

**PRODUCT SPECIFICATIONS
"HARDCOAT" POLYURETHANE FOR POLYSTYRENE SHAPES**

SECTION 06612
PLASTIC COATED POLYSTYRENE SHAPES

PART 1 GENERAL

1.1 QUALITY ASSURANCE

- A. Regulatory Requirements
 - 1. Fire Performance: Identify testing Organization
 - a. Surface Burning: ASTM E 84.
 - b. Fire resistant Rating: ASTM E 119.
 - c. Combustion: ASTM E 136.
 - d. Flame Spread: 25 in accordance with ASTM E 84.
 - 2. Structural Properties:
 - a. Deflection: Under windload pressure, maximum clear span deflections as follows:
 - 1. Normal to Wall: L/240 or ½ inch, whichever is less.
 - 2. Parallel to Wall Plane: 75% of design clearance or 1/8 inch vertically and 3/8 inch horizontally, whichever is less between members of adjacent glass, panel, or part immediately adjacent. At horizontal members over doors, 1/16 inch.
 - 3. Sealant interface: Do not exceed dynamic movement capacity of sealant.
 - 3. Environmental Requirements: Comply with applicable volatile organic compound (VOC) requirements for emissions.
- B. Single Source Manufacturing and Installation Responsibility: Single source capable of assuming full responsibility, capable of providing consistent quality without delaying the work.
- C. Manufacturer's Qualifications: Minimum 5 yrs. Documented experience.
- D. Field Construction Mock Up: Prior to fabrication, erect mock ups for each type of unit required.

1.2 SUBMITTALS

- A. Product Data: Technical data and installation instructions for typical unit.
- B. Shop drawings: As needed. Indicate fabrication and installation including applicable plans.
- C. Samples: Upon request.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Manufacturer: Provide units complying with requirements fabricated by Architectural Foam Supply. 100 South Andrews Ave., Pompano Bch., FL 33069. 1-888-654-3626
- B. Expanded Polystyrene (EPS) ASTM C 578 Type I, rigid cellular thermal insulation formed by expansion of polystyrene resin beads in a closed cell, aged by air drying minimum 6 weeks, nominal density of 1.0 lb/ft³ (16Kg/m³), Minimum 10 psi (69kpa) compressive strength, UL listed and approved.
- C. Extruded Polystyrene (XPS): ASTM C 578 Type IV & VI rigid, cellular thermal insulation with closed cells formed by an extrusion process from a polystyrene base resin, aged by air drying

- minimum 2 weeks, nominal density of 2.0 lb/ ft³ (32 Kg/m³), Minimum 25 psi (172kpa) compressive strength, UL listed and approved.
- D. Plastic Coating: Rapid curing, high impact (fire retardant, if required) urethane hard protective coating, VOC compliant, SHORE A 69 hardness, 40-100 mills thick.
 - E. Primer: compatible with substrates and adhesives and approved by manufacturer (AFS).
 - F. Adhesive: Capable of bonding securely without damage, compatible, and approved by manufacturer (AFS).
 - G. Fasteners: Non-corrosive with washer retainer and clips, mechanically fastened.
 - H. Sealants: Comply with manufacturer's recommendations and Section 07900

2.2 FABRICATION

- A. Measurements: Field measure and verify dimensions and details
- B. Factory fabricate to dimensions, profiles, and details indicated. Coat exposed surfaces with plastic coating, and prime. Cure prior to shipment.
- C. Fabrication Tolerances of Polystyrene Board: Comply with EIMA Guidelines Specifications for Expanded Polystyrene Insulation Board.

PART 3 EXECUTION

3.1 PREPARATION

- A. Substrate Preparation: Prepare and clean substrates complying with manufacturer's requirements for optimum bond between substrate and adhesive. Apply primer where required by manufacturer for improving adhesion.

3.2 INSTALLATION

- A. Attach to substrate by bonding with adhesive or use of mechanical anchorage. Allow adhesives to cure prior to removing supports. Seal joints and fill voids.
- B. Rated Substrates: Comply with rating of substrate.
- C. Fasteners: fasten to comply dimensional tolerances. Patch holes, sand smooth, level and prime.
- D. Installation Tolerances:
 - 1. Maximum Variation of Finished Unit from True Flatness: 1/8 inch in 10 feet (3mm in 3m) in any direction.
 - 2. Plane Alignment: 1/16 inch (1.6mm)
 - 3. Variation from Plumb: +/- 1/8 inch in 10 feet (3.2mm in 3m).
 - 4. Assembly Deflection: Maximum the length of assembly divided by 240.
 - 5. Joint Alignment or Width: Maximum 1/8 inch (3.2mm).

END OF SECTION

Note: This is the guide specification. For more guide specifications questions please contact Architectural Foam Supply.