



## SECTION 07 46 23

### ENGINEERED WOOD SIDING

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#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Engineered Wood Siding/Cladding.
- B. Soffit Panels.
- C. Trim and Fascia.
- D. Accessories:
  - 1. Fasteners.
  - 2. Sealant.
  - 3. Water-resistive barrier.
  - 4. Flashing.

##### 1.2 RELATED SECTIONS

- A. Section 06 05 73.13 - Fire-Retardant Wood Treatment.
- B. Section 06 10 00 - Rough Carpentry.
- C. Section 06 20 00 - Finish Carpentry.
- D. Section 07 62 00 - Sheet Metal Flashing and Trim.

##### 1.3 REFERENCES

- A. ASTM International (ASTM):
  - 1. ASTM A 153 - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
  - 2. ASTM C 920 - Standard Specification for Elastomeric Joint Sealants.
- B. American National Standards Institute (ANSI):
  - 1. ANSI A135.6 - Engineered Wood Siding.
- C. APA - The Engineered Wood Association (APA):
  - 1. PS 2-10 - Performance Standard for Wood-Based Structural-Use Panels.
  - 2. PRP 108 - Performance Standards and Qualification Policy for Structural-Use Panels.
  - 3. PR-N124 - APA Product Report, LP SmartSide Strand Substrate Lap and

- 4. Panel Siding.
  - 4. PR-N117 - APA Product Report, LP SmartSide Strand Substrate Soffit.
- D. Department of Housing and Urban Development (HUD):
  - 1. HUD-MR-1318 - Material Release.
  - 2. HUD-UM-40 - HUD Building Product Standards and Certification Program Plywood and Other Performance Rated Wood-Based Structural-Use Panels.
- E. Florida Product Approval (FL#):
  - 1. FL# 9190 - LP SmartSide Strand & Fiber Substrate Lap and Panel Siding.
  - 2. FL# 9103 - LP SmartSide Strand & Fiber Substrate Lap and Panel Siding.
- F. ICC Evaluation Service (ICC-ES):
  - 1. ESR-1301 - LP SmartSide Strand Substrate Lap and Panel Siding.
  - 2. ESR-3090 - LP SmartSide Fiber Substrate Lap and Panel Siding.
- G. Texas Department of Insurance (TDI):
  - 1. EC-22 - LP SmartSide Strand Substrate Lap and Panel Siding.
  - 2. EC-35 - LP SmartSide Fiber Substrate Lap and Panel Siding.
- H. Canadian Construction Materials Centre (CCMC):
  - 1. CCMC # 11826-L - LP SmartSide Strand Substrate Lap and Panel Siding.
  - 2. CCMC # 12353-L - LP SmartSide Fiber Substrate Lap and Panel Siding.
  - 3. CCMC # 07893-L - LP CanExel Siding.
- I. California Department of Forestry & Fire Protection - Office of State Fire Marshal - Fire Engineering - Building Materials Listing Program (BML):
  - 1. BML No. 8140-2027:0001 - LP SmartSide Strand Substrate Lap Siding.
  - 2. BML No. 8140-2027:0002 - LP SmartSide Strand Substrate Panel Siding.
  - 3. BML No. 8140-2027:0003 - LP SmartSide Fiber Substrate Lap Siding.
  - 4. BML No. 8140-2027:0004 - LP SmartSide Fiber Substrate Panel Siding.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data:
  - 1. Application Instructions.
  - 2. Maintenance and Care Instructions.
- C. Verification Samples: For each exposed product and texture specified, two samples, minimum size 6 inches (152 mm) long representing actual product, color, and patterns.
- D. Shop Drawings: Include details of materials, construction and finish. Include relationship with adjacent construction.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
- B. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
- C. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

- D. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
  - 1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
  - 2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
  - 3. Retain mock-up during construction as a standard for comparison with completed work.
  - 4. Do not alter or remove mock-up until work is completed or removal is authorized.

#### 1.6 PRE-INSTALLATION CONFERENCE

- A. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store and handle in strict compliance with manufacturer's written application instructions and recommendations.
- B. Protect from damage due to weather, excessive temperature, and construction operations.

#### 1.8 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 recommended limits.

#### 1.9 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

#### 1.10 WARRANTY

- A. Manufacturer's Warranty: Provide manufacturer's Limited Warranty.
  - 1. Limited Warranty Period: Fifty years, first 5 years equal to the cost of repairing or replacing, then prorated from the 6th year through the 49th year from the date of installation.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: LP Building Products, which is located at: 414 Union St. Suite 2000; Nashville, TN 37219; Toll Free Tel: 888-820-0325; Fax: 877-523-7192; Email: [request info \(customer.support@lpcorp.com\)](mailto:customer.support@lpcorp.com); Web: <https://lpcorp.com>
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

#### 2.2 ENGINEERED WOOD SIDING/CLADDING

- A. Basis of Design: Strand Panel Siding; as manufactured by LP Building Products.
1. Description: Exterior-grade, phenolic resin-saturated, paper overlay laminated to EPA-registered zinc-borate preservative-treated engineered wood siding. Exposed edges sealed for moisture resistance.
  2. Finish: Acrylic latex primer.
  3. Thickness, 38 Series: 0.315 inch (8 mm) minimum.
  4. Thickness, 76 Series: 0.375 inch (10 mm) minimum.
  5. Thickness, 190 Series: 0.530inch (14 mm) minimum.
  6. Style : Embossed Cedar Texture
  7. Grooves: Channel grooves at 4 inches (102 mm) on center.
  8. Grooves: Channel grooves at 8 inches (203 mm) on center.
  9. Grooves: None.
  10. Length: 6 feet (1829 mm).
  11. Length: 7 feet (2134 mm).
  12. Length: 8 feet (2438 mm).
  13. Length: 9 feet (2743 mm).
  14. Length: 10 feet (3048 mm).
  15. Length: 12 feet (3658 mm).
  16. Width: 48 inches (1219 mm), nominal.
  17. Edges: Shiplap.
- B. Basis of Design: Strand Vertical Siding; as manufactured by LP Building Products.
1. Description: Exterior-grade, phenolic resin-saturated, paper overlay laminated to EPA-registered zinc-borate preservative-treated engineered wood siding. Edges beveled and sealed for moisture resistance.
  2. Finish: Acrylic latex primer.
  3. Thickness, 38 Series: 0.315 inch (8 mm) minimum.
  4. Style: Embossed Cedar Texture.
  5. Length: 16 feet (4877 mm).
  6. Width: 16 inches (406 mm), nominal.
- C. Basis of Design: Strand Lap Siding; as manufactured by LP Building Products.
1. Description: Exterior-grade, phenolic resin-saturated, paper overlay laminated to EPA-registered zinc-borate preservative-treated engineered wood siding. Edges beveled ad sealed for moisture resistance.
  2. Finish: Acrylic latex primer.
  3. Thickness, 38 Series: 0.315 inch (8 mm) minimum.
  4. Thickness, 76 Series: 0.375 inch (10 mm) minimum.
  5. Style: Embossed Cedar Texture.
  6. Width: 5 inches (127 mm), nominal.
  7. Width: 6 inches (152 mm), nominal.
  8. Width: 7 inches (178 mm), nominal.
  9. Width: 8 inches (203 mm), nominal.
  10. Width: 9-1/2 inches (241 mm), nominal.
  11. Width: 12 inches (305 mm), nominal.
  12. Length: 16 feet (4877 mm).
  13. SmartLock Cedar Texture, Size: 8 inches (203 mm) nominal width, 0.375 inch (10 mm) minimum thickness.
- D. Basis of Design: Fiber Panel Siding, 76 Series; as manufactured by LP Building Products.
1. Type: Engineered wood siding with resin and linseed oil impregnated surface, treated with EPA-registered zinc-borate preservative.
  2. Standards Compliance: ANSI A135.6 compliant.
  3. Finish: Acrylic latex primer.
  4. Thickness: 0.375 inch (10 mm), minimum.

5. Style: Reverse board and batten, 12 inch (305 mm) on center groove.
  6. Style: Smooth Finish.
  7. Style: Smooth Finish, 8 inch (203 mm) on center groove.
  8. Style: Stucco Texture.
  9. Style: Cedar Texture, 8 inch (203 mm) on center groove.
  10. Style: Cedar Texture with square edge.
  11. Width: 48.56 inches (1233 mm), actual width.
  12. Length: 8 feet (2438 mm).
  13. Length: 9 feet (2743 mm).
  14. Edges: Shiplap and Square Edge.
- E. Basis of Design: Fiber Lap Siding, 76 Series; as manufactured by LP Building Products.
1. Type: Engineered wood siding with resin and linseed oil impregnated surface, treated with EPA-registered zinc-borate preservative.
  2. Standards Compliance: ANSI A135.6 compliant.
  3. Finish: Acrylic latex primer.
  4. Thickness, 76 Series: 0.375 inch (10 mm) minimum.
  5. Style: Smooth Finish.
  6. Style: Cedar Texture.
  7. Style: Colonial Beaded Smooth Finish.
  8. Style: Colonial Beaded Sequoia Texture.
  9. Width: 8 inches (203 mm) nominal.
  10. Width: 9 inches (229 mm) nominal.
  11. Length: 16 feet (4877 mm).
- F. Basis of Design: Fiber Lap Siding, 120 Series; as manufactured by LP Building Products.
1. Type: Engineered wood siding with resin and linseed oil impregnated surface, treated with EPA-registered zinc-borate preservative.
  2. Standards Compliance: ANSI A135.6 compliant.
  3. Finish: Acrylic latex primer.
  4. Thickness, 120 Series: 0.450 inch (11 mm) minimum.
  5. Style: 12 inch (305 mm) nominal, Triple 4 inch (102 mm) Bold Profile.
  6. Style: 12 inch (305 mm) nominal, Double 5 inch (127 mm) Bold Profile.
  7. Style: 16 inch (406 mm) nominal, Quad 4 inch (102 mm) Bold Profile.
  8. Style: 16 inch (406 mm) nominal, Triple 5 inch (127 mm) Bold Profile.
  9. Style: 16 inch (406 mm) nominal, Double 8 inch (203 mm) Bold Profile.
  10. Width: 6 inches (152 mm) nominal.
  11. Width: 8 inches (203 mm) nominal.
  12. Width: 8 inches (203 mm) nominal, Self-Aligning Cedar Texture.
  13. Width: 9.5 inches (241 mm) nominal.
  14. Width: 12 inches (305 mm) nominal.
  15. Width: 16 inches (406 mm) nominal.
  16. Length: 16 feet (4877 mm).
- G. Basis of Design: Fiber Cedar Shakes; as manufactured by LP Building Products.
1. Type: Engineered wood siding with resin and linseed oil impregnated surface, treated with EPA-registered zinc-borate preservative.
  2. Standards Compliance: ANSI A135.6 compliant.
  3. Finish: Acrylic latex primer.
  4. Thickness: 0.375 inch (10 mm), minimum.
  5. Style: Cedar Texture with staggered edge or straight edge.
  6. Size: 12 x 48 inches (305 x 1219 mm).
  7. Edges: Shiplap Edge.

- H. Basis of Design: Fiber Perfection Shingle; as manufactured by LP Building Products.
1. Type: Engineered wood siding with resin and linseed oil impregnated surface, treated with EPA-registered zinc-borate preservative.
  2. Standards Compliance: ANSI A135.6 compliant.
  3. Finish: Acrylic latex primer.
  4. Thickness: 0.375 inch (10 mm), minimum.
  5. Style: Fine sawn wood texture with no knots and straight edge.
  6. Size: 8 x 48 inches (203 x 1219 mm).
  7. Edges: Shiplap Edge.

### 2.3 SOFFIT PANELS

- A. Basis of Design: Strand Soffit ; as manufactured by LP Building Products.
1. Type: Exterior-grade, phenolic resin-saturated, paper overlay laminated to EPA-registered zinc-borate preservative-treated engineered wood soffit.
  2. Finish: Acrylic latex primer.
  3. Square edges.
  4. Thickness: 0.315 inch (8 mm) minimum.
  5. Thickness: 0.375 inch (10 mm) minimum.
  6. Thickness: 0.530 inch (14 mm) minimum.
  7. Style : Cedar Texture.
  8. Type: Non-vented soffit.
  9. Type: Non-vented, Cut-to-Width soffit.
  10. Type: Vented, Cut-to-Width soffit.
  11. Width: 12 inches (305 mm), nominal.
  12. Width: 16 inches (406 mm), nominal.
  13. Width: 24 inches (610 mm), nominal.
  14. Width: 48 inches (1219 mm), nominal.
  15. Length: 8 feet (2438 mm).
  16. Length: 9 feet (2743 mm).
  17. Length: 16 feet (4877 mm).
- B. Basis of Design: Fiber Soffit ; as manufactured by LP Building Products.
1. Type: Engineered wood siding with resin and linseed oil impregnated surface, treated with EPA-registered zinc-borate preservative.
  2. Finish: Acrylic latex primer. Square edges.
  3. Thickness: 0.375 inch (10 mm).
  4. Style: Cedar Texture.
  5. Style: Smooth Finish.
  6. Type: Non-vented soffit.
  7. Type: Non-vented, Cut-to-Width soffit.
  8. Width: 16 inches (405 mm).
  9. Width: 47.94 inches (1218 mm) actual.
  10. Length: 8 feet (2438 mm).
  11. Length: 9 feet (2743 mm).
  12. Length: 16 feet (4877 mm).

### 2.4 TRIM AND FASCIA

- A. Basis of Design: Strand Trim and Fascia; as manufactured by LP Building Products.
1. Fire Rating: Class 1(A) fire rating required.
  2. Finish: Acrylic latex primer.
  3. Thickness, 190 Series: 0.530 inch (14 mm).
  4. Thickness, 440 Series: 0.625 inch (16 mm).
  5. Thickness, 540 Series: 0.910 inch (23 mm).
  6. Style : Cedar Texture.
  7. Width: 1.50 inches (38 mm), actual.

8. Width: 2.50 inches (64 mm), actual.
9. Width: 3.50 inches (89 mm), actual.
10. Width: 4.50 inches (114 mm), actual.
11. Width: 5.50 inches (140 mm), actual.
12. Width: 7.21 inches (183 mm), actual.
13. Width: 9.21 inches (234 mm), actual.
14. Width: 11.21 inches (285 mm), actual.
15. Length: 16 feet (4877 mm).

- B. Basis of Design: Fiber Trim and Fascia; as manufactured by LP Building Products.
1. Fire Rating: Class 1(A) fire rating required.
  2. Finish: Acrylic latex primer.
  3. Thickness, 440 Series: 0.625 inch (16 mm) minimum.
  4. Thickness, 540 Series: 0.910 inch (23 mm) minimum.
  5. Style : Reversible; Smooth Finish on one side and Cedar Texture on the other side.
  6. Width: 2.70 inches (69 mm), actual.
  7. Width: 3.50 inches (89 mm), actual.
  8. Width: 4.50 inches (114 mm), actual.
  9. Width: 5.50 inches (140 mm), actual.
  10. Width: 7.21 inches (183mm), actual.
  11. Width: 9.21 inches (234 mm), actual.
  12. Width: 11.21 inches (285 mm), actual.
  13. Length: 16 feet (4877 mm).

## 2.5 ACCESSORIES

- A. Fasteners: ASTM A 153:
1. Hot-dip galvanized or stainless steel nails with 0.113 inch (2.9 mm) diameter shank.
  2. Penetrate structural framing or wood structural panels and structural framing a minimum of 1-1/2 inches (38 mm).
- B. Sealant: ASTM C 920, minimum Class 25 sealant.
- C. Water-Resistive Barrier: ASTM D226 or other approved water-resistive barrier.
- D. Air Barrier:
1. Material: ASTM E 1677 .
  2. UV Exposure: Minimum three months.
  3. Seam Tape: Air barrier manufacturer's standard product.
- E. Non-Compressible Drainable Housewrap :
1. Non-Compressible: will not allow the minimum 1 mm drainage gap to be reduced by the force of fastening during the installation of siding.
  2. Drainable Housewrap: will remove more bulk water by creating a minimum 1 mm drainage gap (air gap) at any individual measurement point between the housewrap and the back of the siding.
- F. Flashing:
1. Provide flashing at window and door heads and where indicated on Drawings. Refer to Division 07 for sheet metal flashing.
  2. Material: Aluminum.
    - a. Finish: Siliconized polyester coating.
    - b. Finish: High-performance organic finish.
    - c. Finish: Factory-prime coating.
    - d. Finish: \_\_\_\_\_.

- e. Finish: As determined by the Architect.
- 3. Material: Stainless steel.
- 4. Material: Galvanized steel.
- 5. Material: \_\_\_\_\_.
- 6. Material: As determined by the Architect.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly constructed and prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
- C. Verify location of concealed framing support and anchorage.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's application instructions approved submittals and in proper relationship with adjacent construction.
  - 1. Install in accordance with conditions stated in ICC-ES ESR-1301 for strand substrate products and ICC-ES ESR-3090 for fiber substrate products.
  - 2. Properly space joints to allow for equilibration.
- B. Do not install over damaged or crooked materials.
- C. Do not cut siding/cladding to fabricate trim; use trim components.
- D. After installation, seal and flash joints, except the overlapping horizontal lap joints.
- E. Seal around penetrations.
- F. All wood substrate that is exposed to the weather must be sealed in a manner that prevents moisture intrusion and water build up.
  - 1. Seal ALL exposed cuts of siding and trim. Field spray applied coatings on cuts are not recommended.
  - 2. Sealing can be accomplished by applying a coating or sealant according to the manufacturer's requirements.
  - 3. Butt joints that are covered with joint moldings, sealant, or factory prefinished ends are considered sealed from the weather.

### 3.4 CLEANING AND PROTECTION

- A. Clean products in accordance with the manufacturers Care and Maintenance Instructions.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION