

Composite Siding

SECTION 07466

Polyurethane Composite Siding

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Siding panels
- 1.2 REFERENCES Insert
 - A. ICC-ES AC389 Acceptance Criteria for Composite Siding Containing Inorganic Microspheres and Proprietary Resins, Used as an Exterior Wall Cladding
 - B. ICC-ES AC92 Acceptance Criteria for Polymer-Based and Polymer-Modified Exterior and Interior Wall Cladding
 - C. ASTM D6109 Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastic Lumber and Related Products
 - D. ASTM D1622 Standard Test Method got Apparent Density of Rigid Cellular Plastics
 - E. ASTM D6341 Standard Test Method for Determination of the Linear Coefficient of Thermal Expansion of Plastic Lumber and Plastic Lumber Shapes Between -30 and 140°F
 - F. ASTM D1037 Standard Test Method for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials
 - G. ASTM C1185 Standard Test Method for Sampling and Testing Non-Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles and Clapboards
 - H. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
 - I. ASTM B117 Standard Practice for Operating Salt Fog Spray (Fog) Apparatus
 - J. AWPA E1 Laboratory Methods for Evaluating the Termite Resistance of Woodbased Materials
 - K. ASTM E330 Standard Test Method for Structural Performance of Exterior
 Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
 - L. E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure
 - M. G155 Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials

1.3 SUBMITTALS

- A. Make submittals under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.

- 3. Installation methods, including nailing patterns.
- 4. Applicable model code authority evaluation report (ICC, CNBC, etc.)
- A. Siding manufacturer's requirements for water resistive barrier, primer, paint, etc., to be installed by others.
- C. Maintenance and periodic inspection recommendations.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Refer to manufacturer's installation instructions for storage and handling.

1.5 WARRANTY

- A. Provide with a 30 year limited lifetime warranty.
- B. Register manufacturer's warranty, made out in Owner's name, with copy to Owner.

PART 2 PRODUCT

2.1 MANUFACTURER

A. CertainTeed Corporation, Siding Products Group, 20 Moores Road, Malvern, Pennsylvania 19355. ASD. Tel: (800) 233-8990 (professional) or (800) 782-8777 (consumer). www.certainteed.com.

2.2 PANELS

- A. ICON Composite Siding General: CertainTeed ICON is primer-coated filled polyurethane composite with integral surface texture
- B. ICON Composite Siding Performance Characteristics
 - 1. Surface Burning Characteristics: Flame Spread Classification: C, when tested in accordance with ASTM E 84.
 - 2. Transverse Load Resistance (Wind-load): Allowable Design Pressure = 46.7psf, per Section 4.7 of AC92, when tested in accordance with ASTM E330.
 - 3. Water Infiltration Resistance of water penetration into the wall assembly: Passed, when tested in accordance with E331.
 - 4. Water Absorption: Tested in accordance with C1185.
 - 5. Freeze / Thaw Resistance: No cracking, checking, crazing, erosion, delamination or other distress, when tested in accordance with Section 3.3 of AC389.
 - 6. Accelerated Weathering: No cracking, checking, crazing, erosion, delamination or other distress, when tested in accordance with Section 4.3 of AC389 (G155).
 - 7. Termite Resistance: Demonstrated resistance to termite attack equivalent to that of preservative-treated or the heartwood of naturally durable wood, when tested in accordance with AWPA E1.
 - 8. Salt Spray Resistance: No cracking, checking, crazing, erosion, delamination or other distress, when tested in accordance with Section 4.5 of AC92, (B117).
 - 9. Flexural Strength: Tested in accordance with Section 3.1.1 of AC389 (D6109).
 - 10. Density: Tested in accordance with Section 3.1.2 of AC389 (D1622).

- 11. Coefficient of Linear Thermal Expansion: Testing in accordance with Section 3.1.1 of AC389 (D6341).
- 12. Impact Resistance: Tested in accordance with Section 3.1.4 of AC389 (D1037).
- 13. Nail Pull-Through Resistance: Tested in accordance with Section 4.2 of AC389 (D1037).
- C. Horizontal Siding: CertainTeed ICON Panels.
 - 1. Thickness: 5/16 inch (7.9 mm), plus or minus .04 inch (1 mm).
 - Length: 12 feet (3657 mm), plus 0, minus 1/8 inch (3 mm) and 16 feet (4,877 mm)
 - 3. Style: Wood grain texture lap siding.
 - a. Width: 8-1/4 inches (210 mm) wide.
 - 4. Sealant/Primer: Grey exterior grade primer.
 - 5. Field Finish Paint: High grade non-oil based exterior paint as specified in Section 09900.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Prior to commencing installation, verify governing dimensions of building and condition of substrate.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Examine, clean, and repair as necessary any substrate conditions that would be detrimental to proper installation.
- B. Do not begin installation until unacceptable conditions have been corrected.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's installation instructions
 - 1. Read warranty and comply with all terms necessary to maintain warranty coverage.
- B. Over Structural Wood and Wood-Composite Sheathing: Fasten siding through sheathing into studs.
- Over Foam or Gypsum Based Sheathing: Read and comply with sheathing manufacturer's recommendations.
 - 1. For sheathing of 1 inch (25 mm) thickness or less, fasten through sheathing into studs using correspondingly longer fasteners.
- D. Do not install siding less than 2 inches (51 mm) from surface of ground nor closer than 2 inch (51 mm) to roofs, patios, porches, and other surfaces where water may collect.
- E. Finish Painting: Paint siding within 6 months after installation.

3.4 CLEANING

- A. At completion of work, remove debris caused by siding installation from project site.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION