

SECTION 06 6116

SOLID SURFACING FABRICATIONS

This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by one of the following methods:

Microsoft Word: From the pull-down menus select TOOLS, then OPTIONS. Under the tab labeled VIEW, select or deselect the HIDDEN TEXT option.

Corel WordPerfect: From the pull-down menus select VIEW, then select or deselect the HIDDEN TEXT option.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Solid surfacing [countertops [with sink bowls]] [bar tops] [table tops] [vanity tops] [window sills] [_____].
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C920 - Standard Specification for Elastomeric Joint Sealants.
 - 2. D790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
 - 3. D2583 - Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.
 - 4. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 5. E228 - Standard Test Method for Linear Thermal Expansion of Solid Materials With a Push-Rod Dilatometer.
- B. International Solid Surfaces Fabricators Association (ISSFA) 2-01 - Classification and Standards Publication of Solid Surfacing Material.
- C. National Sanitary Foundation/American National Standards Institute (NSF/ANSI) 51 - Food Equipment Materials.
- D. National Electrical Manufacturer's Association (NEMA) LD-3 - High Pressure Decorative Laminates.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate dimensions, component sizes, fabrication details, attachment provisions and coordination requirements with adjacent work.
 - 2. Product Data: Indicate product description, fabrication information and compliance with specified performance requirements.
 - 3. Samples:
 - a. [[2 x 2] [__ x __] inch solid surfacing samples showing available colors.] [[6 x 6 inch solid surfacing samples in each color.]
 - b. [1/4 x 1/4 x 3 inch long] [__ x __ x __ inch long] joint sealer samples [showing available colors.] [in specified colors.]
- B. Quality Control Submittals:
 - 1. Provide evidence of compliance with referenced standards [upon request].

C. Sustainable Design Submittals:

1. Regional Materials.
2. Low-Emitting Materials.

D. Closeout Submittals:

1. Maintenance Data: Include recommended cleaning materials and procedures and damage repair.

1.4 QUALITY ASSURANCE

A. Fabricator Qualifications: Minimum [___] years [documented] experience in work of this Section.

B. Mockup:

1. Size: [One full size lavatory top.] [____.]
2. Show: Countertop, splash, [apron,] [sink,] and trim.
3. Locate [where directed.] [____.]
4. Approved mockup may [not] remain as part of the Work.

1.5 DELIVERY, STORAGE AND HANDLING

A. Store solid surfacing sheets flat and evenly supported.

1.6 WARRANTIES

A. Provide manufacturer's 10 year warranty covering products that fail due to manufacturing defects; include cost of replacement products and labor.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Contract Documents are based on Mystera by Hudson Surfaces.

B. Substitutions: [Under provisions of Division 01.] [Not permitted.]

2.2 MATERIALS

A. Solid Surfacing:

1. Material: Homogenous sheet material composed of acrylic resins, filler materials, and coloring agents.
2. Thickness: [1/4 inch.] [1/2 inch.] [2 cm.]
3. Color: [____.] [To be selected from manufacturer's full color range.]
4. Performance characteristics:
 - a. Flame spread index: Class I; tested to ASTM E84.
 - b. Smoke developed index: Class A; tested to ASTM E84.
 - c. Food compliance rating: Classified for food preparation; tested to NSF/ANSI 51.
 - d. Color consistency: Pass ISSFA-201, SST 2.1-00.
 - e. Cleanability stain rating: Pass ISSFA-201, SST 3.1-00.
 - f. Visual defects: Pass ISSFA-201, SST 5.1-00.
 - g. Light resistance: Pass ISSFA-201, SST 7.1-00.
 - h. Boiling water resistance: Pass ISSFA SST 8.1.
 - i. High temperature resistance: Pass ISSFA-201, SST 9.1-00.
 - j. Radiant heat resistance: Minimum 600 seconds; tested to NEMA LD3-3.10.
 - k. Linear thermal expansion: Maximum 2.79×10^{-5} inch per inch per degree F; tested to ASTM E228.
 - l. Flexural strength: Minimum 6077 PSI; tested to ASTM D790.
 - m. Flexural modulus: Minimum 1.13 MPsi; tested to ASTM D790.
 - n. Barcol hardness: Minimum 61; tested to ASTM D2583.

- o. Sheet flatness; tested to ISSFA SST 4.1.
 - 1) Length: Maximum 0.010 inch negative warp.
 - 2) Width: Maximum 0.010 inch positive warp.
 - p. Impact resistance: Pass ISSFA-201, SST 6.1-00.
- B. Sinks: Fabricated from same material as solid surfacing, [____] profile, [__ x __] inches, undercounter mounted.

2.3 ACCESSORIES

- A. Seam Adhesive: As manufactured by Integra Adhesives; color matched to solid surfacing.
- B. Countertop Adhesive:
1. Gun grade construction adhesive.
 2. Maximum volatile organic compound (VOC) content: [70] [__] grams per liter.
- C. Joint Sealer:
1. ASTM C920, Grade NS, single component silicone, non sag, mildew resistant.
 2. Source: Sil-Bond RTV 3500 by Silco Inc. [or approved substitute].
 3. Color: [____.] [To be selected from manufacturer's full color range.]

**** OR ****

- D. Joint Sealer:
1. ASTM C920, Grade NS, single component silicone, non sag, mildew resistant.
 2. Source: [____] by [____] [or approved substitute].
 3. Color: [____.] [To be selected from manufacturer's full color range.]
 4. Maximum volatile organic compound (VOC) content: [250] [__] grams per liter.

2.4 FABRICATION

- A. Fabricate components in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Fabricate components in shop to greatest extent possible; minimize field seams.
- C. Do not locate seams within 2 inches of inside corners, in or within 3 inches of cutouts, or over heat-producing appliances.
- D. Reinforce seams on underside with 4 inch wide x 1/2 inch thick seam blocks, adhered to both sheets.
- E. Provide minimum 1 inch radius on inside corners; reinforce corners with corner blocks adhered to underside of sheet.
- F. Fabricate [splashes] [and skirts] from solid surfacing in [color to match countertops.] [[____] color.]
- G. Form joints to be inconspicuous in appearance and without voids. Join pieces with seam adhesive.
- H. Provide holes and cutouts for mounting of [sinks,] [trim,] [and] [accessories].
- I. Finish exposed edges to smooth, uniform [bullnose] [chamfered] [roundover] [inlay] [____] profile.
- J. After fabrication, finish surfaces to [matte finish using 320 grit and gray Scotch Brite pads.] [satin finish using 600 grit and white Scotch Brite pads.] [gloss finish using 4000 grit and polishing compound.]
- K. Allowable Tolerances:
1. Maximum variation in size: Plus or minus 1/4 inch.
 2. Maximum variation in location of openings: 1/4 inch from indicated location.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Set plumb, level, and rigid.
- C. Adhere countertops, splashes, and skirts with continuous beads of adhesive.
- D. Form field joints by abrading contact surfaces with 80 grit sandpaper, cleaning with denatured alcohol, and using manufacturer's recommended seam adhesive.
- E. Attach sinks using manufacturer's recommended adhesive and mounting hardware.
- F. Seal perimeter with joint sealer as specified in Section 07 9200. Finish smooth and flush.

3.2 ADJUSTING

- A. Sand out minor scratches and abrasions.

3.3 PROTECTION

- A. Protect surfaces from damage with nonstaining coverings.

END OF SECTION