

SECTION 09 77 10
DECORATIVE POLYESTER PANELING

PART 1 - GENERAL

1.1 DESCRIPTION

Section specifies polyester sheet for decorative panels.

1.2 RELATED WORK

A. Section 06 20 00 - Finish Carpentry

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Samples:
 - 1. Each type and pattern as specified in finish schedule on drawings.
 - 2. Size: 6" square minimum.
 - 3. Shop drawings including plans, elevations, sections and large scale details, showing attachment to other work.
- C. Manufacturer's Certificates:
 - 1. Compliance with fire-resistive requirements.
- D. Manufacturer's Literature and Data:
 - 1. Product data.
 - 2. Installation instructions.
 - 3. Maintenance instructions, including recommended materials and methods for maintaining and cleaning material.

1.4 QUALITY ASSURANCE

- A. Finish one complete space with each type (color and pattern) of wallcovering showing specified colors and patterns.
- B. Use approved sample spaces as a standard for work throughout the project.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver in original unopened containers bearing the manufacturer's name, brand name, and product designation.
- B. Store in accordance with manufacturer's instructions.
- C. Handle to prevent damage to material.
- D. Provide protective coverings to prevent damage or staining following installation for duration of project.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. 3-Form, Inc.

- B. Other as approved.
- C. Design is based on 3-Form, Inc. "Varia".

2.2 MATERIALS

- A. Resin sheet: Engineered polyester resin, glycol modified.
- B. Interlayer: Compatible with polyester and bonding process to create a monolithic sheet of material when complete.
- C. Fire resistance:
 - 1. Rate of burning, ASTM D635: Class CC1, for 0.060 inch nominal thickness.
 - 2. Self-ignition temperature, ASTM D1929:
Minimum 650 degrees F.
 - 3. Smoke density, ASTM D2843:
Maximum 75 percent.
 - 4. Flammability classification, ASTM E84:
Smoke 450; flame spread 75.
- D. Impact resistance.
 - 1. Notched, 23 degrees, ASTM D526:
88J/m (1/16).
 - 2. Not notched, 23 degrees, ASTM D4812:
No breakage.
- E. Maximum deflection: 1/16 inch over 12 inches.

2.3 FABRICATION

- A. Location: Shop fabricate to greatest extent possible.
- B. Acceptable means of machining. Chipping or warping not permitted.
 - 1. Sawing, drilling, routing, tapping: Equipment, blades, and drills designed for use with plastic products.
 - 2. Milling: Climb cut where possible.
 - 3. Shearing and punching: Acceptable only on 1/16 inch material.
 - 4. Die cutting: Acceptable only on material 1/8 inch or less.
- C. Acceptable forming methods: Cold bending, hot bending, drape forming, matched mold forming. Thermoforming: Acceptable only on uncoated material.
- D. Lamination: Techniques and adhesives recommended by polyester sheet manufacturer.

2.4 ACCESSORIES

- A. General: Solvents, adhesives, cleaners, cleaners recommended by polyester sheet manufacturer.

- B. Fasteners: Designed specifically for plastics. Self-threading screws acceptable for permanent installations. Threaded metal inserts for applications requiring frequent disassembly such as light fixtures.
- C. Glazing channels: Aluminum "U" shape. Stylmark, Minneapolis, MN, other as approved.
 - 1. Top channel: Extrusion No. 110360, 2 inches tall by 1 inch wide.
 - 2. Bottom channel: Extrusion No. 110361, 1 inch tall by 1 inch wide.

PART 3 - EXECUTION

3.1 JOB CONDITIONS

- A. Temperatures:
 - 1. Do not perform work until surfaces and materials have been maintained at minimum of 60 °F. for three days before work begins.
 - 2. Maintain minimum temperatures of 60 °F. until adhesives are dried or cured.
- B. Lighting:
 - 1. Do not proceed unless a minimum lighting level of 15 candlepower per square foot occurs.
 - 2. Measure light level at mid-height of wall.
- C. Ventilation:
 - 1. Provide uniform continuous ventilation in space.
 - 2. Ventilate for a time for not less than complete drying or curing of adhesive.
- D. Protect other surfaces from damage which may be caused by this work.
- E. Remove waste from building daily.

3.2 INSTALLATION

- A. Allow fabrications to reach room temperature before beginning installation.
- B. Do not use material that is chipped, warped, hazed or discolored.
- C. Install components plumb, level and rigid. Scribe to adjacent finishes.
- D. Do not locate panel seams in line with substrate seams.
- E. Protect from damage until Substantial Completion.

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