

SECTION 123600 - COUNTERTOPS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Countertops for architectural cabinet work.

1.2 RELATED REQUIREMENTS

- A. Section 064100 - Architectural Wood Casework

1.3 REFERENCE STANDARDS

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition.
- C. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards.
- D. ISFA 2-01 - Classification and Standards for Solid Surfacing Material.
- E. ISFA 3-01 - Classification and Standards for Quartz Surfacing Material.
- F. PS 1 - Structural Plywood.

1.4 SUBMITTALS

- A. See Section 013300 - Submittal Procedures for submittal procedures.
- B. Shop Drawings: Complete details of materials and installation ; combine with shop drawings of cabinets and casework specified in other sections.
- C. Maintenance Data: Manufacturer's instructions and recommendations for maintenance and repair of countertop surfaces.

1.5 QUALITY ASSURANCE

- A. Fabricator Qualifications: Natural Stone Institute (NSI) Accredited Natural Stone Fabricator; www.naturalstoneinstitute.org/#sle.
- B. Installer Qualifications: Company specializing in performing work of the type specified in this section, with not less than three years of experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.7 FIELD CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 COUNTERTOPS

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- B. Solid Surfacing Countertops (SSM-1 & SSM-2): Solid surfacing sheet or plastic resin casting over continuous substrate.
 - 1. Flat Sheet Thickness: 1/2 inch, minimum.
 - 2. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISFA 2-01 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.
 - a. Manufacturers:
 - 1) Basis of Design: Formica Corporation; Everform Solid Surfacing: www.formica.com.
 - 2) Dupont; Corian Solid Surfacing: www.corian.com.
 - 3) Wilsonart; Wilsonart Solid Surface: www.wilsonart.com.
 - b. Surface Burning Characteristics: Flame spread index of 25, maximum; smoke developed index of 450, maximum; when tested in accordance with ASTM E84.
 - c. Finish on Exposed Surfaces: Matte, gloss rating of 5 to 20.
 - d. Color and Pattern: As indicated on drawings.
 - 3. Other Components Thickness: 1/2 inch, minimum.
 - 4. Exposed Edge Treatment: Built up to minimum 1-1/4 inch thick; square edge.
 - 5. Back and End Splashes: Same sheet material, square top; minimum 4 inches high.
 - 6. Skirts: As indicated on drawings.

2.2 MATERIALS

- A. Plywood for Supporting Substrate: PS 1 Exterior Grade, A-C veneer grade, minimum 5-ply; minimum 3/4 inch thick; join lengths using metal splines.
- B. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.
- C. Joint Sealant: Mildew-resistant silicone sealant, clear.

2.3 FABRICATION

- A. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.
 - 1. Join lengths of tops using best method recommended by manufacturer.
 - 2. Fabricate to overhang fronts and ends of cabinets 1 inch except where top butts against cabinet or wall.

- a. Rout a 1/8 inch drip groove at underside of exposed overlapping edges, set back 1/2 inch from face of edge.
- 3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.
- 4. Miter outside corner joints between surfaces.
- B. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
 - 1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.
 - 2. Height: 4 inches, unless otherwise indicated.
- C. Solid Surfacing: Fabricate tops up to 144 inches long in one piece; join pieces with adhesive sealant in accordance with manufacturer's recommendations and instructions.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations. Do not proceed if services and outlets conflict with back or side splashes.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Securely attach countertop substrate to cabinets using concealed fasteners. Make flat surfaces level; shim where required.
- B. Attach solid surface countertops to substrate using compatible adhesive.
- C. Seal joint between back/end splashes and vertical surfaces.

3.4 TOLERANCES

- A. Variation From Horizontal: 1/8 inch in 10 feet, maximum.
- B. Offset From Wall, Countertops: 1/8 inch maximum; 1/16 inch minimum.
- C. Field Joints: 1/8 inch wide, maximum.

3.5 CLEANING

- A. Clean countertops surfaces thoroughly.

3.6 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

END OF SECTION 123600