

# 2020 MASTER FORMAT™ SECTION 12 36 61.16

## Schedules for Solid Surfacing Countertops

### Polygood 100% Recycled Surfacing Material

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION OF WORK AND MATERIALS

The work herein includes the provision and installation of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

##### 1.02 RELATED SECTIONS:

- A. This Section includes the Solid Surfacing Countertops as shown and specified in the described system(s):

Adjust list below to suit project.

1. Appliqués
2. Backsplashes
3. Balustrade Panels
4. Bar fronts
5. Bus Shelters
6. Cabinet Doors
7. Light-Diffusing Ceiling Panels
8. Closet Doors
9. Door Lights
10. Doors
11. Flooring
12. Lighting
13. Projection screens
14. Retail Shelving
15. Sculpture
16. Shower doors & enclosures
17. Side lights
18. Signage
19. Tabletops
20. Transaction Tops
21. Vanity tops
22. Wall Sculpture
23. Water walls
24. Whiteboards
25. Worktops
26. [Insert Item]
27. Other interior counter or surfacing applications as shown on drawings.

##### 1.03 RELATED REQUIREMENTS

1. Section 01 81 13 – Sustainable Design Requirements for additional LEED requirements
2. Section 06 10 00 – Rough Carpentry
3. Section 06 06 60 – Plastic Fabrications
4. Section 06 61 13 – Simulated Stone Fabrications
5. Section 06 61 16 – Solid Surfacing Fabrications
6. Section 07 92 00 – Joint Sealants
7. Section 11 42 16 – Food Preparation Surfaces
8. Section 12 30 00 – Casework
9. Section 12 34 00 – Plastic Casework
10. Section 12 34 16 –Manufactured Solid-Plastic Casework

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11. Section 12 35 70 – Healthcare Casework
12. Section 12 36 23 – Plastic Countertops
13. Section 12 36 61 – Simulated Stone Countertops
14. Section 12 36 61.19 – Quartz Agglomerate Countertops

#### 1.04 REFERENCES

- A. ASTM D1505 – Standard Test Method for Density of Plastics by the Density-Gradient Technique
- B. ASTM D638 – Standard Test Method for Tensile Properties of Plastics
- C. ASTM D790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- D. ASTM D792 – Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- E. ASTM D256 - Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics
- F. ASTM D648 – Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.
- G. ASTM D1525 – Standard Test Method for Vicat Softening Temperature of Plastics.
- H. ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials.

#### 1.05 SUBMITTALS

- A. Product data –Submit product data for each type of product indicated.
  1. Submit manufacturer’s product data on material characteristics, performance, fabrication instructions, installation instructions and maintenance instructions.
- B. Shop drawings:
  1. Show location of each item; provide complete dimensioned plans and elevations, large-scale details and attachment devices.
    - i. Full-size details, edge details, attachments, etc.
    - ii. Locations and sizes of furring and blocking.
    - iii. Fabrication details for brackets.
    - iv. Locations and sizes for cutouts and holes.
    - v. Type of Sealant or adhesive.
    - vi. Seam locations.
- C. Samples
  1. For each type of product indicated:
    - i. Submit minimum 2in x 2in sample in specified color. For patterns or veining submit 4in x 4in samples.
    - ii. Cut sample and seam for representative seaming and glue color.
    - iii. Indicate full range of color and pattern variation.
    - iv. Approved samples will be retained as a standard for work.
- D. Product Data:
  1. Indicate product description, fabrication information and compliance with specified performance requirements.
- E. Sustainable Design Reporting:
  1. Provide documentation from manufacturer of the amounts of post-consumer recycled content for products.
  2. Provide documentation from manufacturer showing manufacturing locations for products manufactured and sourced within 500 miles of project site.
  3. Provide documentation from manufacturer that products meet or exceed emissions guidelines for VOC’s.
  4. Provide documentation from manufacturer indicating that adhesives and sealants applied on-site meet or exceed emission guidelines for VOC’s.
- F. LEED Submittals:
  1. LEED 2009, Credits MR Credit 4 – Recycled Content
  2. LEED 2009, Credits MR Credit 5 – Regional Materials
  3. LEED 2009, Credits MR Credit 4.1 – Low-Emitting Materials – Adhesives and Sealants
  4. LEED NC v4, EQ: Indoor Environmental Quality, EQ Credit: Low Emitting Materials

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5. LEED NC v4, MR Credit: Building Product Disclosure and Optimization – Material Ingredients
    - i. Option 1. Material Ingredient Reporting.
      1. Provide manufacturer’s HPD (Health Product Declaration).
  6. LEED® NC v4, MR Credit: Building Product Disclosure and Optimization - Sourcing of Raw Materials.
    - i. Option 1. Raw Material Source and Extraction Reporting.
      1. Provide manufacturer’s CSR (Corporate Sustainability Report)
    - ii. Option 2. Leadership Extraction Practices.
      1. Provide documentation from manufacturer of the amounts of pre-consumer and post-consumer recycled content for products specified.
  7. LEED® NC v4, MR Credit: Building Product Disclosure and Optimization.
    - i. Option 1. Environmental Product Declaration (EPD)
      1. Provide manufacturer’s EPD (Environmental Product Declaration)
- G. Fire Characteristics
1. Provide Class A surface burning characteristics – per ASTM E84 / UL 723 from IAS Accredited testing laboratory.
- 1.06 QUALITY ASSURANCE
- A. Qualifications:
- a. Shop employs skilled workers who custom fabricate products similar to those required for this project and whose products have a record of successful in-service performance.
- B. Fabricator/installer qualifications:
1. Work of this section shall be by a certified fabricator/installer, certified in writing by the manufacturer or designated representative.
- C. Coordination drawings:
1. Shall be prepared indicating:
    - a. Project-specific information, drawn accurately to scale.
    - b. Do not base coordination drawings on reproductions of the contract documents or standard printed data.
    - c. Indicate dimensions shown on the contract drawings.
- 1.7 DELIVERY, STORAGE AND HANDLING
- A. Deliver no components to project site until areas are ready for installation.
  - B. Store components indoors in clean and dry area prior to installation.
  - C. Handle materials to prevent damage to finished surfaces.
  - D. Follow manufacturer’s safe handling and storage recommendations.
  - E. Provide protective coverings to prevent physical damage or staining following installation for duration of project.
- 1.08 WARRANTY
- A. Provide manufacturer’s 10-year warranty.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURER

- A. Polygood Panels shall be provided as manufactured by The Good Plastics Company, Inc.
  - a. Address: One World Trade Center, 85th Floor, New York, NY 10007, U.S.A.
  - b. Website: polygood.com
- B. Substitutions: Not Permitted

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#### 2.02 MATERIALS

- A. Material:
1. Polygood material composed of 100% post-consumer recycled polystyrene with pigments.
- B. Thickness:
1. ½" (12mm)
  2. ¾" (19mm)
- C. Polygood Panel Performance Properties:
- |                           |                         |            |
|---------------------------|-------------------------|------------|
| 1. Density                | 65.5 lb/in <sup>3</sup> | ASTM D1505 |
| 2. Tensile Stress (break) | 5076-7135psi            | ASTM D638  |
| 3. Elongation (yield)     | 60%                     | ASTM D638  |
| 4. Tensile Modulus        | 239,312-468,327psi      | ASTM D638  |
| 5. Flexural Modulus       | 239,312-476,159psi      | ASTM D790  |
| 6. Flexural Strength      | 5,511-15,733psi         | ASTM D790  |
| 7. Izod Impact-Notched    | 1.12-0.03 ft*lb/in      | ASTM D256  |
| 8. Heat Deflection Temp.  | 166-173°F               | ASTM D648  |
| 9. Vicat Softening Temp.  | 205°F                   | ASTM D1525 |
- D. Polygood Certifications and Approvals
1. Cradle to Cradle Certified Bronze – Certificate Number 6161
  2. EPD (Environmental Product Declaration) – 3<sup>rd</sup> Party Verified according to ISO 14025:2006
  3. LCA (Life Cycle Assessment) – in accordance to EN15804+A2 & ISO 14025 / ISO 21930
  4. ISO 14001 – Environmental Management Systems - Certificate Number 230870
  5. ISO 9001 – Quality Management Systems - Certificate Number 230064
  6. ISO 45001 – Occupational Health and Safety Management Systems - Certificate Number 230871

#### 2.3 ACCESSORY PRODUCTS

- A. Mounting Adhesives:
1. 100 percent Silicone Sealant.

#### 2.4 FABRICATION

- A. 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.
- B. Form joints between components using manufacturer's standard joint adhesive.
1. Reinforce as required.
  2. Rout and finish component edges with clean, sharp returns.
  3. Rout cutouts, radii and contours to template.
- C. Smooth edges.

#### 2.5 FINISHES

- A. Select from Polygood Patterns:
1. Pattern:
    - a. [satin]
    - b. [gloss]

### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Examine substrates, areas, and conditions where installation of Plastic Fabrications will occur, with Installer present, for compliance with manufacturer's requirements. Verify that substrates and conditions are satisfactory for installation and comply with requirements specified.

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#### **3.02 INSTALLATION**

- A. General: Comply with manufacturer's written instructions for the installation of Plastic Fabrications. Sizes, profiles and other characteristics are indicated on the drawings.
- B. Local GC or fabricator shop to fabricate items to the greatest degree possible.
- C. Utilize fasteners, adhesives and bonding agents recommended by manufacturer for type of installation indicated. Material that is chipped, warped, hazed or discolored as a result of installation or fabrication methods will be rejected.
- D. Install components plumb, level and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and product data.
- E. Form field joints using manufacturer's recommended procedures. Locate seams in panels so that they are not directly in line with seams in substrates.

#### **3.03 CLEANING AND PROTECTION**

- A. Protect surfaces from damage until date of substantial completion. Repair work or replace damaged work, which cannot be repaired to Architect's satisfaction.

**END OF SECTION 12 36 61.16**

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#### 3.04 SCHEDULE

**Collection:** [The Colourful Splash collection] [The Dark collection] [The Light collection]

[The Translucent collection]

**Pattern:** [all from opaque] [all from translucent]

**Thickness:** [1/2"] [3/4"]

**Orientation:** [Horizontal][Vertical]