

## SECTION 06067 – PLASTIC SURFACING

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to this section.

#### 1.2 SECTION INCLUDES

- A. Solid Surface Compression Molded Sheet Materials.
  - a. Countertops.
  - b. Wall Panels.
  - c. Tub Walls with Trim Kit.
  - d. Shower Walls with Trim Kit.
  - e. (Insert Other)
- B. Solid Surface Compression Molded Products.
  - a. Single Bowl Kitchen Sinks (undermount / self rimming).
  - b. Double Bowl Kitchen Sinks (undermount / self rimming).
  - c. Molded Counter Tops.
  - d. Countertops with Integral Bowl.
  - e. Vanity Tops.
  - f. Vanity Tops with Integral Bowl.
  - g. Lavatory Bowls.
  - h. Bar Sinks (undermount / self rimming).
  - i. Barrier Free Shower Floors.
  - j. Shower Floors.
  - k. Window Trim Kits.
  - l. Corner Soap Shelves.
  - m. Recessed Accessory Shelves.
  - n. Economy Soap Shelves.
  - o. Soap Shelf Panels.
  - p. (Insert Other)

#### 1.3 RELATED SECTIONS

- A. Section 06200 – Finish Carpentry.
- B. Section 06400 – Architectural Woodwork.
- C. Section 12300 – Manufactured Casework.
- D. Sections of Division 15 for coordination of plumbing fixture installation.

#### 1.4 REFERENCES

- A. ADA – American Disabilities Act.
- B. ANSI Z 124.3 – Plastic Lavatories.
- C. ANSI Z 124.6 – Plastic Sinks.
- D. ANSI Z 124.1.2 – Plastic Bathtub & Shower Units
- E. ASTM D 256 – Standard Test Method for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- F. ASTM D 570 – Standard Test Method for

Water Absorption.

- G. ASTM D 638 – Standard Test Method for Tensile Properties.
- H. ASTM D 696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between – 30 degrees C. and 30 degrees C.
- I. ASTM D 2583 – Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials.
- J. ASTM D 790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- K. ASTM F-462 – Standard Consumer Safety Specification for Slip-Resistance Bathing Facilities.
- L. ASTM G21-96 – Standard Practice for Determining Resistance of Synthetic Polymeric Materials for Fungi.
- M. ASTM G22-90 – Standard Practice for Determining Resistance of Plastics to Bacteria.
- N. NEMA – National Electrical Manufacturers Association.
- O. NSF – National Sanitation Foundation.

#### 1.5 SUBMITTALS

- A. Submit shop drawings under provisions of Section 01300 which indicate dimensions, component sizes, fabrication details, attachment provisions and coordination requirements with adjacent work.
- B. Samples:
  - 1. Selection Samples: Submit 1.75" x 3.5" actual samples of surfacing materials to illustrate full range of colors, patterns, and finishes available.
  - 2. Verification Samples: Submit two samples, each 1.75" x 3.5" square, illustrating each selected surfacing material in specified color, pattern, and finish.
- C. Product Data:
  - 1. Indicate product description, fabrication information and compliance with specified performance requirements.
- D. Manufacturer's Instructions:
  - 1. Submit manufacturer's printed installation instructions for each product.
  - 2. Submit manufacturer's care and maintenance data, including repair and cleaning instructions. Include in project closeout documents.

### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products in accordance with provisions of Section 01600.
- B. Store surfacing materials to prevent breakage and marring of surfaces in accordance with manufacturer's printed instructions.
- C. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

### 1.7 SEQUENCING

- A. Ensure that fabricators using products of this section are in possession of complete manufacturer's instructions before beginning fabrication. Work should be performed by factory trained fabricators.

### 1.8 WARRANTY

- A. Countertops: Provide manufacturer's 10-year warranty against defects in materials. Warranty shall provide material only to repair or replace defective materials.
- B. Commercial: Swan offers the following limited warranties: 25-Year Limited Warranty on wall panels and trim kits; 25-Year Limited Warranty against thermal cracking on our vanity tops and bowls; 10-Year Limited Warranty against defects and/or thermal cracking on our kitchen sinks and bar sinks; 10-Year Limited Warranty against warping, blistering, loss of color, or fading on shower floors. Warranty shall provide material only to repair or replace defective materials.
- C. Residential: Provide manufacturer's Lifetime Warranty against defects in materials.

## PART 2 – PRODUCTS

### 2.1 MANUFACTURER

- A. Subject to with requirements, provide plastic surfacing material by the following manufacturer:
  1. The Swan Corporation  
515 Olive Street  
St. Louis, MO 63101  
Telephone: 800/325-7008  
Fax: 314/231-8165
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.

### 2.2 SWANSTONE SOLID SURFACING

### MATERIAL

- A. Swanstone Solid Surfacing Materials.
- B. Product Description: Homogenous compression molded material composed of acrylic resins or polyester/acrylic resin blend, fire-retardant filler materials, fiber reinforcement, and coloring agents meeting the following requirements:
  1. Nominal sheet thickness: 0.225 inch (6mm)
  2. Surface burning characteristics in accordance with ASTM E 84: Flame spread meets Class A, Smoke Developed Index 85.
  3. Liquid Absorption, ASTM D 570, for 1/4 inch material thickness: 0.321 percent.
  4. Izod Impact, ASTM D 256,  
Method A: 3.0 ft.-lb./in.  
Method E: 4.0 ft.-lb./in.
  5. Tensile Modulus, ASTM D 638 Nominal:  
7.48 X 10<sup>5</sup> PSI.
  6. Hardness, ASTM D 2583, Barcol Hardness: 51.  
Rockwell RB Hardness: 60.5, IST Hardness:  
34.7.
  7. Flexural Modulus, ASTM D 790:  
7.49 X 10<sup>5</sup> PSI.
  8. Gloss Level 40% at 60°, NEMA LD 3; +/- 5%.
  9. Stain Resistance, CSA B45.5/IAPMO  
Z124-2011, Passes.
  10. Boiling Water Resistance, NEMA LD 3,  
Method 3.5: No effect.
  11. High Temperature Resistance, NEMA LD 3,  
Method 3.6: Slight effect (sustain  
temperature up to 375 degrees F).
  12. Ball Impact Resistance, NEMA LD 3, Method  
3.8, 1-1/2" diameter steel ball: Over  
72", no damage.
  13. Specific Gravity: 1.55 grams per cubic  
centimeter.
  14. Approximate weight: 2 pounds per square  
foot in 1/4" sheet products.
  15. NSF Food Zone and Splash Zone Compliant.
  16. Bacterial Resistance, ASTM G22-90:  
Passes: 0 Growth.
  17. Abrasion Resistance, ASTM D4060, Passes.
- C. Countertops:
  1. Swanstone Solid Surfacing Material:
  2. Type: Counter Top Model \_\_\_\_\_.
  3. Type: Island Top Model \_\_\_\_\_.



- 4. Type: Backsplash Model \_\_\_\_\_.
- 5. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches.
- 6. Color: \_\_\_\_\_.
- 7. Color: Indicated on drawings.
- 8. Color: Selected from manufacturer's range of available colors.

D. Wall Panels:

- 1. Swanstone Solid Surfacing Material (nominal .225" thickness):
- 2. Type: Wall Panel Model \_\_\_\_\_.
- 3. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches.
- 4. Color: \_\_\_\_\_.
- 5. Color: Indicated on drawings.
- 6. Color: Selected from manufacturer's range of available colors.

E. Tub Walls with Trim Kit:

- 1. Swanstone Solid Surfacing Material (nominal .225" thickness):
- 2. Type: Tub Wall Panel Model \_\_\_\_\_.
- 3. Trim Kit Model \_\_\_\_\_.
- 4. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches.
- 5. Color: \_\_\_\_\_.
- 6. Color: Indicated on drawings.
- 7. Color: Selected from manufacturer's range of available colors

F. Shower Walls with Trim Kit:

- 1. Swanstone Solid Surfacing Material (nominal .225" thickness):
- 2. Type: Shower Wall Panel Model \_\_\_\_\_.
- 3. Trim Kit Model \_\_\_\_\_.
- 4. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches.
- 5. Color: \_\_\_\_\_.
- 6. Color: Indicated on drawings.
- 7. Color: Selected from manufacturer's range of available colors

- d. Test 4.3; Impact load test, 1/2 pound ball at 20 inches: No cracks or chips.
- e. Test 4.4; Load test, 300 pounds: No cracks
- f. Test 4.4; Residual deflection, after removal of 300 pound load: No deflection.
- g. Test 5.1; Colorfastness test: No change after 200 hours.
- h. Test 5.3; Wear and cleanability test: Maximum 0.2 percent reflectance loss after 10,000 cycles.
- i. Test 5.4; Cigarette burn resistance test, 2 minute duration: No effect after cleaning.
- j. Test 5.6, Ignition test: Pass.
- k. Test 6.3.2; Water resistance test, 500 cycles alternating between 150 degrees F and 50 degrees F: No crazing blistering, or spalling.

B. Single Bowl Kitchen Sinks:

- 1. Swanstone Compression Molded Fixtures;
- 2. Model Number \_\_\_\_\_ single bowl; outside dimensions \_\_\_\_\_ inches by \_\_\_\_\_ inches bowl dimensions \_\_\_\_\_ inches by \_\_\_\_\_ inches by \_\_\_\_\_ inches.
- 3. Color: \_\_\_\_\_.
- 4. Color: Indicated on drawings.
- 5. Color: Selected from manufacturer's full range of available colors.

C. Double Bowl Kitchen Sinks:

- 1. Swanstone Compression Molded Fixtures;
- 2. Model Number \_\_\_\_\_ double bowl; outside dimensions \_\_\_\_\_ inches by \_\_\_\_\_ inches bowl dimensions \_\_\_\_\_ inches by \_\_\_\_\_ inches by \_\_\_\_\_ inches.
- 3. Color: \_\_\_\_\_.
- 4. Color: Indicated on drawings.
- 5. Color: Selected from manufacturer's full range of available colors.

D. Molded Counter Tops: Integral top and seamless edges. Compression molded into one piece between edges and top with factory installed 3/4" Roseburg Ultrakote particle board or plywood. Tops will include a factory installed .5" perimeter build-up.

- 1. Swanstone Compression Molded Fixtures;
- 2. Type: Counter Top Model \_\_\_\_\_.
- 3. Type: Island Top Model \_\_\_\_\_.
- 4. Type: Backsplash Model \_\_\_\_\_.
- 5. Color: \_\_\_\_\_.
- 6. Color: Indicated on drawings.
- 7. Color: Selected from manufacturer's range of available colors.

E. Countertops with Integral Bowls:

- 1. Swanstone Compression Molded Fixtures;
- 2. Type: Counter Top Model \_\_\_\_\_.

### 2.3 SWANSTONE SOLID SURFACE COMPRESSION MOLDED PRODUCTS

A. Product Description: Compression molded items of same homogenous material, composed of mineral-filled thermoplastic polymers with fiber reinforcement finished to smooth surface, as solid plastic surfacing material meeting the following requirements:

- 1. Physical characteristics when tested in accordance with ANSI Z 124.3:
  - a. Test 3.3; Surface test: No chips, cracks, or blisters.
  - b. Test 3.4; Subsurface test: No voids.
  - c. Test 4.2; Drain fitting connection test, 25 pounds at 24 inches: No cracks or chips.

3. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches with \_\_\_\_\_ inches bowl depth.
  4. Color: \_\_\_\_\_.
  5. Color: Indicated on drawings.
  6. Color: Selected from manufacturer's full range of available colors.
- F. Vanity Tops:
1. Swanstone Solid Surfacing Material:
  2. Type: Vanity Top Model \_\_\_\_\_.
  3. Type: Backsplash Model \_\_\_\_\_.
  4. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches.
  5. Color: \_\_\_\_\_.
  6. Color: Indicated on drawings.
  7. Color: Selected from manufacturer's range of available colors.
- G. Vanity Tops with Integral Bowls:
1. Swanstone Compression Molded Fixtures;
  2. Model Number \_\_\_\_\_, molded with integral bowl (s) and 3" inches high integral backsplash:
  3. Top Size: \_\_\_\_\_ wide by \_\_\_\_\_ deep.
    - a. Bowl: Single, centered in top width.
    - b. Bowl: Single, offset to left quarter point of top width, viewed from front edge.
    - c. Bowl: Single, offset to right quarter point of top width, viewed from front edge.
    - d. Bowls: Double, each offset to quarter points of top width, viewed from front edge.
  4. Color: \_\_\_\_\_.
  5. Color: Indicated on drawings.
  6. Color: Selected from manufacturer's full range of available colors.
- H. Lavatory Bowls:
1. Swanstone Compression Molded Fixtures;
  2. Model Number \_\_\_\_\_; outside dimensions \_\_\_\_\_ inches by \_\_\_\_\_ inches inside dimensions \_\_\_\_\_ inches by \_\_\_\_\_ inches by \_\_\_\_\_ inches.
  3. Color: \_\_\_\_\_.
  4. Color: Indicated on drawings.
  5. Color: Selected from manufacturer's full range of available colors.
- I. Bar Sinks (undermount / self rimming)
1. Swanstone Compression Molded Fixtures;
  2. Model Number \_\_\_\_\_;
  3. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches with \_\_\_\_\_ inches bowl depth.
  4. Color: \_\_\_\_\_.
  5. Color: Indicated on drawings.
  6. Color: Selected from manufacturer's full range of available colors.
- J. Barrier Free Shower Floors:
1. Swanstone Solid Surfacing Material:
  2. Type: Barrier Shower Floor Model \_\_\_\_\_.
  3. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches.
  4. Color: \_\_\_\_\_.
  5. Color: Indicated on drawings.
  6. Color: Selected from manufacturer's range of available colors.
- K. Shower Floors:
1. Swanstone Solid Surfacing Material:
  2. Type: Shower Floor Model \_\_\_\_\_.
  3. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches.
  4. Color: \_\_\_\_\_.
  5. Color: Indicated on drawings.
  6. Color: Selected from manufacturer's range of available colors.
- L. Window Trim Kits:
1. Swanstone Solid Surfacing Material:
  2. Type: Window Trim Kit Model \_\_\_\_\_.
  3. Size: \_\_\_\_\_ inches by \_\_\_\_\_ inches.
  4. Color: \_\_\_\_\_.
  5. Color: Indicated on drawings.
  6. Color: Selected from manufacturer's range of available colors.
- M. Corner Soap Shelves:
1. Swanstone Compression Molded Fixtures;
  2. Model Number \_\_\_\_\_.
  3. Color: \_\_\_\_\_.
  4. Color: Indicated on drawings.
  5. Color: Selected from manufacturer's range of available colors.
- N. Recessed Accessory Shelves:
1. Swanstone Compression Molded Fixtures;
  2. Model Number \_\_\_\_\_.
  3. Color: \_\_\_\_\_.
  4. Color: Indicated on drawings.
  5. Color: Selected from manufacturer's range of available colors.
- O. Economy Soap Shelves:
1. Swanstone Compression Molded Fixtures;
  2. Model Number \_\_\_\_\_.
  3. Color: \_\_\_\_\_.
  4. Color: Indicated on drawings.
  5. Color: Selected from manufacturer's range of available colors.
- P. Soap Shelf Panels:
1. Swanstone Compression Molded Fixtures;
  2. Model Number \_\_\_\_\_.
  3. Color: \_\_\_\_\_.
  4. Color: Indicated on drawings.
  5. Color: Selected from manufacturer's range of available colors.

**ACCESSORIES**

- A. Supply materials for installation of products as specified in manufacturer's printed installation instructions including color matched silicon sealant and adhesives where applicable.

**FABRICATION**

- A. Fabricate components in shop to the greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings.
- B. Form joints between components using manufacturer's standard joint adhesive. Joints shall be inconspicuous in appearance and without voids.
- C. Provide holes and cutouts for plumbing and bath accessories as indicated on the drawings.
- D. Rout and finish component edges to a smooth, uniform finish.
- E. All surfaces shall have a uniform finish.

- G. Protect surfaces from damage until project completion.
- H. Fabricator/Installer is to review "Care and Maintenance Procedures" including repair and cleaning instructions with the Owner upon completion of project.

**PART 3 – EXECUTION****3.1 PREPARATION**

- A. Preparation and Fabrication: Precondition surfacing materials and surfaces to receive surfacing materials in accordance with manufacturer's printed instructions. Fabrication of seams and fixture mounting in accordance with factory fabrication manual. Work to be performed by factory trained specialists.

**3.2 INSTALLATION**

- A. Install components plumb and level in accordance with approved shop drawings and manufacturer's printed installation instructions.
- B. Form field joints using manufacturers recommended adhesive, with joints inconspicuous in finished work.
- C. Adhere undermount sinks/bowls to countertop using manufacturers recommended adhesive and mounting hardware.
- D. Adhere topmount sinks to countertops using manufacturer's recommended adhesive and color matched silicone sealant.
- E. Provide backsplashes and endsplashes as indicated on the drawings. Adhere to countertop using manufacturer's standard color matched silicone sealant.
- F. Remove adhesives, sealants and other stains upon completion of installation per manufactures written instructions.