

SECTION 07466

FIBER CEMENT SIDING

CertainTeed

WeatherBoards™

FiberCement Siding

For best results, display hidden notes to specifier.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Siding panels.
- B. Soffit panels.
- C. Accessories and trim.

1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry: Framing and Sheathing.
- B. Section 07900 - Joint Sealers.
- C. Section 09900 - Paints and Coatings: Field painting.

1.3 REFERENCES

- A. ASTM C 920 - Standard Specification for Elastomeric Joint Sealants; 1998.
- B. ASTM C 1185 - Standard Test Methods for Sampling and Testing Non-Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards; 1999.
- C. ASTM C 1186 - Standard Specification for Flat Non-Asbestos Fiber Cement Sheets; 1999.
- D. ASTM E 72 - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction; 1998.
- E. ASTM E 84 -- Standard Test Method for Surface Burning Characteristics of Building Materials; 1999.
- F. ASTM E 96 - Standard Test Methods for Water Vapor Transmission of Materials; 1995.
- G. ASTM E 136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace At 750 Degrees C; 1999.
- H. ASTM E 228 - Standard Test Method for Linear Thermal Expansion of Solid Materials With a Vitreous Silica Dilatometer; 1995.

- I. ASTM G 26 - Standard Practice for Operating Light-Exposure Apparatus (Xenon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials; 1996.

1.4 SUBMITTALS

- A. Make submittals under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each 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 (ICBO, BOCA, CCMC, etc.)
- C. Siding manufacturer's requirements for vapor retarders, primer, paint, etc., to be installed by others.
- D. Maintenance and periodic inspection recommendations.

1.5 QUALITY ASSURANCE

- A. Installer: Provide installer with not less than three years of experience with products similar to those specified.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products off the ground, on a flat surface, and under a roof or separate waterproof covering.

1.7 WARRANTY

- A. Register manufacturer's warranty, made out in Owner's name, with copy to Owner.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. CertainTeed Corporation, Siding Products Group, P.O. Box 860, Valley Forge, Pennsylvania 19482. ASD. Tel: (800) 233-8990 (professional) or (800) 782-8777 (consumer). www.certainteed.com.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 PANELS

- A. Fiber Cement Board Panels - General: Cement and cellulose fiber formed under high pressure into boards with integral surface texture; complying with ASTM C 1186 Type A Grade II; machined edges; for nail attachment.
 - 1. Surface Burning Characteristics: Flame spread index of 0, smoke developed index of 6, maximum; when tested in accordance with ASTM E 84 (Class I/A).
 - 2. Flammability: Noncombustible, when tested in accordance with ASTM E 136.

3. Flexural Strength: At least 1450 psi (10 MPa) when in equilibrium condition, and at least 1015 psi (7 MPa) when in wet condition, tested in accordance with ASTM C 1185.
 4. Coefficient of Thermal Expansion: Less than 1×10^{-5} /inch/inch/degree F (0.5×10^{-5} /degree C), when tested in accordance with ASTM E 228.
 5. Water Vapor Transmission: Less than 7.0 perm-inch (10 ng/(Pa s m), when tested in accordance with ASTM E 96.
 6. Freeze Thaw Resistance: At least 80 percent flexural strength retained, when tested in accordance with ASTM C 1185.
 7. UV Resistance: No cracking, checking, or erosion, when tested for 2000 hours in accordance with ASTM G 26.
 8. Water Tightness: No water droplets on underside, when tested in accordance with ASTM C 1185.
- B. Horizontal Siding: CertainTeed WeatherBoards, FiberCement Siding.
1. Thickness: 5/16 inch (8 mm), nominal.
 2. Length: 12 feet (3657 mm), nominal.
 3. Style: Smooth lap siding.
 4. Style: Smooth beaded lap siding.
 5. Style: Textured beaded lap siding.
 6. Style: Textured Dutchlap siding.
 7. Style: Cedar lap siding.
 8. Width: 5-1/4 inches (133 mm) wide.
 9. Width: 6-1/4 inches (159 mm) wide.
 10. Width: 7-1/4 inches (185 mm) wide.
 11. Width: 7-1/2 inches (190 mm) wide.
 12. Width: 8-1/4 inches (210 mm) wide.
 13. Width: 9-1/4 inches (235 mm) wide.
 14. Width: 12 inches (305 mm) wide.
 15. Finish: Factory sealed with FiberTect.
- C. Simulated Shingle Siding: CertainTeed WeatherBoards Shapes FiberCement Siding.
1. Thickness: 5/16 inch (8 mm), nominal.
 2. Style: Perfection shingle, grooved, 7 inches (178 mm) exposure, 8-1/4 inches (210 mm) wide by 12 feet (3657 mm) long, nominal.
 3. Style: Random square straight edge, cut between shingles, 5 inches (127 mm) exposure, 12 inches (305 mm) wide by 48 inches (1219 mm) long, nominal.
 4. Style: Random square straight edge, cut between shingles, 7 inches (178 mm) exposure, 16 inches (406 mm) wide by 48 inches (1219 mm) long, nominal.
 5. Style: Random square staggered edge, cut between shingles, 7 inches (178 mm) exposure, 16 inches (406 mm) wide by 48 inches (1219 mm) long, nominal.
 6. Style: Half-rounds full cut between shingles, 7 inches (178 mm) exposure, 16 inches (406 mm) wide by 48 inches (1219 mm) long, nominal.
 7. Style: Octagons full cut between shingles, 7 inches (178 mm) exposure, 16 inches (406 mm) wide by 48 inches (1219 mm) long, nominal.
 8. Finish: Factory sealed with FiberTect.
- D. Vertical Siding: CertainTeed WeatherBoards, FiberCement Siding.
1. Thickness: 5/16 inch (8 mm), nominal.
 2. Size: 48 by 96 inches (1220 by 2440 mm), nominal.
 3. Size: 48 by 108 inches (1220 by 2743 mm), nominal.
 4. Size: 48 by 120 inches (1220 by 3048 mm), nominal.
 5. Style: Smooth panel.
 6. Style: Stucco texture panel.
 7. Style: Cedar panel, no grooves.
 8. Style: Cedar panel, 3/8 inch (9.5 mm) wide grooves at 8 inches (200 mm) on center.

- 9. Finish: Factory sealed with FiberTect.
 - 10. Finish: Unprimed.
- E. Soffit: CertainTeed WeatherBoards, Fiber Cement Soffit, ventilated and non-ventilated.
 - 1. Thickness: 1/4 inch (6 mm), nominal.
 - 2. Style: Smooth texture, 12 inches (305 mm) wide.
 - 3. Style: Smooth texture, 16 inches (406 mm) wide.
 - 4. Style: Cedar texture, 12 inches (305 mm) wide.
 - 5. Style: Cedar texture, 16 inches (406 mm) wide.
 - 6. Style: Cedar texture, 24 inches (610 mm) wide.
 - 7. Finish: Factory sealed with FiberTect.

2.3 ACCESSORIES

- A. Trim: Fiber cement board, cut from siding material; cut edges primed.
- B. Trim: Western red cedar lumber, without knotholes, checks, or cracks; 1 inch (25 mm) nominal thickness.
- C. Trim: Pressure preservative treated southern pine, without knotholes, checks, or cracks, No.1 grade or better; 1 inch (25 mm) nominal thickness.
- D. Trim: PVC, composite and aluminum trim shapes suitable for trim conditions.
- E. Provide the following trim:
 - 1. Starter strip for lap siding.
 - 2. Outside corners, butted to siding.
 - 3. Outside corners, overlapping siding.
 - 4. Fascia board.
 - 5. _____.
- F. Sealant: Paintable, 100 percent acrylic latex caulk complying with ASTM C 920.
- G. Sheet Metal Flashing: Minimum 26 gauge hot-dipped galvanized steel sheet, or aluminum.
- H. Nails: Length as required to penetrate minimum 1-1/4 inch (32mm) into solid backing; hot-dipped galvanized or stainless steel.
- I. Building Paper: Kraft or bituminous paper; not polyethylene or foil.
- J. Finish Paint: As specified in Section 09900.
- K. Finish Paint: 100 percent acrylic latex.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Prior to commencing installation, verify governing dimensions of building and condition of substrate.

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 instructions and drawing details.
 - 1. Read warranty and comply with all terms necessary to maintain warranty coverage.
 - 2. Install in accordance with conditions stated in model code evaluation report applicable to location of project.
 - 3. Use trim details indicated on drawings.
 - 4. Touch up all field cut edges before installing.
 - 5. Pre-drill nail holes if necessary to prevent breakage.
- B. Over Wood Studs Without Sheathing: Install building paper over studs prior to installing siding.
- C. Over Wood and Wood-Composite Sheathing: Fasten siding through sheathing into studs.
- D. Over Foam Sheathing: Read and comply with sheathing manufacturer's recommendations.
 - 1. For sheathing of 1 inch (25 mm) thickness or less, nail through sheathing into studs using correspondingly longer nails.
 - 2. For sheathing over 1 inch (25 mm) thickness, install furring strips over studs and fasten siding through furring and into studs.
- E. Over Masonry Walls: Install furring strips of adequate thickness to accept full length of nails and spaced at 16 inches (406 mm) on center.
- F. Over Steel Studs: Minimum 20 gauge steel, 3 5/8" (92 mm) C-studs. Use 1-5/8" (41 mm) long, #8-18 x 3/8" HD self-tapping, corrosion-resistant ribbed bugle head screws. Attach siding at each stud insuring that at least 3 screw threads penetrate the studs.
- G. Diagonal Siding: Follow manufacturer's instructions.
- H. Allow space between both ends of siding panels that butt against trim for thermal movement; seal joint between panel and trim with exterior grade sealant.
- I. Joints in Horizontal Siding: Avoid joints in lap siding except at corners; where joints are inevitable stagger joints between successive courses.
- J. Joints in Vertical Siding: Install Z-flashing in horizontal joints between successive courses of vertical siding.
- K. Furred Installation: Leave space at top and bottom open; top may be behind soffit; at bottom install insect screen over opening by wrapping a strip of screen over bottom ends of vertical furring strips.
- L. Install sheet metal flashing above door and window casings and horizontal trim in field of siding.
- M. Do not install siding less than 6 inches (150 mm) from surface of ground nor closer than 1 inch (25 mm) to roofs, patios, porches, and other surfaces where water may collect.
- N. After installation, seal all joints except lap joints of lap siding. Seal around all penetrations. Paint all exposed cut edges.
- O. Finish Painting: Specified in Section 09900.

P. Finish Painting: Within 24 months after installation, paint siding and trim with one coat finish paint.

Q. Finish Painting: Within 24 months after installation, paint siding and trim with one coat primer and two coats finish paint.

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