

**SECTION 066255 (06 62 55) - GLASS-FIBER REINFORCED POLYMER COMPOSITE MOLDED ARCHITECTURAL SHAPES**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Beam Covers.
- 2. Column Covers.
- 3. Bulkhead Liners.
- 4. Chases.
- 5. Canopy Hoods.

B. Related Sections:

- 1. Section 066200 - Glass Fiber Reinforced Composite Ceiling and Wall Panels.
- 2. Section 066250 - Engineered Polymer Wall and Ceiling Panels.
- 3. Section 083110 - Acrylic Access Doors and Panels.
- 4. Section 085645 - Flush Glazed Window Units.
- 5. Section 095800 - Glass Fiber Reinforced Polymer Composite Ceiling Panels.
- 6. Section 095810 - Engineered Polymer Lay-In Ceiling Panels.
- 7. Section 115301 - Laboratory Equipment Wall Panels and Canopy Hood.

1.3 REFERENCES

- A. ASTM D 1621 Compressive properties of rigid cellular plastics.
- B. ASTM D 2538 Barcol hardness.
- C. ASTM E 96 Water Vapor Transmission.
- D. ASTM D 3273 Standard test method for resistance to growth of mold on surface.
- E. ASTM D 3274 Standard test method for evaluating degree of surface disfigurement by fungal or algal growth or soil or dirt accumulation.
- F. ISO 846 Evaluation of the action of Microorganism Resistance to Fungi and Bacteria Test Method.

1.4 SUBMITTALS

- A. Comply with section 013300 submittal procedures.

- B. Product Data: Submit manufacturer's product data including installation instructions.
- C. Shop drawings: Submit manufacturer's shop drawings of Molded Architectural Shapes.
- D. Samples: Submit manufacturer's samples of Molded Architectural Shapes.
- E. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.

#### 1.5 QUALITY ASSURANCE

- A. Source Limitations: Obtain window units from single manufacturer.

#### 1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store Molded Architectural Shapes in clean, dry area in accordance with manufacturer's instructions.
- C. Protect materials and finish from damage during handling and installation in accordance with manufacturer's instruction.

#### 1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not install materials until building is enclosed and areas to receive materials are protected from dirt and dust.

#### 1.8 WARRANTY

- A. Submit manufacturer's standard warranty.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURER

- A. Basis of Design: Subject to compliance with requirements, provide **Glass Fiber Reinforced Polymer Molded Architectural Shapes by ARCOPLAST**, 1873 Williamstown Drive, St. Peters, Missouri 63376. Toll Free (888) 736-2726. Phone (636) 978-7781. Fax (636) 978-7782. Web Site [www.arcoplast.com](http://www.arcoplast.com).

#### 2.2 MOLDED ARCHITECTURAL SHAPES

- A. Molded Architectural Shapes: Foam core with exposed side of one-piece, uniform, glass-fiber mat embedded in resin matrix and gel coat facing.
  - 1. Foam Core: 1/2-inch-thick, polyisocyanurate close cell, Class A.

2. Resin/Glass Matrix: Glass strand fiber mats minimum 25% embedded in fire retardant resinous system.
3. Color: Standard white or specially formulated per requirements.
4. Thermal Resistance: R: 6.56 per inch of foam.
5. Thermal Conductivity: 0.15 BTU in/ft-h-degree F (0.022 W/m-degree C) F Core Shear Strength: 28 pounds per inch (193kPa).
6. Core compression Strength – ASTM D 1621; 25 pounds per inch (170kPa).
7. Barcol Hardness – ASTM D 2538: 45.
8. Water Vapor Transmission – ASTM E 96: Less than 0.01.

### **PART 3 - EXECUTION**

#### **3.1 EXAMINATION**

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### **3.2 INSTALLATION**

- A. Install Molded Architectural Shapes in accordance with manufacturer's instruction.
- B. Install Molded Architectural Shapes level and in alignment.
- C. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by architect.
- D. Remove and replace damaged components that cannot be successfully repaired as determined by architect.

#### **3.3 CLEANING**

- A. Clean Molded Architectural Shapes properly after installation in accordance with manufacturer's instructions.
- B. Do not use harsh abrasive materials or methods that would damage finish.

#### **3.4 PROTECTION**

- A. Keep covered with polyethylene film and protect Molded Architectural Shapes from damages

#### **3.5 GEL COAT REPAIR**

- A. Repair surface damages or scratches with gel coat putty per manufacturer's instructions.

END OF SECTION 066255 (06 62 55)