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**SECTION 06 6116**  
**SOLID SURFACING WALL PANELS**

This Section specifies “Wilsonart<sup>®</sup> Solid Surface” wall panels produced by Wilsonart LLC. Wilsonart Solid Surface is an acrylic resin based solid surfacing material available in 4 standard colors and designs.

Wilsonart Solid Surface is highly resistant to stains and easy to maintain. LEED-CI points are available for the Commercial Interiors category. Wilsonart Solid Surface has attained GREENGUARD Certification from UL Environment for low chemical emissions into indoor air during product usage.

Wilsonart offers a 10 year Commercial Limited Warranty for material defects.

Section Editing: Informational notes will appear as “Editing Note” text boxes throughout this Section. Bracketed bold text will require a selection to be made.

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

**EDITING NOTE:** Revise listing to suit Project requirements.

- A. Wall cladding panels.
- B. Wall cladding panels (surrounds) for wet locations.
- C. Moldings.
- D. Adhesives and sealants.

**1.02 RELATED REQUIREMENTS**

**EDITING NOTE:** Section listings below are common references and based on the broadly accepted CSI MasterFormat<sup>®</sup> for Section numbers and titles. Revise to suit requirements for particular project.

- A. Section 01 3000 - Submittals.
- B. Section 06 1000 - Rough Carpentry.
- C. Section 09 2900 - Gypsum Board.
- D. Section 09 3000 - Tiling.
- E. Section 12 3661 - Solid Surfacing Countertops.

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**1.03 REFERENCES**

<b>EDITING NOTE:</b> Revise Reference Standards to suit Project requirements.
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- A. Reference Standards:
1. ASTM C 834: Standard Specification for Latex Sealants.
  2. ASTM C 920: Standard Specification for Elastomeric Joint Sealants.
  3. ASTM D 256: Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics.
  4. ASTM D 570: Standard Test Method for Water Absorption of Plastics.
  5. ASTM D 696: Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer.
  6. ASTM D 792: Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
  7. ASTM D 2583: Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.
  8. ASTM E 84: Standard Test Method for Surface Burning Characteristics of Building Materials.
  9. ASTM G 21: Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
  10. ASTM G 22: Standard Practice for Determining Resistance of Plastics to Bacteria.
  11. ASTM G 155: Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials.
  12. NEMA LD-3: High Pressure Decorative Laminates.
  13. SCAQMD Rule 1168: Adhesive and Sealant Applications.
  14. UL 2818: GREENGUARD Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishings.

**1.04 SUBMITTALS**

- A. Submit under provisions of Section 01 3000 - Submittals.
- B. Product Data:
1. Submit product data for each specified product. Include manufacturer's technical data sheets and published instruction instructions.
  2. Submit Material Safety Data Sheets (MSDS) for adhesives and sealants.
- C. Shop Drawings:
1. Submit fully dimensioned shop drawings showing wall panel layouts, joinery, terminating conditions, substrate construction, and cutouts and holes. Include elevations, section details, and large scale details.
- D. Samples:
1. Submit selection and verification samples for each color, pattern, and finish required.

- E. Quality Assurance Submittals:
1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties, if required.
  2. LEED Submittals: Submit applicable LEED documentation for potential credits specified in this Section.
  3. Warranty: Specimen copy of specified warranty.
- F. Maintenance Data: Submit manufacturer's published maintenance manual with closeout submittals.

### 1.05 REGULATORY REQUIREMENTS

- A. Adhesives, Sealants, and Sealant Primers:
1. SCAQMD (South Coast Air Quality Management District) Rule 1168 for VOC content.

### 1.06 QUALITY ASSURANCE

- A. Qualifications:
1. Fabricator Qualifications: Minimum of three years documented experience in fabricating solid surfacing wall panels similar in scope and complexity of this Project. Currently certified by the manufacturer as an acceptable fabricator.
  2. Installer Qualifications: Minimum of three years documented installation experience for projects similar in scope and complexity to this Project, and currently certified by the manufacturer as an acceptable Installer. **[Installer shall be the fabricator].**

**EDITING NOTE:** Following two LEED paragraphs offer potential credits according to LEED 2009 for Commercial Interiors (LEED-CI). Coordinate with designated LEED AP for credits applicable to Project.

- B. LEED 2009 rating system potential credits for solid surfacing:
1. LEED-CI MR Credit 1.2 Building Reuse - Maintain Indoor Nonstructural Elements.
  2. LEED-CI MR Credit 3.1 - Materials Reuse.
- C. LEED 2009 rating system potential credits for adhesives:
- LEED-CI IEQ Credit 4.1 Low-Emitting Materials - Adhesives and Sealants.
- D. Mock-Ups:

**EDITING NOTE:** Revise mock-up size and location to suit Project requirements.

1. Install at Project site using acceptable products and manufacturer approved installation methods. Obtain Architect's acceptance of color, pattern, finish, fabrication, and installation standards.
2. Mock-Up Size: [\_\_\_\_\_] by [\_\_\_\_\_].
3. Mock-Up Size: Indicated on Drawings.
4. Mock-Up Location: **[Indicated on Drawings] [As directed by Architect].**

5. Maintain mock-up during construction for fabrication and installation comparison. If required, remove and legally dispose of mock-up when no longer required.
6. Incorporation: If permitted by Architect, mock-up may be incorporated into as part of the completed Work.

### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Storage and Protection: Store materials protected from exposure to harmful weather conditions, at temperature and humidity conditions recommended by manufacturer. Store sheet materials flat on pallets or similar rack-type storage to preclude damage.

### 1.08 PROJECT CONDITIONS

- A. Field Measurements: Verify actual measurements and openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.
- B. Adhesive: Acclimatize adhesives to occupancy room temperatures with maximum temperature not to exceed 75 deg F.

### 1.09 WARRANTY

- A. Manufacturer's Limited Warranty: Provide manufacturer's standard 10 Year Commercial Limited Warranty against defects in solid surface sheet materials.

## PART 2 - PRODUCTS

**EDITING NOTE:** Full Contact Information: Wilsonart LLC, 2400 Wilson Place, Temple, TX 76503-6110. Tel. 254.207.7000, Toll-Free 800.433.3222, Fax 254.207.2384. Websites are:  
[www.wilsonart.com](http://www.wilsonart.com) (primary website)  
<http://sustain.wilsonart.com> (sustainable design website)

### 2.01 MANUFACTURER

- A. Basis of Design: Wilsonart LLC.

### 2.02 SOLID SURFACING SHEET MATERIAL

- A. Acceptable Product: "Wilsonart Solid Surface."
- B. Composition: Acrylic resins, fire-retardant mineral fillers, and proprietary coloring agents. Through-the-body color for full thickness of sheet material.

**EDITING NOTE:** Solid surface sheet material in 1/4 inch thickness is typically used for vertical applications, such as shower/tub walls, wainscoting, backsplashes, and operating room walls.

**EDITING NOTE:** Standard wall panel sheet material dimensions are 30 inches wide by 120 inches long.

- C. Material Thickness: 1/4 inch, nominal.

## D. Conformance Standards:

1. UL 2818:
  - a. GREENGUARD - Emission levels in UL 2818, Section 7.1 are applicable for furniture products.
  - b. GREENGUARD Gold - Emission levels in UL 2818, Section 7.2 are applicable for building materials, finishes, and furnishings.

## E. Physical Characteristics:

**EDITING NOTE:** High temperature resistance tests may have a slight effect on the material surface; this can be corrected (renewed) to "No Effect."

1. Thermal Expansion Coefficient:  $1.5 \times 10^{-5}$  in./in.<sup>°F</sup>; ASTM D 696.
2. Hardness (Barcol Impressor): 62; ASTM D 2583.
3. Impact Resistance: 78 in. drop with no fracture; NEMA LD-3, Method 3.8.
4. Izod Impact: 0.24 (ft-lb.)/in.; ASTM D 256, Method A.
5. Light Resistance - Xenon: No effect; NEMA LD-3, Method 3.3.
6. Stain Resistance: Pass; ANSI Z 124.3, modified.
7. Wear and Cleanability: Pass; ANSI Z 124.3.
8. Fungi Resistance: Pass; ASTM G 21.
9. Bacterial Resistance: Pass; ASTM G 22.
10. Boiling Water Resistance: No effect; NEMA LD-3, Method 3.5.
11. High Temperature Resistance: No effect; NEMA LD-3, Method 3.6.
12. Weatherability: Delta E less than 5; ASTM G 155.
13. Moisture Absorption: Less than 0.25 percent; ASTM D 570, long term.
14. Specific Gravity: 1.78 gram/cm<sup>3</sup>; ASTM D 792.
15. Approximate Weight: 2.2 lb./ft<sup>2</sup>.
16. Surface Burning Characteristics: Class II and Class B; ASTM E 84.

**EDITING NOTE:** Select color, pattern, and finish design from one of the following options. Note: Surface finish options are matte, satin, semigloss, gloss, and high gloss. Durability (maintenance) increases as sheen value increases.

- F. Color, Pattern, and Finish Design: **[Frosty White] [Antique White] [Beige Tempest] [Chai Cream Mirage]**.
- G. Color, Pattern, and Finish Design: Specified in SCHEDULE Article of this Section.
- H. Color, Pattern, and Finish Design: Indicated on Drawings.
- I. Color, Pattern, and Finish Design: Selected from manufacturer's standard offerings.

**2.03 ACCESSORY MATERIALS**

**EDITING NOTE:** Standard molding types include crown, base, shoe, and cap moldings.

- A. Solid Surfacing Moldings: Same material as wall cladding panels. Types as **[indicated on Drawings] [selected from manufacturer's standard offerings]**.

**EDITING NOTE:** Select color, pattern, and finish design from one of the following options. Surface finish options are matte, satin, semigloss, gloss, and high gloss. Durability (maintenance) increases as sheen value increases.

1. Color, Pattern, and Finish: Match wall cladding panels.
  2. Color, Pattern, and Finish: [\_\_\_\_\_].
  3. Color, Pattern, and Finish Design: Specified in SCHEDULE Article of this Section.
  4. Color, Pattern, and Finish Design: Indicated on Drawings.
  5. Color, Pattern, and Finish Design: Selected from manufacturer's standard offerings.
- B. Seam Adhesive: Methacrylate-based adhesive for chemically bonding solid surfacing seams. Color complementary to solid surfacing panels. UL 2818 GREENGUARD Gold certified and complies with SCAQMD Rule 1168.
1. Product: "Wilsonart Hard Surface Adhesive."
- C. Elastomeric Sealant: Mildew-resistant silicone sealant for filling gaps between wall panels and at terminating substrates at tubs, showers, and similar wet environment applications. Complies with ASTM C 920, Type S (single component), Grade NS (nonsag).
1. Product: Acceptable to wall panels manufacturer.
  2. Color: **[Complementary to solid surfacing color] [Clear] [Selected from sealant manufacturer's standard offerings].**
- D. Siliconized Acrylic Sealant: Siliconized acrylic latex sealant. For general applications to fill gaps between wall panels and at terminating substrates. Complies with ASTM C 834, Type OP, Grade NF, and SCAQMD Rule 1168.
3. Product: "Wilsonart Color Matched Caulk".
  4. Color: **[Complementary to solid surfacing color] [Clear] [Selected from sealant manufacturer's standard offerings].**
- E. Construction Adhesive: Wall panels manufacturer's recommended silicone-based construction adhesive for attachment of wall panels to supporting substrates, attachment of moldings, and other applications according to manufacturer's published installation instructions.

## 2.04 FABRICATION

- A. Fabricate components in shop, to greatest extent practicable, in sizes and shapes indicated according to approved shop drawings and manufacturer's published fabrication requirements.
- B. Form joint seams between solid surfacing components with specified seam adhesive. Completed joints inconspicuous in appearance and without voids.
- C. Provide holes and cutouts indicated on approved shop drawings. Rout cutouts and complete by sanding all edges smooth.

**PART 3 - EXECUTION****3.01 EXAMINATION**

- A. Examine substrates and conditions that could adversely affect the work of this Section.
- B. Substrates must be sound, flat, smooth, and free from dust or other surface contaminants.
- C. Commencement of work will constitute acceptance of substrates and conditions to receive the work.

**3.02 WALL CLADDING PANELS INSTALLATION**

- A. Install wall cladding panels plumb, level, and true according to approved shop drawings and manufacturer's published installation instructions. Shim as required during installation process. Use woodworking and specialized fabrication tools acceptable to manufacturer.
- B. Rout all wall cladding panels to size; sawcuts are not permissible. Cutouts must also be routed with eased edges.
- C. Provide eased panel edges where specified silicone sealant is required to fill gap between panels.
- D. Attach wall cladding panels to substrate with specified construction adhesive. Apply construction adhesive as 1/4 inch beads in locations and spacing according to manufacturer's published installation instructions. Provide temporary bracing until adhesive has to set to proper strength. Promptly remove excess adhesive.
- E. Form wall cladding joint seams for multiple panels with specified seam adhesive. Seams in locations shown on approved shop drawings and acceptable to manufacturer. Promptly remove excess adhesive.
- F. Provide specified silicone sealant to fill gaps in the following locations and as required by manufacturer:

<b>EDITING NOTE:</b> Revise conditions to suit Project requirements.
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- 1. Wall panel joints indicated to receive silicone sealant.
  - 2. At inside corners.
  - 3. Between finished floor and ceiling for full height wall cladding.
  - 4. Not greater than 12 feet on center for any wall cladding length or height.
- G. Wall-mounted accessories must be completed supported by substrate wall framing, not wall cladding panels.
- H. Install solid surfacing moldings with specified construction adhesive. Promptly remove excess adhesive.

### 3.03 WET WALL CLADDING PANELS INSTALLATION

- A. Install wall cladding panels plumb, level, and true according to approved shop drawings and manufacturer's published installation instructions. Use woodworking and specialized fabrication tools acceptable to manufacturer.
- B. Rout all wall cladding panels to size; sawcuts are not permissible. Cutouts must also be routed.
- C. Provide eased panel edges where specified silicone sealant is required to fill gap between panels.
- D. Attach wall cladding panels to substrate with specified construction adhesive. Apply construction adhesive as 1/4 inch beads in locations and spacing according to manufacturer's published installation instructions. Promptly remove excess adhesive.
- E. Form wall cladding joint seams for multiple panels with specified joint adhesive. Seams in locations shown on approved shop drawings and acceptable to manufacturer. Promptly remove excess adhesive.
- F. Provide specified silicone sealant to fill gaps in the following locations and as required by manufacturer:

**EDITING NOTE:** Revise conditions to suit Project requirements.

- 1. Wall panel joints indicated to receive silicone sealant.
  - 2. At inside corners.
  - 3. At interface with tub or shower pan.
  - 4. At interface with tiled shower base.
  - 5. Between finished floor and ceiling for full height wall cladding.
  - 6. Not greater than 12 feet on center for any wall cladding length or height.
- G. Wall-mounted accessories must be completed supported by substrate wall framing, not wall cladding panels.
  - H. Install solid surfacing moldings with specified construction adhesive. Promptly remove excess adhesive.

### 3.04 WALL PANEL REPAIRS

- A. If permissible to Architect, minor surface marring may be repaired according to manufacturer's published installation instructions.
- B. Remove and replace wall panel components that are damaged and cannot be satisfactorily repaired.

### 3.05 CLEANING AND PROTECTION

- A. Clean solid surfacing components according to manufacturer's published maintenance instructions. Completely remove excess adhesives and sealants from finished surfaces.
- B. Protect completed work from damage during remainder of construction period.



**3.06 SCHEDULE**

**EDITING NOTE:** Schedule for solid surfacing wall panels may be inserted here if not indicated on Drawings or in Finish Schedule.

**END OF SECTION 06 6116**