

## SECTION 07 46 33

### PLASTIC SIDING

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#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Paintable PVC Board and Batten and Accessories.
- B. PVC Board and Batten and Accessories.

##### 1.2 RELATED SECTIONS:

- A. Section 06 11 00 – Rough Carpentry.
- B. Section 07 25 00 – Weather Barriers.

##### 1.3 DEFINITIONS:

- A. PVC: Cellular polyvinyl chloride.

##### 1.4 SUBMITTALS

- A. Submit in accordance with requirements of Section 01 30 00 - Administrative Requirements.
- B. Product Data: For each product specified include the following:
  - 1. Manufacturer’s technical product data, including component descriptions, construction details, and test results showing compliance with specified performance criteria.
  - 2. Manufacturer’s surface preparation and installation instructions.
  - 3. Safety Data Sheets (SDS).
- C. Selection Samples: Provide 5 by 7-inch samples depicting the manufacturer’s full range of options.

- D. Verification Samples: Provide two samples of specified board, full board width by minimum 48 inches in length.
- E. Informational Submittals:
  - 1. Installer qualifications.
  - 2. Product test reports.
  - 3. Sample warranties.
- F. Closeout Submittals:
  - 1. Maintenance data for installed system.

#### 1.5 QUALITY ASSURANCE

- A. Installer's Qualifications: An entity with demonstrated experience installing systems similar in scope and complexity to those specified.
- B. Mock-Up: Arrange for the construction of a mock-up of the products specified in this section. Example must include one cladding section for each type specified, including the selected color and finish. Owner and Architect will verify acceptance of products and workmanship.
  - 1. Accepted mockups may be incorporated into the work.
  - 2. Provide mockups as indicated on the drawings.

#### 1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle materials and products in accordance with the manufacturer's instructions and recommendations and industry standards.
- B. Store all materials in the manufacturer's original packaging until ready for installation. Protect all products from damage or exposure to adverse weather conditions or excessive heat.
- C. Cover stored products with white, breathable protective wraps to minimize heat gain.

#### 1.7 PROJECT CONDITIONS

- A. Schedule work around the ambient conditions required by the manufacturer. Do not perform work outside manufacturer's recommended limits for environmental conditions.
- B. Prior to fabrication, verify that dimensions are consistent with those found in the construction drawings. Where discrepancies exist, confirm the proper dimensions with the Architect before proceeding with work.

#### 1.8 WARRANTY

- A. Warranty: Manufacturer agrees to replace or refund the purchase price of nonconforming products that fail in workmanship within the specified warranty period.
  - 1. Failure Methods: Corrosion, rotting, splitting, splintering, delamination, warping or swelling excessively from moisture.
  - 2. Residential Warranty Period: Limited Lifetime.
  - 3. Commercial Warranty Period: 20 years from date of purchase.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Basis of Design Manufacturer: AZEK Building Products.
  - 1. Address: 1330 W Fulton Street, Suite 350 Chicago, IL 60607.
  - 2. Phone: (877) 275-2935
  - 3. Website: [www.azekexteriors.com](http://www.azekexteriors.com)
- B. Manufacturer List:
  - 1. Manufacturer:
- C. Substitution Limitations:
  - 1. Submit substitution requests in accordance with provisions of Section 01 60 00.
  - 2. Single manufacturer to provide, from a single source, primary products and accessories specified in this section.

### 2.2 PERFORMANCE REQUIREMENTS:

- A. Rate and Extent of Burn: No sustained combustion beyond 30 seconds or 1 inch (25 mm) when tested in accordance with ASTM D635.
- B. Ignition Resistance: Pass; when tested in accordance with NFPA 268.
- C. Surface-Burning Characteristics: Meet the following values when tested in accordance with ASTM E84:
  - 1. Class A Flame-Spread Index: 25.
- D. Ignition Temperature of Plastics: No less than the below values when tested in accordance with ASTM D1929.
  - 1. Self-Ignition: Minimum 450 degrees C.
  - 2. Flash Ignition: Minimum 380 degrees C.
- E. Heat Shrinkage: Less than 0.12% linear change when tested in accordance with ASTM D1042.

- F. Coefficient of Thermal Expansion: Between  $2.6 \times 10^{-5}$  in/in/°F to  $2.8 \times 10^{-5}$  in/in/°F; when tested in accordance with ASTM D696.
- G. Surface Distortion: No effect at 120°F when tested in accordance with ASTM D3679 Section 6.12.
- H. Flexural Rigidity: Not less than the below values when tested in accordance with ASTM D790.
  - 1. Flexural Strength: 1866 psi.
  - 2. Modulus of Elasticity: 83,620 psi.
- I. Water Absorption and Resistance: No observed water droplets when tested in accordance with ASTM D570 and AATCC 127.

### 2.3 PAINTABLE PVC BOARD AND BATTEN SIDING

- A. General: ASTM D3679, PVC siding board in accordance with ICC-ES AC227.
  - 1. Basis of Design Product: Board and Batten Siding with PaintPro Technology, by AZEK Building Products.
- B. Physical Characteristics:
  - 1. Sheet Texture: Woodgrain.
    - a. Size: 8 feet by 48 inches by 1/2 inch.
    - b. Size: 10 feet by 48 inches by 1/2 inch.
  - 2. Sheet Texture: Smooth.
    - a. Size: 8 feet by 48 inches by 1/2 inch.
    - b. Size: 10 feet by 48 inches by 1/2 inch.
    - c. Size: 12 feet by 48 inches by 1/2 inch.
  - 3. Batten Texture: Woodgrain.
    - a. Size: 16 feet by 1-1/2 inch by 3/4 inch.
  - 4. Batten Texture: Smooth.
    - a. Size: 16 feet by 1-1/2 inch by 3/4 inch.
    - b. Size: 16 feet by 2-1/2 inch by 3/4 inch.
  - 5. Spacing: As indicated on drawings.

### 2.4 PVC BOARD AND BATTEN SIDING

- A. General: ASTM D3679, PVC siding board in accordance with ICC-ES AC227.
  - 1. Basis of Design Product: Board and Batten Siding, by AZEK Building Products.
- B. Physical Characteristics:
  - 1. Sheet Texture: Woodgrain.
    - a. Size: 8 feet by 48 inches by 1/2 inch.
    - b. Size: 10 feet by 48 inches by 1/2 inch.

- c. Size: 12 feet by 48 inches by 1/2 inch.
2. Sheet Texture: Smooth.
  - a. Size: 8 feet by 48 inches by 1/2 inch.
  - b. Size: 10 feet by 48 inches by 1/2 inch.
  - c. Size: 12 feet by 48 inches by 1/2 inch.
3. Batten Texture: Woodgrain
  - a. Size: 18 feet by 1-1/2 inch by 3/4 inch.
  - b. Size: 18 feet by 2-1/2 inch by 3/4 inch.
4. Batten Texture: Smooth.
  - a. Size: 18 feet by 1-1/2 inch by 3/4 inch.
  - b. Size: 18 feet by 2-1/2 inch by 3/4 inch.
5. Spacing: As indicated on drawings.

## 2.5 ACCESSORIES

- A. Siding Accessories, General: Provide edge trim, outside and inside corner caps, and other items as recommended by siding manufacturer for building configuration.
  1. Provide accessories matching color and texture of adjacent siding unless otherwise indicated.
- B. Decorative Accessories: Provide the following decorative accessories as indicated:
  1. Corner posts.
  2. Door and window casings.
  3. Fascia.
  4. Moldings and trim.
  5. --Insert accessories--.
- C. Fasteners: Provide fasteners in accordance with manufacturer's written instructions and authorities having jurisdiction.
  1. Concealed Fasteners:
    - a. Basis of Design Product: Cortex, by AZEK Building Products.
      - 1) Material: Electric coated epoxy painted carbon steel.
      - 2) Size: Minimum #10 x 2 inch carbon steel fasteners.
      - 3) Installation: Counter-bored.
      - 4) Corrosion Resistance: Pass; when tested in compliance with ASTM B117.
  2. Exposed Fasteners: Minimum 1-1/2-inch by .092 ring shank nail in hot dip galvanized or stainless steel.
- D. Water management: Provide flashings complying with Section 076200 "Sheet Metal Flashing and Trim" at window and door heads, horizontal transitions, and kickout flashings at fascia to wall intersects, and where indicated.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting the performance of PVC siding and related accessories, including the following:
  - 1. Wall sheathing is in place and properly installed.
  - 2. Water-resistive barrier (or air barrier) is in place, continuous, and properly installed with minimum 1/32-inch air space to allow drainage and drying.
- B. Do not begin work until adjacent substrates have been properly prepared to receive work specified in this section. Commencement of work will constitute acceptance of substrates to receive the work.

### 3.2 PREPARATION

- A. General: Comply with manufacturer's printed installation instructions, clean substrates of projections and substances detrimental to application.
- B. Protect adjacent finishes and substrates not to receive PVC siding.

### 3.3 INSTALLATION

- A. General: Install in accordance with manufacturer's current installation instructions, industry recognized best practices, all code bodies having jurisdiction, and approved shop drawings. Do not install damaged products.
  - 1. Do not install damaged components.
  - 2. Install sheets vertically to maintain finish texture and minimize horizontal joints.
  - 3. Install fasteners every 8 inches vertically along the left and right sides of the sheet, 1/2 inch from the edge, and 2 inches from the top and bottom edge.
  - 4. Install fasteners every 12 inches vertically spanning the batten, 1/2 inch from the top and bottom edge.
- B. Install PVC siding level, plumb, true, and aligned with adjacent materials.
  - 1. Use concealed shims where necessary for alignment.
  - 2. Scribe and cut exterior finish carpentry to fit adjoining work.
  - 3. Refinish visible cuts as recommended by manufacturer.
  - 4. Install to tolerance of 1/8-inch in 96 inches (3 mm in 2438 mm) for level and plumb. Install adjoining exterior finish carpentry with 1/32-inch (0.8-mm) maximum offset for flush installation and 1/16-inch (1.5-mm) maximum offset for reveal installation.
  - 5. Leave gaps at the following conditions:
    - a. Vertical Seams: 1/16-inch.
    - b. Horizontal Joints: 1/4-inch above flashing.

- c. Perimeter, Openings, and Trims: 1/8-inch.
  6. Flash all horizontal joints in accordance with manufacturer's instructions. Do not caulk flashed horizontal joints.
  7. Seal vertical butt joints at inside and outside corners and at trim locations.
  8. Coordinate exterior finish carpentry with materials and systems in or adjacent to it.
  9. Provide cutouts for mechanical and electrical items that penetrate exterior finish carpentry.
  10. Conceal fasteners to greatest practical extent.
  11. Do not bridge or span floor construction when installing sheet.
- C. Field Painting: Apply paint in accordance with manufacturer's current finishing instructions, paint manufacturer's instructions, and industry recognized best practices.
1. Apply paint within 180 days of installation.
  2. Ensure that surface is clean, dry, and free of foreign materials.
  3. Do not apply primer.
  4. Provide one of the following in compliance with Section 099113 "Exterior Painting."
    - a. Acrylic Latex: Subject to compliance with manufacturer's recommendations, provide 100% acrylic latex exterior paint with light reflective value greater than 55.
    - b. Vinyl-Safe Latex: Subject to compliance with manufacturer's recommendations, provide 100% acrylic latex exterior paint from a pre-set vinyl-safe palette.
    - c. Specialty Paint: Subject to compliance with manufacturer's recommendations, provide specialty exterior paint with solar reflective pigments.

#### 3.4 CLEANING AND PROTECTION

- A. Clean and remove all stains, grime, or other soils using manufacturer's recommended methods. Only use materials and methods approved by the manufacturer for use on the finishes specified.
- B. Damaged products must be repaired or replaced prior to substantial completion.
- C. Protect installed products until completion of work specified in this section.

END OF SECTION 074643