

SECTION 123661.16

SOLID SURFACING COUNTERTOPS

SPEC NOTE: THIS SPECIFICATION HAS BEEN PREPARED TO ASSIST THE SPECIFIER IN PREPARING A PROJECT OR MASTER SPECIFICATION. IT FOLLOWS GUIDELINES ESTABLISHED BY CONSTRUCTION SPECIFICATION INSTITUTE AND THEREFORE MAY BE USED WITH MOST MASTER SPECIFICATION SYSTEMS WITH MINOR EDITING.

Instructions:

Red text indicates notes to specification writer, delete upon completion. **Bold text** within [XX] brackets indicate available options, retain applicable option and delete remaining. **Blue text** in (xx) parenthesis indicate metric units, delete if not applicable to project.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section. **(Verify if applicable)**

1.2 SUMMARY

- A. Section Includes: **(Edit based on project needs)**

1. Solid surface material countertops.
2. Solid surface material backsplashes.
3. Solid surface material end splashes.
4. Solid surface material apron fronts.
5. Solid Surface material sinks.
6. Windows sills.
7. Lavatory or laboratory tops with integral sinks.
8. Millwork countertops with sinks and backsplashes.
9. Countertops for Nurses stations – Reception area

- B. Related Requirements: **(Verify if needed based on list above and select applicable sub-section)**

1. Section 013329, General LEED Requirements.
2. Section 016013, LEED Product Requirements.
3. Section 017419, Waste Management and Disposal.
4. Section 018119, Indoor Air Quality Requirements.
5. Section 064000, Architectural Woodwork.
6. Section 224100 “Residential Plumbing Fixtures” for **[non-integral sinks] [sinks] [and] [plumbing fittings]**.

7. Section 224216.16 “Commercial Sinks” for **[non-integral sinks]** **[sinks]** **[and]** **[plumbing fittings]**.
8. Section 224300 “Healthcare Plumbing Fixtures” for **[non-integral sinks]** **[sinks]** **[and]** **[plumbing fittings]**.

1.3 Administrative Requirements

- A. Preinstallation Meetings: Arrange preinstallation meeting 1 week prior to commencing work with all parties associated with trade designated in Contract Documents or as requested by Architect. Review Contract Documents for work included under this trade and determine complete understanding of requirements and responsibilities relative to work included, storage and handling of materials, materials to be used, installation of materials, sequence and quality control, Project staffing restrictions on area or work and matters affecting construction, to permit compliance with intent of work of the section.

1.4 ACTION SUBMITTALS

- A. Product Data: For countertop materials **[and sinks]**.
- B. Sustainable Design Submittals: Provide Products meeting the following LEED performance criteria: **(retain only if applicable to LEED Project)**
 1. MRc4: Provide Products with a combined minimum pre-consumer and post-consumer recycled content of [xx%].
 2. MRc5: Provide Product with regional content.
 3. EQc4.1: Provide adhesives and sealants with VOC quantities lower than stated in SCAQMD Rule 1168. Ensure VOC quantities for sealants do not exceed 250 g/l.
- C. Shop Drawings: For countertops. Show materials, finishes, edge and backsplash profiles, methods of joining, and cutouts for plumbing fixtures.
 1. Show locations and details of joints.
 2. Show direction of directional pattern, if any.
- D. Samples: For each type of material exposed to view in manufacturer’s standard size.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For fabricator/ installer.
 1. Installer: Provide work of this section executed by competent installer with minimum 5 years experience in the application of products, systems and assemblies specified.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For solid surface material countertops to include in maintenance manuals. Include Product Data for care products used or recommended by Installer and names, addresses, and telephone numbers of local sources for products.

1.7 QUALITY ASSURANCE

- A. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate countertops similar to that required for this Project, and whose products have a record of successful in-service performance.
- B. Installer Qualifications: Fabricator of countertops with experience in custom shape configurations.
- C. Mockups: Build mockups to demonstrate aesthetic effects and to set quality standards for fabrication and execution.
 - 1. Build mockup of typical countertop as shown on Drawings.
 - 2. Subject to compliance with requirements, approved mockups may become part of the complete Work if undisturbed at time of Substantial Completion.

1.8 FIELD CONDITIONS

- A. Field Measurements: Verify dimensions of countertops by field measurements [**after base cabinets are installed but**] before countertop fabrication is complete.

1.9 COORDINATION

- A. Coordinate locations of utilities that will penetrate countertops or backsplashes.

1.10 DELIVERY, STORAGE AND HANDLING

- A. Delivery and Acceptance Requirements: Deliver no components to Project site until areas are ready for installation.
- B. Storage and Handling Requirements:
 - 1. Store components indoors prior to installation.
 - 2. Handle materials to prevent damage to finished surfaces.

1.11 WARRANTY

- A. Manufacturer Warranty: Provide manufacturer's standard warranty for material only for a period of 5 years against defects and/ or deficiencies in accordance with General Conditions of the Contract. Promptly correct and defects or deficiencies which become apparent within warranty period, to satisfaction of Architect and at no expense to Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: ASST Beyond Surface Level Solutions, 350 South Street, McSherrystown, PA 17344; Tel: (717)630-1251; email info@asst.com
- B. Substitutions: Not permitted
- C. Request for substitution will be considered in accordance with provisions of Section 016000 – Product Requirements.
 - 1. Approval of comparable Products: Submit the following in accordance with project substitution requirements, within time period allowed for substitution review:
 - a. Project references: minimum of 5 installations not less than 5 years old, with owner contact information.
 - b. List of successful installations of similar products of similar complexity for evaluation by Architect
 - c. Sample warranty.

2.2 SOLID SURFACE COUNTERTOP MATERIALS

- A. Solid Surface Material: Homogeneous-filled plastic resin complying with ICPA SS-1.
 - 1. Type: Provide Standard type unless Special Purpose type is indicated from the following manufacturers.
 - a. Corian® DuPont; www.corian.com
 - b. Samsung Chemical USA; www.staron.com
 - c. Wilsonart Contract; www.wilsonartcontract.com
 - d. Durasein; www.duraseinusa.com
 - e. Aristech; www.aristechsurfaces.com
 - f. Porcelanosa; www.porcelanosa-usa.com
 - g. LG HI-MACS; <http://www.lghimacsusa.com>
 - 2. Integral Sink Bowls: Comply with CSA B45.5/IAPMO Z124.
 - 3. Color and Patterns: [**As indicated on drawings**] [**As indicated by manufacturer's designation**] [**As selected by Architect from Manufacturer's full range**].
- B. Particleboard: ANSI A208.1, [**Grade M-2**] [**Grade M-2 Exterior Glue**].
- C. Plywood: Exterior softwood plywood complying with DOC PS 1, Grade C-C Plugged, touch sanded.

2.3 COUNTERTOP FABRICATION

- A. Fabricate countertops according to solid surface material manufacturer's written instructions and to the AWI/AWMAC/WI's "Architectural Woodwork Standards."

1. Grade: **[Premium]** **[Custom]** **[Economy]**.
- B. Configuration:
 1. Front: **[Straight, slightly eased at top]** **[Beveled]** **[3/4-inch (19-mm) bullnose]** **[Radius edge with apron, 2 inch (50-mm) high with 3/8"-inch (9.5-mm) radius]** **[1-1/2-inch (38-mm) laminated bullnose]** **[1-inch (25-mm) laminated bullnose]** **[Straight, slightly eased at top with separate apron, 6 inches (150 mm) high, recesses 1/4-inch (6.4 mm) behind front edge]**.
 2. Backsplash: **[Straight, slightly eased at corner]** **[Beveled]** **[Radius edge with 3/8-inch (9.5-mm) radius]**.
 3. End Splash: **[Matching backsplash]** **[None]**.
- C. Countertops: **[1/2-inch (12.7-mm)]** **[3/4-inch (19-mm)]** thick, solid surface material **[with front edge built up with same material]**.
- D. Countertops: **[1/4-inch (6.4-mm)]** thick, solid surface material laminated to 3/4-inch (19-mm) thick particleboard with **[wood-trimmed exposed edges]** **[exposed edges built up with 3/4-inch (19-mm) thick, solid surface material]** **[exposed edges faced with 1/4-inch (6.4-mm) thick, solid surface material]**.
- E. Backsplashes: **[1/2-inch (12.7-mm)]** **[3/4-inch (19-mm)]** thick, solid surface material.
- F. Fabricate tops with shop-applied edges **[and backsplashes]** unless otherwise indicated. Comply with solid surface material manufacturer's written instructions for adhesives, sealers, fabrication, and finishing.
 1. Install integral sink bowls in countertops in the shop.
 2. Fabricate with loose backsplashes for field assembly.
- G. Joints: Fabricate countertops without joints.
- H. Joints: When required, fabricate countertops in sections for joining in field.
 1. Joint Locations: Not within 18 inches (450-mm) of a sink or cooktop and not where a countertop section less than 36 inches (900-mm) long would result, unless unavoidable.
 2. Splined Joints: Accurately cut kerf in edge at joint for insertion of metal splines to maintain alignment of surfaces at joints **[where indicated]**. Make width of cuts slightly more than thickness of splines to provide snug fit. **[Provide at least three splines in each joint.]**
- I. Cutouts and Holes:
 1. Undercounter Plumbing Fixtures: Make cutouts for fixtures **[in shop]** using template or pattern furnished by fixture manufacturer. Form cutouts to smooth, even curves.

2. Counter-Mounted Plumbing Fixtures: Prepare countertops in shop for field cutting openings for counter-mounted fixtures. Mark tops for cutouts and drill holes at corners of cutout locations. Make corner holes of largest radius practical.
3. Fittings: Drill countertops in shop for plumbing fittings, undercounter soap dispensers, and similar items.

2.4 INSTALLATION MATERIALS

- A. Adhesive: Product recommended by solid surface material manufacturer.
 1. Provide manufacturer's low VOC adhesives. (for LEED projects)
- B. Sealant for Countertops: Comply with applicable requirements in Section 079200 "Joint Sealants."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates to receive solid surface material countertops and conditions under which countertops will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of countertops.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install countertops level to a tolerance of 1/8 inch in 8 feet (3-mm in 2.4-m), 1/4 inch (6-mm) maximum. Do not exceed 1/64-inch (0.4-mm) difference between planes of adjacent units.
- B. Fasten countertops by screwing through corner blocks of base units into underside of countertop. Pre-drill holes for screws as recommended by manufacturer. Align adjacent surfaces and, using adhesive in color to match countertop, form seams to comply with manufacturer's written instructions. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
- C. Bond joints with adhesive and draw tight as countertops are set. Mask areas of countertops adjacent to joints to prevent adhesive smears.
- D. Install backsplashes and end splashes by adhering to wall and countertops with adhesive. Mask areas of countertops and splashes adjacent to joints to prevent adhesive smears.
- E. Complete cutouts not finished in shop. Mask areas of countertops adjacent to cutouts to prevent damage while cutting. Make cutouts to accurately fit items to be installed, and at right angles to finished surfaces unless beveling is required for clearance. Ease edges slightly to prevent snipping.

ASST
McSherrystown, PA

Project Name
Project Location

08/02/19 - Draft

- F. Apply sealant to gaps at walls; comply with Section 079200 "Joint Sealants."

END OF SECTION