

SECTION 06610 (06 61 16)

SOLID SURFACING FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Section Includes:
 - 1. Solid Surfacing Fabrications for [tabletops] [countertops] [vanities] [with integral bowls] [shower surrounds] [tub surrounds] [wall cladding] [wainscoting] [handrails] [windowsills] [toilet partitions] as indicated, including trim and material needed for a complete installation.

1.2 RELATED WORK

- A. Work of this section is related to work specified in the following sections:
 - 1. Section 06200 (06 20 23) - "Interior Finish Carpentry".
 - 2. Section 06400 (06 40 23) - "Interior Architectural Woodwork" (12 32 00) - ["Institutional Casework"] ["Residential Casework"] ["Laboratory Casework"].
 - 3. Section 09310 (09 31 00) - "Ceramic Tile".
 - 4. Section 10260 (10 26 23) - "Impact Resistant Wall Protection".
 - 5. Section 15410 (22 40 00) - "Plumbing Fixtures".
- B. Allowances: Furnish the following under the allowances indicated as specified in Division 1 Section "Allowances":
 - 1. [Insert work to be included under an allowance.]
- C. Alternates: Refer to Section 01230 (01 23 00) - "Alternates" for description of Work in this Section affected by alternates.

1.3 REFERENCES

- A. Reference Standards: In addition to requirements, comply with applicable provisions of following for design, materials, fabrication, and installation of component parts:
 - 1. ISSFA-2, "Classification And Standards Publication of Solid Surfacing Material".
 - 2. ANSI Z124-3 for vanities and Z124-6 for kitchen sinks.
 - 3. NSF Standard 51 for use in both splash and food service areas.
 - 4. New York City MEA for gas toxicity.
 - 5. Canadian Standards Association (CSA).
 - 6. ASTM G21 "Fungal Resistance", Method [A] [B], no growth.
 - 7. ASTM G22 "Bacterial Resistance", no growth.
 - 8. Stain Resistance, ANSI Z124-6-5.2 1997.
 - 9. [Comply with requirements in CID-A-A-60003, "Partitions, Toilets, Complete."]

1.4 DESIGN REQUIREMENTS

- A. Design Load: Deflection limited to 1/360.
- B. Design items with sufficient strength for handling stresses.

- C. Accessible Design: Comply with [the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)."] [ICC/ANSI A117.1.] [FED-STD-795, "Uniform Federal Accessibility Standards."]

1.5 SUBMITTALS

- A. Product Data: Manufacturer's technical literature indicating physical properties and performance criteria for solid surfacing materials and related components.
- B. Shop Drawings: Indicate design parameters, adjacent construction, materials, dimensions, thickness, fabrication details, tolerances, jointing methods, method of support, anchorages, integration with plumbing fixtures and connections, and colors.
- C. Samples: Submit two, 2 inch by 2 inch (51mm x 51mm) samples representative of colors, patterns, textures, finishes and edge treatments. Approved samples will be retained as a standard for the work.
- D. Informational Submittals: Submit following packaged separately from other submittals:
 - 1. Manufacturer's written installation instructions.
 - 2. Maintenance Data: Manufacturer's recommended cleaning and maintenance procedures. Include in project closeout documents.
- E. LEED Submittals:
 - 1. Product Data for Credit EQ 4.1: For installation adhesives, including printed statement of VOC content.
 - 2. Product Data for Credit EQ 4.4: For adhesives, documentation indicating that the adhesive contains no urea formaldehyde.
 - 3. Credit MR 4: For products having recycled content, provide documentation indicating percentages, by weight, of post-consumer and pre-consumer recycled content. Include statement indicating costs for each product having recycled content.
 - 4. Credit MR 5: Identify each regional material along with the location of its harvest, extraction, or manufacture. Include material cost for each item.

1.6 QUALITY ASSURANCE

- A. Fabricator/Installer Qualifications: Company specializing in fabricating and installing solid surfacing fabrications similar in complexity to those required in this project, including specific requirements indicated.
- B. Source Limitations: Obtain solid surfacing fabrications through one source.
- C. Fire-Test-Response Characteristics: Provide solid surfacing fabrications with the following surface-burning characteristics as determined by testing identical products per ASTM E 84 by UL 723 or another testing and inspecting agency acceptable to authorities having jurisdiction:
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.
- D. Mockups: Build mockups to [**verify selections made under sample Submittals and to demonstrate aesthetic effects**][**and qualities of materials and execution**][**set quality standard for fabrication and installation**].
- E. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Section 01310 (01 31 00) - "Project Management and Coordination."

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, handle, and protect materials in accordance with manufacturer's written instructions.
 - 1. Provide protective coverings of suitable material. Take special precautions at corners.

1.8 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install solid surfacing fabrications until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at design levels during the remainder of the construction period.
- B. Field Measurements: Verify that field measurements are as indicated on Shop Drawings.

1.9 SEQUENCING

- A. Sequence work to permit installation of adjacent affected construction, plumbing rough-in.
- B. Coordinate sizes and locations of plumbing, cut-outs and other related Work specified in other Sections to ensure that interior architectural woodwork can be supported and installed as indicated.

1.10 WARRANTY

- A. Warranty: Provide manufacturer's 10 year limited warranty covering replacement of the material except for non-covered conditions as follows:
 - 1. Minor stains, scratches, water spots, and burns which may be corrected by techniques covered in the manufacturer's Use and Care Guide.
 - 2. Failure of solid surfacing joint material.
 - 3. Failure due to structural failure of base cabinets or other solid surfacing substrate construction.
 - 4. Use for purposes other than indoor finish material.See manufacturer's warranty for complete details.

PART 2 - PRODUCTS

2.1 PRODUCTS AND MANUFACTURERS

- A. Acceptable Product and Manufacturer: Formica Solid Surfacing, Formica Corp., Cincinnati, OH.

2.2 MATERIALS AND COMPONENTS

- A. Solid Surfacing Materials: Homogeneous solid sheets of filled plastic resin complying with ISSFA-2.
 - 1. Colors and Patterns: **[As indicated by manufacturer's designations] [Match Architect's samples] [As selected by Architect from manufacturer's full range].**
- B. Special Features: Eased edge treatments.
- C. Accessories:
 - 1. Adhesives: For seams and drop edges, Formica Solid Surfacing Seaming Cartridges, 9 ounce (260ml); color to blend with sheet material.
 - 2. VOC Limits for Installation Adhesives and Glues: Use installation adhesives that comply with the limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.3 FABRICATION

- A. Assemble work at shop following manufacturer's printed fabrication instructions and deliver to job ready for installation. Manufacture in largest practical pieces for handling and shipping without seams.
 - 1. Grade: AWI, **[Premium] [Custom] [Economy].**
 - 2. Fabricate work square and to required lines.
 - 3. Recess and conceal fasteners, connections, and reinforcing.
 - 4. Design construction and installation details to allow for expansion and contraction of materials. Properly frames material with tight, hairline joints held rigidly in place.
 - 5. Fabricate countertops and vanities with back splash and side splash pieces to profiles and sizes indicated.

6. Fabricate items to profiles shown with connections and supports as indicated or as required for complete installation in accordance with manufacturer's written instructions and approved submittals.
 7. Provide cut-outs for plumbing fixtures and trim, washroom accessories, appliances, and related items. Confirm lay-out with manufacturer's cut-out templates before beginning work. Round corners of cut-outs and sand edges smooth.
 8. Do not exceed manufacturer's recommended unsupported overhang distances.
 9. Finish exposed surfaces smooth and polish to low sheen.
 10. Radius corners and edges.
- B. **[Tabletops] [Countertops] [Vanity Tops] [Bar Tops]: [1/2 inch (13mm)]** thick, Solid Surfacing, adhesively joined with no exposed seams, edge details as indicated.
- C. Laboratory Tops: **[1/2 inch (13mm)]** thick, Solid Surfacing, adhesively joined with no exposed seams, edge details as indicated **[complete with indicated plumbing fixtures and accessories]**. Refer to Formica Data Sheet (Form No. 11-117) for list of chemicals which do and do not stain Formica Solid Surfacing.
- D. **[Reception Countertops] [Nurse Station Countertops]:** Horizontal surfaces of **[1/2 inch (13mm)]** thick, Solid Surfacing, adhesively joined with no exposed seams, edge details as indicated.
- E. Vertical Surfaces: **[1/4 inch (6mm)] [1/2 inch (13mm)]** thick Solid Surfacing, adhesively joined with no exposed seams, edge details as indicated.
- F. Cold Cafeteria Surfaces: **[1/2 inch (13mm)]** thick, Solid Surfacing, adhesively joined with no exposed seams, edge details as indicated.
1. Provide expansion joints in countertops as indicated.
 2. Provide cut-outs for equipment and appliances in accordance with approved submittals with templates furnished by equipment manufacturer.
 3. Reinforce seams, cut-outs and edges in accordance with approved submittals and manufacturer's written installation instructions.
 4. Provide insulation between solid surfacing fabrications and adjacent cold pans in accordance with approved submittals and manufacturer's written installation instructions.
- G. Hot Cafeteria Surfaces: **[1/2 inch (13mm)]** thick, Solid Surfacing, adhesively joined with no exposed seams, edge details as indicated.
1. Provide expansion joints in countertops as indicated.
 2. Provide cut-outs for equipment and appliances in accordance with approved submittals with templates furnished by equipment manufacturer.
 3. Reinforce seams, cut-outs and edges in accordance with approved submittals and manufacturer's written installation instructions.
 4. Provide insulation and conductive tape between solid surfacing fabrications and adjacent hot pans in accordance with approved submittals and manufacturer's written installation instructions.
 5. Provide venting of cabinets as indicated.
- H. **[Toilet Partitions] [Shower Partitions]: [3/4 inch (19mm) thick, Custom]** Solid Surfacing with solid phenolic or chrome plated steel pilasters attached at floor and ceiling. Provide partition manufacturers standard hardware for assembly and attachment.
- I. **[Wall Cladding] [Wainscoting]: 1/4 inch (6mm)** thick Solid Surfacing, with **[butt joints] [1/8 inch 93mm) wide joints]** sealed with silicone sealant per solid surfacing manufacturer's recommendations, adhesively applied to approved substrate.
- J. Windowsills: **[1/2 inch (13mm)]** thick, Solid Surfacing, edge details as indicated.
- K. Sinks:
1. K100 Model Sink: Single Bowl, 23 inches by 18 inches by 9 inches deep (Outside Dimensions); 20-3/4 inches by 16-3/4 inches (Inside Dimensions), Drain Diameter 3-1/2 inches (88.9mm).

2. S050 Model Sink: Single Bowl, 14-1/2 inches by 14-1/2 inches by 6-1/2 inches deep (Outside Dimensions); 12-5/8 inches by 12-5/8 inches (Inside Dimensions), Drain Diameter 3-9/16 inches (90.4mm).
 3. S075 Model Sink: Single Bowl, 16-1/2 inches by 19-3/8 inches by 8-7/8 inches deep (Outside Dimensions); 14-5/8 inches by 17-1/2 inches (Inside Dimensions), Drain Diameter 3-9/16 inches (90.4mm).
 4. SB025 Model Sink: Single Bowl, 8-3/16 inches by 14-1/2 inches by 6-1/2 inches deep (Outside Dimensions); 6-5/16 inches by 12-5/8 inches (Inside Dimensions), Drain Diameter 3-9/16 inches (90.4mm).
 5. S200 Model Sink: Double Bowl, 33 inches by 18-3/8 inches by 9 inches deep (Outside Dimensions); 15 inches by 16-1/2 inches (Inside Dimensions), Drain Diameter 3-9/16 inches (90.4mm).
 6. S175 Model Sink: Double Bowl, 33 inches by 20-3/16 inches by 9 inches deep (Large), Outside Dimensions. Double Bowl, 33 inches by 20-3/16 inches by 7 inches deep (small), Outside Dimensions; [18-5/16 inches by 18-5/16 (Large)] [11-3/4 inches by 14-7/8 inches (Small)] (Inside Dimensions), Drain Diameter 3-9/16 inches (90.4mm).
- L. Countertops with Under-mounted Sinks: **[1/2 inch (13mm)]** thick, Solid Surfacing, edge details as indicated with under-mount sink.
- M. V-075 Lavatory Bowl, Nickel or Bronze: 18-1/2 inches by 15-1/16 inches by 5-1/4 inches deep (Outside Dimensions); 16-1/2 inches by 13-1/16 inches (Inside Dimensions). Overflow: Front.
- N. Vanity Tops with Under-mounted Sinks: **[1/2 inch (13mm)]** thick, Solid Surfacing, edge details and back splash as indicated, with under-mount sink.
- O. Accessible-ADA Lavatory Bowl:
1. L-075 Model Sink: 18-1/2 inches by 15-1/16 inches by 5-1/4 inches deep (Outside Dimensions); 16-1/2 inches by 13-1/16 inches (Inside Dimensions), Overflow: Front.
 2. L050 Model Sink: 16-11/16 inches by 12-1/4 inches by 5-1/2 inches deep (Outside Dimensions); 14-11/16 by 10-1/4 inches (Inside Dimensions), Overflow: Front
 3. L-100 Model Sink: 20-5/8 inches by 15-5/16 inches by 5-3/8 inches deep (Outside Dimensions); 18-5/8 inches by 13-5/16 inches (Inside Dimensions), Overflow: Front.
 4. V-065 Model Sink: 18 inches by 14 inches by 5 inches deep (Outside Dimensions); 16 inches by 12 inches (Inside Dimensions), Overflow: Front.
 5. L-080 Model Sink: Vanity Undermount Bowl, 17-7/8 inches by 15-15/16 inches by 5 inches deep (Outside Dimensions); 14-15/16 inches by 13 inches (Inside Dimensions), Drain Diameter 1-3/4 inches (44.5mm). Overflow: Back
- P. Tolerances:
1. Variation in component Size: Plus/Minus 1/4 inch.
 2. Location of Openings: Plus/Minus 1/4 inch from indicated location.

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Examine surfaces for conditions that would adversely affect execution.
- B. Preparation: Take field measurements.

3.2 INSTALLATION

- A. General: Install in accordance with manufacturer's written installation instructions and approved Submittals. Provide templates and rough-in measurements.
 1. Set items plumb, level, rigid and solidly adhered to substrate.
 2. Prefit items: Adjust supports to make fit. Align joints over support framing.

3. Apply dabs of silicone on supports; place items on supports and attach.
- B. Splashes: Install splashes at back and sides of countertops and vanities using silicone. Apply silicone to back surface only. Place thin bead of seam adhesive along edge where splash seats.
 1. Seal joint between vanity top and splashes and between splashes and walls with Sealant Designation [] as specified in Section 07920 (07 92 00) "Sealants".
 - C. Window Sills: Install sills tight to window framing and adjacent wall surfaces. Anchor with concealed fastening system to securely prevent rocking, racking, or displacement. Seal joint between sill at adjacent wall and window surfaces with Sealant Designation [] as specified in Section 07920 (07 92 00) - "Sealants".
 - D. Tolerances:
 1. Maximum Variation From True Dimension: 1/8 inch.
 2. Maximum Offset From True Position: 1/8 inch.
- 3.3 CLEANING AND PROTECTION
- A. Cleaning:
 1. Clean and polish fabrications in accordance with manufacturer's instructions.
 2. Promptly remove excessive mastic and seam adhesive.
 3. Clean tops and splashes in accordance with manufacturer's recommendations.
 - B. Protection:
 1. Do not permit construction near unprotected surfaces.
 - C. Refer to manufacturer's warranty and exclusions.

END OF SECTION