

## SECTION 06 65 10

### SOLID SURFACE FABRICATIONS

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Section includes: Labor, materials, equipment and accessories to provide the following:
  - 1. Solid surface window stools where noted.
- B. Related work specified in other sections:
  - 1. Wood Blocking - Section 06 10 53.
  - 2. Plastic Laminate Casework – Division 12.

#### PART 2 PRODUCTS

##### 2.01 ACCEPTABLE MANUFACTURERS

- A. Acceptable Manufacturers: DuPont Company, Wilmington, DE, CORIAN Building Products or other manufacturers who meet specification.

##### 2.02 MATERIALS

- A. Solid polymer components:
  - 1. Cast, nonporous, filled polymer, not coated, laminated or of composite construction with through body colors meetings ANSI Z124.3 or ANSI Z124.6, having minimum physical and performance properties specified.
  - 2. Superficial damage to a depth or 0.010 inch shall be repairable by sanding and/or polishing.
- B. Thickness:
  - 1. Horizontal surfaces and backsplashes: ½”
  - 2. Vertical surfaces: ¼”
- C. Edge treatment: As detailed.
- D. Back and side splash: Applied.
- E. Performance Characteristics:

<u>Property</u>	<u>Typical Result</u>	<u>Test</u>
1. Tensile Strength	6,000 psi	ASTM D 638
2. Tensile Modulus	1.5 x 10 <sup>6</sup> psi	ASTM D 638
3. Tensile Elongation	0.4% min.	ASTM D 638
4. Flexural Strength	10,000 psi	ASTM D 790
5. Flexural Modulus	1.2 x 10 <sup>6</sup> psi	ASTM D 790
6. Hardness	>85	Rockwell “M” Scale
	56	ASTM D 785 Barcol Impressor ASTM D 2583
7. Thermal Expansion	1.80 x 10 <sup>-5</sup> in./in./°F	ASTM D 696
8. Gloss (60° Gardner)	5–75 (matte–highly polished)	ANSI Z124
9. Light Resistance	(Xenon Arc) No effect	NEMA LD 3-2000 Method 3.3
10. Wear and Cleanability	Passes	ANSI Z124.3 & Z124.6
11. Stain Resistance: Sheets	Passes	ANSI Z124.3 & Z124.6
12. Fungus and Bacteria Resistance	Does not support microbial growth	ASTM G21 & G22

13.	Boiling Water Resistance	No visible change	NEMA LD 3-2000 Method 3.5
14.	High Temperature Resistance	No change	NEMA LD 3-2000 Method 3.6
15.	Izod Impact (Notched Specimen)	0.28 ft.-lbs./in. of notch	ASTM D 256 (Method A)
16.	Ball Impact Resistance: Sheets	No fracture—½ lb. ball: ¼” slab—36” drop ½” slab—144” drop	NEMA LD 3-2000 Method 3.8
17.	Weatherability	$\Delta E^*_{94} < 5$ in 1,000 hrs.	ASTM G 155
18.	Specific Gravity (Approximate weight per square foot: ¼” 2.2 lbs., ½” 4.4 lbs.)	1.7	
19.	Water Absorption	Long-term 0.4% (¾”) 0.6% (½”) 0.8% (¼”)	ASTM D 570
20.	Toxicity	99 (solid colors) 66 (patterned colors)	Pittsburgh Protocol Test (“LC50” Test)
21.	Flammability	All colors (Class I and Class A)	ASTM E 84, NFPA 255 & UL 723
22.	Flame Spread Index	<25	
23.	Smoke Developed Index	<25	

F. Joint adhesive:

1. Manufacturer’s standard one- or two-part adhesive kit to create inconspicuous, nonporous joints.

G. Sealant:

1. Manufacturer’s standard mildew-resistant, FDA-compliant, NSF 51-compliant (food zone – any type), UL-listed silicone sealant in colors matching components.

**2.03 FACTORY FABRICATION**

A. Shop assembly:

1. Fabricate components to greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer’s printed instructions and technical bulletins.
2. Form joints between components using manufacturer’s standard joint adhesive without conspicuous joints.
3. Provide factory cutouts for plumbing fittings and bath accessories.
4. Rout and finish component edges with clean, sharp returns.
  - a. Rout cutouts, radii and contours to template.
  - b. Smooth edges.
  - c. Repair or reject defective and inaccurate work.

**2.04 FINISHES**

- A. Finish: Provide surfaces with a uniform matte finish; gloss range of 5-20.

**PART 3 EXECUTION**

**3.01 INSTALLATION**

- A. Refer to specific specification sections for installation.

**END OF SECTION 06 65 10**