS

### 2.1 BASIX® QUARTZ SURFACE FABRICATION MATERIALS

- A. Acceptable Products: Basix® Quartz.
- B. Material: Homogeneous, non-porous quartz surface material
- C. Thickness:
  - 1. 2 cm
  - 2. 3 cm

### 2.2 BASIX® QUARTZ SURFACE FABRICATIONS

- A. **Vertical Surfaces:**
  - 1. Wall Base: [2cm] [3cm] thick Basix® Quartz Surface to size and shape, and with edge details as indicated on the drawings. Provide wall base using Basix® Quartz Surface approved adhesive.
  - 2. Chair Rails: [2cm] [3cm] thick Basix® Quartz to size and shape, and with edge details as indicated on the drawings. Provide chair rails using Basix® Quartz Surface approved adhesive.
- B. **Horizontal Surfaces:**
  - 1. Specialty Countertops: [2cm] [3cm] Basix® Quartz Surface to size and shape, and with edge details as indicated on the drawings. [Provide countertops complete with specified bowl.] [Provide countertops complete with specified sinks.] Provide countertops using Basix® Quartz Surface approved adhesive. Surfaces shall not be affected by Class I reagents.
  - 2. Reception Area Stations: Horizontal surfaces of [2cm][3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. [Provide countertop complete with specified bowl.] [Provide countertops complete with specified sinks.] Provide countertop using Basix® Quartz Surface approved adhesive. Vertical surfaces shall be of [2cm]) [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. Provide vertical facing with [using Basix® Quartz Surface approved adhesive, 1/16" (1.5 mm) wide] [using Basix® Quartz Surface approved adhesive, 1/8" (3 mm) wide] [butt joints, sealed with silicone sealant matching color of Basix® Quartz Surface unless otherwise indicated] [reveal joints, 1/8" deep x 1/4" wide reveal sealed with silicone sealant matching color of Basix® Quartz Surface unless otherwise indicated] [Joint size and type as indicated on the drawings, sealed with silicone sealant matching color of Basix® Quartz Surface unless otherwise indicated].
  - 3. Table Tops: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. [Provide tabletops using Basix® Quartz Surface approved adhesive.]
  - 4. Bar Tops: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. Under Mount and Top Mount sink options: [Provide bar top complete with bar/utility sink.] [Under mount bar/utility sink.] [Seam mount bar/utility sink.] [Flush mount bar/utility sink.] Provide bartops using Basix® Quartz Surface approved adhesive.

5. Window sills [2cm] [3cm] thick Basix® Quartz to size, shape and tolerances, and with edge details as indicated on the drawings. Provide window sills using Basix® Quartz Surface approved adhesive.
  6. Kitchen Countertops: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. Provide kitchen countertops using Basix® Quartz Surface approved adhesive.
  7. Kitchen Countertop with Sink: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings, complete with [Under mount] [Seam mount] [Flush mount] sink. Provide [single bowl] [double bowl] kitchen sink. Provide kitchen countertops using Basix® Quartz Surface approved adhesive.
  8. Kitchen Island Top: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. Provide kitchen island countertops using Basix® Quartz Surface approved adhesive.
  9. Kitchen Island Top with Sink: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings, complete with [Under mount] [Seam mount] [Flush mount] sink. Provide [single bowl] [double bowl] kitchen sink. Provide kitchen island countertops using Basix® Quartz Surface approved adhesive.
  10. Vanity Tops: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. Provide vanity tops using Basix® Quartz Surface approved adhesive.
  11. Vanity Tops with Bowls: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings, complete with [Under mount] [Seam mount] vanity bowl. Provide vanity tops using Basix® Quartz Surface approved adhesive.
- C. Commercial Food Service Countertops:
1. Cold Cafeteria Surfaces: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. Provide cold cafeteria surfaces using Basix® Quartz Surface approved adhesive.
  2. Provide expansion joints in countertop as per details.
  3. Make cutouts to template furnished by manufacturer. Radius corners of all cutouts to a minimum of ½" inside radius.
  4. Provide insulation between Basix® Quartz Surface and adjacent cold surfaces.
  5. Thermally isolate hot applications from cold: follow manufacturer's methods and recommendations.
  6. Hot Cafeteria Surfaces: Horizontal surfaces of [2cm] [3cm] thick Basix® Quartz Surface with edge details as indicated on the drawings. Provide hot cafeteria surfaces using Basix® Quartz Surface approved adhesive.
  7. Provide expansion joints in countertop as detailed on the drawings.
  8. Make cutouts to templates furnished by item manufacturer. Radius corners of all cutouts to a minimum of ½" inside radius.

9. Thermally isolate hot applications from cold following manufacturer's methods and recommendations.
10. Provide Insulation: between Basix® Quartz Surface and adjacent hot water pans, food warmers and other hot surfaces or equipment.
11. Provide Venting of Cabinets: as indicated on the drawings. [Architect must design and specify.]

### 2.3 ACCESSORY PRODUCTS

- A. Sealants: When required, sealants shall be 100% silicone and shall be matched to sheet color unless otherwise noted.
- B. Adhesives:
  1. Flexible adhesive shall be 100% silicone and shall be matched to Basix® Quartz Surface sheet color.
  2. Rigid seam adhesive shall be Basix® Quartz Surface seam adhesive as manufactured by Basix® International or approved by same.
- C. Sink/Bowl mounting hardware: Provide hardware for mounting sinks and bowls as approved by manufacturer. Provide bowl clips, panel inserts and fasteners for attachment of sinks and bowls as required and as recommended by the quartz surface manufacturer.

## EXECUTION OF BASIX® QUARTZ SURFACE FABRICATION AND INSTALLATIONS

### 3.1 PREPARATION OF BASIX® QUARTZ SURFACE FOR INSTALLATION

- A. Observe all recommended and required safety precautions including, but not limited to, eye protection, hearing protection, skin protection and adequate ventilation.
- B. Maintain clean work surfaces during seaming and other joint work.
- C. Fabricate and install work at temperatures above sixty-five (65) degrees F.

### 3.2 FABRICATION OF BASIX® QUARTZ SURFACE MATERIAL

- A. Fabrication shall be performed by an MIA accredited fabricator or who has demonstrated proficiency in the types of work required by this project.
- B. Shop fabricated components to greatest extent practicable to sizes and shapes indicated, in accordance with approved shop drawings.
- C. Special Techniques: Comply with the manufacturer's recommendations for the use of specific types of stationary equipment and stationary tools. Site fabrication and finishing processes shall be in accordance with the manufacturer's recommendations for working with the quartz surface fabrication materials.
- D. Form seams between components, unless otherwise indicated, using quartz surface manufacturer's standard seam adhesive. Adhesive shall be color coordinated to match quartz surface material color and shall form inconspicuous seams.
- E. Provide cutouts for plumbing fittings and bath accessories as indicated on the drawings and as recommended by the equipment and quartz surface manufacturer.

- F. Cut and finish component edges with clean, sharp returns. Route radii and contours to exact template sizes. Repair or reject defective or inaccurate work.

### **3.3 INSTALLATION OF QUARTZ SURFACE MATERIAL**

- A. Prepare substrate, plane, plumb and level, secure in place with all fasteners set flush. Shim supporting structure as required to provide an acceptable surface for attaching finish materials.
- B. Install components, plane, plumb and level, in accordance with approved shop drawings and product data.
- C. Pre-fit finish material in place. Scribe material as required to provide proper fit with adjacent materials.
- D. Provide additional support for material seams in horizontal locations.
- E. Form field joints using manufacturer's recommended adhesive, with inconspicuous joints in finished work.
- F. Prior to installing quartz surface fabrication, make sure that substrate is clean and dry. Place silicone on substrate in accordance with manufacturer's recommendations.
- G. Sink and Bowl Installation:  
  
Adhere [under mount] [seam mount] [flush mount] sinks/bowls to countertops using manufacturer's recommended adhesive and mounting hardware.
- H. Adhere top mount sinks/bowls to countertops using manufacturer's recommended [color matched] [clear] flexible adhesive.
- I. Provide backsplashes and sidesplashes as indicated on the drawings. Adhere backsplashes and sidesplashes to countertops using manufacturer's recommended [color matched] [clear] flexible adhesive.
- J. Keep components and hands clean during installation. Remove adhesives, sealants and other stains from the work as they occur.
- K. During installation, protect surfaces of quartz surface fabrications from damage until all components have been installed.
- L. Make plumbing connections to sinks in accordance with Division 15, Mechanical. Do not over tighten connections which are in direct contact with or attached to quartz surface fabrications.

### **3.4 PROTECTION OF QUARTZ SURFACE FABRICATIONS**

- A. After fabrication and installation, protect surfaces of quartz surface fabrications from damage until accepted by the General Contractor. Replace any damaged material prior to acceptance.

### **3.5 CLEANING OF QUARTZ SURFACE FABRICATIONS**

- A. After installation, all surfaces shall be cleaned to remove contaminants. After cleaning, all work shall be protected against damage until it is accepted by the Owner. Thereafter, it shall be the responsibility of the Owner to maintain protection and provide final cleaning.