

**SECTION 06650 - SOLID SURFACING****PART 1 - GENERAL****1.1 SUMMARY**

1. Section Includes:
  1. Gibraltar® Solid Surface Material.
  2. Earthstone™ Solid Surface Material.
  3. Solid Surface Material Shaped Goods (Wilsonart® Sinks).
2. Related Sections:
  1. Finish Carpentry: Section 06200.
  2. Custom Casework [Architectural Woodwork]: Section 06410.
  3. Sealants: Section 07920.
  4. Door Thresholds at Ceramic Tile: Section 09310.
  5. Plumbing: Division 15.

**1.2 SYSTEM DESCRIPTION**

1. Gibraltar® Solid Surface Sheet: Homogenous sheet material composed of acrylic resins, fire-retardant filler materials, and coloring agents.
2. Earthstone™ Solid Surface Sheet: Homogenous sheet material composed of acrylic resins, fire-retardant filler materials, and coloring agents.
3. Solid Surface Shaped Goods (Wilsonart® Sinks): Cast items of homogenous material composed of polyester and acrylic resins, fire-retardant filler materials, and coloring agents.

**1.3 SUBMITTALS**

1. Comply with Section 01330, unless otherwise indicated.
2. Product Data:
  1. Detailed specification of construction and fabrication.
  2. Manufacturer's installation instructions.
  3. Manufacturer's detailed recommendations for handling, storage, installation, protection, and maintenance.
3. Shop Drawings: Installation details including location and layout of each type of fabrication and accessory.
4. Samples: Full range of colors and patterns.
5. Contract Closeout Submittals: Comply with Section 01700.

**1.4 QUALITY ASSURANCE**

1. Fabricator Qualifications: Wilsonart® certified solid surface fabricator/installer.
2. Installer Qualifications: Firm experienced in installation or application of systems similar in complexity to those required for this Project, including specific requirements indicated.
  1. Acceptable to or licensed by manufacturer.
3. Source Limitations: Obtain materials and products from single source.

**1.5 DELIVERY, STORAGE, AND HANDLING**

1. Deliver fabrications appropriately wrapped in protective materials.
2. Protect fabrications from damage.

**1.6 PROJECT CONDITIONS**

1. Maintain relative humidity planned for building occupants and an ambient temperature between 65 and 75\_F° for 48 hours prior to and during installation. After installation, maintain relative humidity and ambient temperature planned for building occupants.

**1.7 WARRANTY**

1. Furnish manufacturer's limited 10 year warranty.

**PART 2 - PRODUCTS****2.1 MANUFACTURER**

1. Wilsonart International, (800) 433-3222, www.wilsonart.com.
  1. Gibraltar® Solid Surface, Type 051.
  2. Earthstone™ Solid Surface, Type 051.

**2.2 GIBRALTAR® SOLID SURFACE SHEET**

1. Nominal sheet thickness: 0.50 inch (13 mm)
2. Surface burning characteristics in accordance with ASTM E 84: Class I or A, and as follows:
  1. Flame spread: < 25.
  2. Smoke developed: <25.
3. Liquid Absorption, ISO 4586-2, for 1/2 inch material thickness: 0.4 percent after 2 hour period.
4. Izod Impact, ASTM D 256, Method A: 0.3 foot pounds per inch.
5. Tensile Modulus, ASTM D 638 Nominal: 1.2 million pounds per square inch.
6. Thermal Expansion, ASTM D 696: 0.000018 inch per inch per degree F, maximum.
7. Hardness, ASTM D 2583, Barcol Impressor: 57.
8. Flexural Toughness, ASTM D 790: 3 (in.-lb./in<sup>3</sup>).
9. Deflection Temperature under load, ASTM D 648: 90 degrees C.
10. Stain Resistance, ANSI Z-124.3 Modified; 3.4: No effect.
11. Boiling Water Resistance, NEMA LD 3-3.05: No effect.
12. High Temperature Resistance, NEMA LD 3-3.06: No effect.
13. Radiant Heat Resistance, NEMA LD 3-3.10: No effect.
14. Light Resistance, NEMA LD 3-3.03: No effect.
15. Ball Impact Resistance, NEMA LD 3-3.08, one half pound ball, unsupported: 125 inches.
16. Specific Gravity (Density ASTM D792): 1.60 grams per cubic centimeter.
17. Approximate weight: 4.20 pounds per square foot.
18. Weatherability, ASTM D 2565: Pass.
19. Fungus Resistance, ASTM G 21: Pass.
20. Bacterial Resistance, ASTM G 22: Pass.
21. Pittsburgh Protocol Toxicity: 66.9 grams.
22. Pattern:
23. Finish:

**SPEC NOTE:** If pattern and finish are not specified above, indicate location of information or method of selection below.

24. Patterns and Finishes: Specified in SCHEDULE Article of this section. Patterns and Finishes: Indicated on drawings.
25. Patterns and Finishes: Selected from manufacturer's full range of available selections.

**2.3 EARTHSTONE™ SOLID SURFACE SHEET**

1. Nominal sheet thickness: 0.50 inch (13 mm).
2. Surface burning characteristics in accordance with ASTM E 84: Class II or B, and as follows:
  1. Flame spread: < 26.
  2. Smoke developed: < 35.
2. Liquid Absorption, ISO 4586-2, for 1/2 inch material thickness: 0.4 percent after 2 hour period.
3. Izod Impact, ASTM D 256, Method A: 0.3 foot pounds per inch.
4. Tensile Modulus, ASTM D 638 Nominal: 1.1 million pounds per square inch.
5. Thermal Expansion, ASTM D 696: 0.00002 inch per inch per degree F, maximum.
6. Hardness, ASTM D 2583, Barcol Impressor: 57.
7. Flexural Toughness, ASTM D 790: 5 (in.-lb./in<sup>3</sup>).

8. Deflection Temperature under load, ASTM D 648: 90 degrees C.
9. Stain Resistance, ANSI Z-124.3 Modified; 3.4: No effect.
10. Boiling Water Resistance, NEMA LD 3-3.05: No effect.
11. High Temperature Resistance, NEMA LD 3-3.06: No effect.
12. Radiant Heat Resistance, NEMA LD 3-3.10: No effect.
13. Light Resistance, NEMA LD 3-3.03: No effect.
14. Ball Impact Resistance, NEMA LD 3-3.08, one half pound ball, unsupported: 125 inches.
15. Specific Gravity (Density ASTM D792): 1.56 grams per cubic centimeter.
16. Approximate weight: 4.10 pounds per square foot.
17. Fungus Resistance, ASTM G 21: Pass.
18. Bacterial Resistance, ASTM G 22: Pass.
19. Pittsburgh Protocol Toxicity: 65.4 grams.
20. Pattern:

**SPEC NOTE:** If pattern and finish are not specified above, indicate location of information or method of selection below.

21. Finish:
22. Patterns and Finishes: Specified in SCHEDULE Article of this section. Patterns and Finishes: Indicated on drawings.
23. Patterns and Finishes: Selected from manufacturer's full range of available selections.

## 2.4 SOLID SURFACING MATERIAL SHAPED GOODS (WILSONART® SINKS)

### (Interior Dimensions)

1. Offset Double Sink: Product Type BD321; size 30 inches (76.20 cm) by 18 inches (45.72 cm), 8-inches (20.32 cm) bowl depth.
2. Offset Double Sink, Drop Ledge Style: Product Type BD421; size 29-1/4 inches (74.29 cm) by 18-1/4 inches (46.35 cm), 8-1/2 inches (21.59 cm) bowl depth.
3. Full Offset Double Sink: Product Type BD322; size 30-1/4 inches (76.84 cm) by 18 inches (45.72 cm), 8 inches (20.32 cm) bowl depth.
4. Large Double Equal Sink: Product Type BD323; size 32-1/2 inches (82.55 cm) by 17 inches (43.18 cm), 7-3/4 inches (19.69 cm) bowl depth.
5. Double Equal Sink: Product Type BD324; size 30 inches (76.20 cm) by 15-3/4 inches (40.0 cm), 8-1/2 inches (21.59 cm) bowl depth.
6. Double Sink, Drop Ledge Style: Product Type BD424; size 28-1/2 inches (72.39 cm) by 14-3/4 inches (37.47 cm) [18-1/4 (46.35 cm) including deck], 8-3/4 inches (22.22 cm) bowl depth.
7. Square Sink: Product Type BK222; size 17 inches (43.18 cm) by 17 inches (43.18 cm), 8 inches (20.32 cm) bowl depth.
8. Rectangle Single Sink: Product Type BK323; size 10-1/4 inches (26.04 cm) by 16-1/2 inches (41.91 cm), 8 inches (20.32 cm) bowl depth.
9. Large Utility Sink: Product Type BK320; size 27-3/8 inches (69.53 cm) by 17-7/8 inches (45.87cm), 14 inches (35.56 cm) bowl depth.
10. Large Rectangle Single Sink: Product Type BK324; size 21 inches (53.34 cm) by 15-3/4 inches (40.0 cm), 7-1/2 inches (19.05 cm) bowl depth.
11. Single Sink, Drop Ledge Style: Product Type BK424; size 21-3/4 inches (55.24 cm) by 15-3/4 inches (40.0 cm) [19-1/2 (49.53 cm) including deck], 9-3/4 inches (24.76 cm) bowl depth.
12. Bar Sink: Product Type BK325; size 9 inches (22.86 cm) by 12 inches (30.48 cm), 5-1/2 inches (13.97 cm) bowl depth.
13. Bar Sink, Drop Ledge Style: Product Type BK425; size 9 inches (22.86 cm) by 12 inches (30.48 cm) [16 (40.64 cm) including deck], 6-3/4 inches (17.14 cm) bowl depth.
14. "D" Bowl Sink: Product Type BK326; size 21 inches (53.34 cm) by 16-3/4 inches (42.55 cm), 7-1/2 inches (19.05 cm) bowl depth.
15. Vanity Bowl: Product Type BV120; size 14-5/8 inches (37.13 cm) by 10-7/16 inches (26.52 cm), 5

- 3/8 inches (13.61 mm) bowl depth.
16. Vanity Bowl: Product Type BV121; size 15-3/4 inches (40.0 cm) by 12-3/4 inches (32.39 cm), 5-1/2 inches (13.97 cm) bowl depth.
  17. Vanity Bowl: Product Type BV122; ADA-approved type; size 15-3/4 inches (40.0 cm) by 12-3/4 inches (32.39 cm), 3-1/2 inches (8.89 cm) bowl depth.
  18. Vanity Bowl: Product Type BV123; size 16-1/2 inches (41.91 cm) by 13-1/2 inches (34.29 cm), 5 inches (12.70 cm) bowl depth.
  19. Large Vanity Bowl: Product Type BV125; size 20-3/4 inches (52.70 cm) by 13-1/2 inches (34.29 cm), 7-1/4 inches (18.41 cm) bowl depth
  20. Vanity Bowl, Drop Ledge Style: Product Type BV421; size 17-3/4 inches (45.08 cm) by 11-1/2 inches (29.20 cm) [15-1/2 (39.37 cm) including deck], 6-1/2 inches (16.51 cm) bowl depth.

**SPEC NOTE:** If product types are not specified above, indicate location of information or method of selection below.

21. Furnish types indicated on drawings.
22. Furnish types indicated on approved shop drawings required in Section 06400, Architectural Woodwork.
23. Furnish types specified in SCHEDULE Article of this section.

**SPEC NOTE:** Select one of the paragraphs below; if more than one pattern or finish is selected, select appropriate paragraph for location or method of selection.

24. Pattern:
25. Finish:

**SPEC NOTE:** If pattern and finish are not specified above, indicate location of information or method of selection below.

26. Patterns and Finishes: Specified in SCHEDULE Article of this section.
27. Patterns and Finishes: Indicated on drawings.
28. Patterns and Finishes: Selected from manufacturer's full range of available selections.

## 2.5 ACCESSORY MATERIALS

1. Joint adhesive: Manufacturer's standard adhesive to create inconspicuous, nonporous joints, with a chemical bond (WA8215).

**SPEC NOTE:** RETAIN BELOW FOR UNDERMOUNT SINKS AND BOWLS

2. Sealant: Standard mildew resistant, FDA/UL® recognized silicone sealant in color matched or clear formulations.
3. Sink/bowl mounting hardware: Manufacturer's approved bowl clips, brass inserts and fasteners for attachment of undermount sinks/bowls.

## 2.6 FABRICATION

1. Fabrication to be performed by a Wilsonart® certified solid surface fabricator/installer.
2. Fabricate components in shop to greatest extent practical to size and shape indicated, in accordance with approved shop drawing and Wilsonart® published requirements.
3. Wilsonart® Solid Surface Fabrication Manual (SS0319)
4. Form joints between components using manufacture's standard joint adhesive. Joints shall be inconspicuous in appearance and without voids. Attach 4" (100mm) wide Gibraltar®/Earthstone™ reinforcing strip under joints required by Deck Seam Section of the Wilsonart® Solid Surface

Fabrication Manual (SS0319).

5. Provide holes and cutouts for plumbing and bath accessories as indicated on shop drawings.
6. Rout and finish component edges to a smooth, uniform finish. Rout all cutouts then sand all edges smooth. Repair or reject defective or inaccurate work.
7. Finish: Surfaces shall have a uniform finish.
  1. Matte: Standard finish for high traffic areas, requires the least amount of maintenance.
  2. Satin: Standard finish for darker Gibraltar® and Earthstone™ patterns, requires minimal maintenance.
  3. Semi-gloss: Higher sheen with greater reflectance, suggested for lower traffic areas, requires increased maintenance
  4. Gloss: Maximum sheen and reflectance, recommended for light traffic areas or vertical applications.
8. Thermoforming (optional): Comply with forming data from manufacturer.
  1. Construct matching molds to form components shape.
  2. Form pieces to shape prior to seaming and joining.
  3. Cut pieces larger than finished dimensions, sand edges, remove all nicks and scratches.
  4. Heat entire component uniformly between 280°–325°F during forming.
  5. Prevent blistering, whitening or cracking of Gibraltar®/Earthstone™ during forming.

**SPEC NOTE:** Refer to Wilsonart® Fabrication Manual SS0319. Technical information and a listing of the certified Wilsonart® Gibraltar® or Earthstone™ fabricators can be provide by the local Wilsonart® distributor.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

1. Examine substrates to receive solid surfacing. Identify conditions detrimental to proper or timely installation. Do not commence installation until conditions have been corrected.

### 3.2 PREPARATION

1. Precondition Wilsonart® Solid Surfacing in accordance with manufacturer's printed installation instructions.

### 3.3 INSTALLATION

1. Install components plumb and level, in accordance with approved shop drawings, project installation details and manufacturer's printed instructions.
2. Form joints using manufacturer's approved adhesive, with joints inconspicuous in finished work.
3. Adhere undermount sinks/bowls to countertop using manufacturer's recommended joint adhesive.
4. Adhere topmount sinks/bowls to countertop using manufacturer's recommended adhesive/silicone sealant.
5. Provide backsplashes and endsplashes as indicated on the drawings. Adhere to countertops using manufacturer's recommended silicone sealant.
6. Remove excessive adhesive and sealants. Components shall be clean on Date of Substantial Completion.
7. Coordinate plumbing installation with Division 15.

### 3.4 INSTALLATION OF WINDOW STOOLS

1. Install window stools full length of window, set securely into place using only concealed fasteners and manufacturer's approved adhesive.
2. Window stools shall be plumb, true and level.
3. Provide minimum 1/8" expansion gaps on both sides of window stools, sealed with Manufacturer's approved sealant.
4. Ease edges and sand smooth.

### 3.5 INSTALLATION OF VANITIES

1. Install plumb, level, true and straight. Shim as necessary using concealed shims.
2. Attach top securely to base unit or support brackets in accordance with manufacturer's printed instructions.
3. Seal between wall and component with manufacturer's recommended silicone sealant.
4. Attach backsplashes and endsplashes to countertops using manufacturer's recommended silicone sealant.

### 3.6 PROTECTION

1. Protect surfaces from damage until Date of Substantial Completion. Repair or replace damaged components that cannot be repaired to architect's satisfaction.
2. Fabricator/Installer to provide the Wilsonart® Care and Maintenance kit, review maintenance procedures and the Wilsonart® warranty with the head of maintenance upon completion of project.

### 3.7 SCHEDULE

<p><b>SPEC NOTE:</b> List fabricated or manufactured components here by drawing symbol identifier, product number, color, pattern, etc. Coordinate with drawings. Do not duplicate drawing information here.</p>
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END OF SECTION 06650