# SECTION 06620 - SOLID SURFACE FABRICATIONS

# PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- Solid surface fabrications.
- B. Custom thermoformed solid surface fabrications.

## 1.2 RELATED SECTIONS

- A. Section 06100 Rough Carpentry.
- B. Section 06410 Cabinets.
- C. Section 07900 Joint Sealers.
- D. Section 10800 Toilet and Bath Accessories.

## 1.3 REFERENCES

A. American Society for Testing of Materials (ASTM): E84, Surface Burning Characteristics of Building Materials.

#### 1.4 DEFINITION

A. Solid surface is defined as nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment.

#### 1.5 SUBMITTALS

- A. General: Submit following items in accordance with Section 01330.
- B. Product Data: Submit manufacturer's technical literature indicating physical properties and performance criteria for sheet materials and related components.
- C. Shop Drawings: Indicate design parameters, adjacent construction, materials, dimensions, thickness, fabrication details, tolerances, jointing methods, method of support, anchorages, integration with plumbing fixtures, and colors.
- D. Samples: Submit two, 4 x 4 inch samples representative of colors, textures, finishes and edge treatments.
- E. Manufacturer's Instructions: Submit manufacturer's printed installation instructions. Indicate preparation of openings required, with rough-in sizes.
- F. Maintenance Data: Submit manufacturer's recommended cleaning and maintenance procedures.
- G. LEED Submittals:
  - 1. Credit EQ 4.1:
    - a. Manufacturer's product data for installation adhesives, including printed statement of VOC content and material safety data sheets.
  - 2. Credits MR 5.1:
    - a. Product data indicating that materials are regionally manufactured and within 500 miles of the project site.
- H. Product certificates: For each type of product, signed by product manufacturer.
- I. Fabricator/installer qualifications: Provide copy of certification number.
- J. Manufacturer certificates: Signed by manufacturers certifying that they comply with requirements.
- K. NSF/ANSI standards: Refer to www.nsf.org for the latest compliance to NSF/ANSI Standard 51 for food zone all food types.

## 1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in fabricating solid surface components with minimum 5 years documented experience.
- B. Source Limitations: Obtain materials and products from single source.
- C. Fabricator/ Installer Qualifications:
  - 1. Shop that employs skilled workers who custom fabricate and install products

similar to those required for this project and whose products have a record of successful in-service performance.

- 2. Shall meet the following requirements:
  - Be a certified fabricator/installer, certified in writing by the manufacturer for minimum 5 years.
  - b. Completed a minimum 5 projects of equal or greater value (\$4 million dollar projects). Submit a list of the projects to the Architect prior to submitting a bid.
  - c. Be able to provide a bond for the total value of the project.
  - d. Submit resime on individual who will be in charge of project. Individual must have hands on experience with minimum 5 projects equal in size.

Select the article above to allow open bidding but requiring fabricators to submit qualifications before bids are due.

Select the paragraph below to limit fabricators to pre-approved companies.

D	Pregualified Fabricator/ Installers:

- 1. ASST Beyond Surface Level Solutions. (www.asst.com).
- 2.
- 3.

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, handle, and protect products in accordance with Section 01600.
- B. Provide protective coverings of suitable material. Take special precautions at corners.

## 1.8 ENVIRONMENTAL REQUIREMENTS

A. Do not install components when site conditions may be detrimental to product or adhesive.

#### 1.9 FIELD MEASUREMENTS

A. Verify that field measurements are as indicated on shop drawings.

## 1.10 SEQUENCING

A. Sequence work to permit installation of adjacent affected construction, plumbing rough-in.

#### 1.11 WARRANTY

- A. Warranty shall provide material and labor to repair or replace defective materials.
- B. Optional Installed Warranty:
  - 1. To qualify for the optional Installed Warranty, fabrication and installation must be performed by a DuPont Certified Fabrication/Installation source who will provide a brand plate for the application.
  - 2. This warranty covers all fabrication and installation performed by the certified/approved source subject to the specific wording contained in the Installed Warranty Card.
- C. Manufacturer's warranty period: Ten years from date of substantial completion.

## PART 2 PRODUCTS

## 2.1 MONOLITHIC ACRYLIC SHEETS

- A. Material: Monolithic, solid, one piece, acrylic sheets; ASTM E84, Class I flammability index; stain, burn and scratch resistant; including molded shapes; for uses as scheduled and detailed.
- B. Countertop Edges: 1-1/2 in. total thickness; provide eased edges.
- C. Countertop Size: 24 in. deep by length shown on Drawings.

- D. Mastic: Type recommended by manufacturer.
- E. Seam Adhesive: Type recommended by manufacturer; color to blend with sheet material.
- F. Product Standard: Corian® surfaces by Dupont.

## 2.2 FABRICATION

- A. Assemble work at shop and deliver to job ready for installation. Manufacture in largest practical lengths with seams in least conspicuous locations.
- B. Fabricate work square and to required lines.
- Recess and conceal fasteners, connections, and reinforcing.
- D. Design construction and installation details to allow for expansion and contraction of materials. Properly frame material with tight, hairline joints held rigidly in place.
- E. Comply with adhesive manufacturer's recommendations for adhesive shelf life, pot life, working life, mixing, spreading, assembly time, time under pressure and ambient temperatures.
- F. Fabricate vanities with backsplash and side splashes to profiles indicated or detailed.
- G. Fabricate items to profiles shown with connections and supports as detailed or as required for proper installation per manufacturer's recommendations.
- H. Provide cut-outs for plumbing fixtures and trim, washroom accessories, appliances, and related items. Confirm lay-out with manufacturer's cut-outs templates before beginning work. Round corners of cut-outs and sand edges smooth.
- I. Do not exceed manufacturer's recommended unsupported overhang distances. Provide additional support for counters over 4 ft. long.
- J. Finish exposed surfaces smooth and polish to a low sheen.
- K. Radius corners and edges.
- L. Thermoforming:
  - 1. Comply with manufacturer's data.
  - 2. Heat entire component. Material shall be uniform, between 275 and 325 degrees Fahrenheit during forming.
  - 3. Form pieces to shape prior to seaming and joining.
  - Cut pieces to finished dimensions.
  - 5. Sand edges and remove nicks and scratches.

# PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Examine surfaces for conditions that would adversely affect execution.
- B. Do not proceed until unsatisfactory conditions are corrected.
- C. Beginning of execution will constitute acceptance of existing conditions.

## 3.2 INSTALLATION

- A. Install in accordance with manufacturer's printed instructions and approved shop drawings. Provide templates and rough-in measurements.
- B. Set items plumb, level, rigid and solidly adhered to substrate.
- C. Prefit items: Adjust supports to make fit. Align joints over support framing.
- D. Apply dabs of mastic on supports; place items on supports and attach.
- E. Install splashes using mastic. Apply mastic to back surface only. Place thin bead of seam adhesive along edge where splashes seat.

# 3.3 TOLERANCES

- A. Maximum Variation From True Dimension: 1/8 inch.
- B. Maximum Offset From True Position: 1/8 inch.

## 3.4 CLEANING

- A. Clean work under provisions of Section 01700.
- B. Clean and polish fabrications in accordance with manufacturer's instructions.
- C. Promptly remove excessive mastic and seam adhesive.

#### 3.5 **DEMONSTRATION**

- Section 01700 Execution Requirements: Requirements for demonstration and training.
- Demonstrate proper cleaning and care of surfaces to Owner's representative.

#### PROTECTION OF FINISHED WORK 3.6

- Protect finished work under provisions of Section 01500.
- Do not permit construction near unprotected surfaces.

#### 3.7 **SCHEDULE**

A.	Reception	areas
Α.	Reception	areas

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	1.	Surfaces of material adhesively joined with inconspicuous seams.		
	2.	Color:		
	3.	Vertical Thickness		
	4.			
	5.			
	6.	Edge Details		
	7.	Finish		
	8.	Backsplash		
	9.	Sidesplash		
B.	Nurse	Nurses station:		
	1.	Surfaces of material adhesively joined with inconspicuous seams.		
	2.	Color:		
	3.	Vertical Thickness		
	4.			
	5.	Inlay		
	6.	Edge Details		
	7.	Finish		
	8.	Backsplash		
	9.	Sidesplash		
	10.	Sink		

**END OF SECTION**