



# High Density Polyurethane (HDP)

## SECTION 06447

### PART 1 GENERAL

#### 1.1 RELATED SECTIONS

All contract documents apply to work of this section: this includes but is not limited to: Drawings, Instructions to Bidders, General and Supplementary Conditions and Division One Administrative Sections of the Specifications.

- A. Section 06100 - Rough Carpentry.
- B. Section 06200 - Finish Carpentry.
- C. Section 06400 - Architectural Woodwork.
- D. Section 07900 - Joint Sealants.
- E. Section 09900 - Paints and Coatings.

#### 1.2 SECTION INCLUDES

- A. Columns, Mouldings, Porch Posts, Balustrade Systems and misc. architectural detail

#### 1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Submit manufacturer's descriptive literature, specifications, installation instructions and limited warranty.
- C. Shop Drawings: Submit shop drawings showing location, profiles and product components, including but not limited to anchorage requirements, accessories, and provisions for achieving desired finishes.
- D. Selection Samples: For each product specified, two samples representing manufacturer's full range of available finishes and textures.
- E. Verification Samples: For each product specified, two samples, full size or minimum 12 inches (300 mm) square, representing actual product finishes and textures.
- F. Quality Assurance Submittals:
  - 1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
  - 2. Manufacturer's Instructions: Manufacturer's installation instructions.

- 3. Manufacture's Field Reports: Manufacturer's field reports specified herein.
- G. Closeout Submittals: Submit manufacturer's standard warranty documents.

#### **1.4 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Manufacturer shall have five years experience manufacturing and fabricating products of similar type and scope as those specified in this section.
- B. Installer Qualifications: Installer shall have five years experience installing products of similar type and scope as those specified in this section.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - 1. Finish areas designated by Architect.
  - 2. Do not proceed with remaining work until workmanship, finish are approved by Architect.
  - 3. Refinish mock-up area as required to produce acceptable work. Mock-up may be incorporated into finished work upon approval from Owner.
- D. Performance Requirements: Provide units which have been manufactured, fabricated and installed to maintain performance criteria stated by manufacturer without defects, damage, or failure.
- E. Preinstallation Meetings: Conduct a preinstallation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements.

#### **1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Ordering: Comply with manufacturer's instructions and lead time requirements to avoid construction delays.
- B. Delivery: Store products in manufacturer's labeled, unopened packaging until ready for installation and field finishing.
- C. Storage and Protection: Store materials protections from exposure to harmful weather conditions and within manufacturer's published limits for temperature and humidity.

#### **1.6 PROJECT CONDITIONS**

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Field Measurements: Verify actual measurements and openings by field measurements before fabrication. Show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays

## **MANUFACTURER:**

- C. Acceptable Manufacturer:  
First Class Building Products, Inc.  
3600 Dallas Highway, Suite 230-387  
Marietta, Georgia 30064  
Tel: 770.514.8141  
Email: [www.firstclassbp@gmail.com](mailto:www.firstclassbp@gmail.com) Web site: [www.firstclassbp.com](http://www.firstclassbp.com)
- D. Substitutions: Not permitted.
- E. Requests for substitutions will be considered in accordance with provisions of Section 01600.

## **1.7 Product Tolerances**

- A. Non Critical Part Thickness:  $\pm 1/4$ "
- B. Critical Dimensions All Directions:  $\pm 1/8$ "
- C. Variation From Square:  $\pm 1/8$ "
- D. Hardware Location Variation:  $\pm 1/8$ "
- E. Warpage or Bowing:  $1/16$ " per foot

## **2.3 MATERIAL**

- 1. Material: Closed cell polyurethane.
  - a. Compressive Strength: 800-950 psi.
  - b. Tensile Strength: 550-650 psi.
  - c. Density: Skin density greater than core density, 14-18 pcf.
- 2. Adhesive: PL Premium adhesive must be used on all bedding/butt joints.
- 3. Finish: Factory "double primed" with exterior grade latex paint, ready for installation and field finishing.
  - a. Field Finish Color: \_\_\_\_\_
- 4. Models: As indicated on Drawings.
- 5. Models: As selected by Architect.

Accessories: As indicated on Drawings.

- 1. Accessories: As selected by Architect.
- 2. Primer: Sherwin Williams A100 or PrepRite Classic Interior Latex Primer.
- 3. Paint: Sherwin Williams A100 or SuperPaint.
- 4. PreCleaner: Sherwin Williams Pro Clean Professional.
- 5. Caulking: Sherwin Williams ProSelect 1100A.
- 6. Deco Flex: Sherwin Williams SuperPaint.
- 7. Lightweight Automotive Filler: Car Systems AutoFit, Eurosoft # CARS134458.

## **Part 3 EXECUTION**

### **3.1 EXAMINATION**

- B. Inspect conditions of substrate and other conditions which may affect installation of signage.
- C. Do not begin installation until substrates are within manufacturer's specified tolerances and have been prepared in accordance with manufacturer's instructions.
- D. If substrate preparation is the responsibility of another installer, do not proceed with installation. Notify Architect of unsatisfactory preparation immediately.
- E. Commencement of work is deemed as acceptance of installation conditions.

### **3.2 INSTALLATION**

- F. Adhesives and fasteners must be used for installing all products on concrete, metal, vinyl or wood, PL Premium adhesive must be used on all bedding/butt joints to ensure the beauty of you installation for years to come.
  - 1.FCBP polyurethane products are handled in the same manner as wood millwork
  - 2.FCBP adhesives refer to PL Premium
  - 3.Fasteners refer to nails, screws, bolts etc.

### **3.3 FINISHING**

- G. Allow adhesive to dry 24-48 hours before beginning the finishing procedure. Cut off any excess adhesive using a utility knife.
- H. Clean and remove all dirt, oil and greases from surface of product using a wax and grease remover product such as Sherwin-Williams Pro-Clean Professional.
- I. With 80 grit sandpaper, "rough up" surface surrounding screw or nail holes made during installation to ensure good filler adhesion. Sand all joint areas with 80 grit sandpaper to "rough up" and "blend in" any misalignment of product during installation.
- J. Once all areas needing repair are "roughed up" and "blended in", remove all dust from the surface of the product, again using the wax and grease remover.
  - 1. Use compressed air to remove the excess sanding dust.
- K. Apply filler to the areas needing repair. Use a 2- component, light weight automotive filler, such as " Car Systems AutoFit, Eurosoft # CARS134458." Apply the filler using thin coats, sanding between each coat with 120 or 180 grit sandpaper. Apply minimum of 2 coats of filler to get the results detailed in manufacturer's literature.
- L. Prime all areas which have had filler applied. Use an interior/exterior latex primer such as Sherwin-Williams A100.
- M. Caulk seams along bedding edges of moulding, around balusters, and in any other area necessary to provide a clean installation. Use an exterior, paintable exterior Latex caulking such as Sherwin-Williams ProSelect 1100A.
- N. Paint the product in color specified by Architect. Dark or glossy colors are not recommended as they will accentuate any flaws left during the installation. Manufacturer recommends product such as Sherwin Williams Interior/Exterior A100 or SuperPaint, flat or satin.

### **3.4 PROTECTION**

- O. Protect installed products until completion of project.
- P. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

***FIRST CLASS Building Products, Inc.***  
***3600 Dallas Highway Suite 230-387***  
***Marietta GA, 30064***  
***1.770.514.8141***  
***firstclassbp@gmail.com***  
***www.firstclassbp.com***