



SECTION 074643 - COMPOSITION SIDING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Engineered wood cladding.
2. Soffit panels.
3. Trim and fascia.
4. Sealant.
5. Weather barrier.
6. Flashing.

1.2 COORDINATION

- A. Coordinate installation with flashings, weather barriers, and other adjoining construction to ensure proper sequencing for weathertight performance.
- B. Coordinate with finish coat to be applied over primed cladding, soffits, and trim. Comply with coating manufacturer's written requirements for substrate primer.

1.3 PREINSTALLATION MEETINGS

- A. Meet at Project site **<insert number>** days before starting installation.
- B. Attendees: Contractor, Installer, LP Technical Representative, LP Manufacturer Representative, and affected trades.
- C. Discussion Topics:
 1. **<Insert specific requirements>**

1.4 ACTION SUBMITTALS

A. Product Data:

1. Engineered wood cladding.
2. Soffit panels.
3. Trim and fascia.

4. Sealant.
5. Weather barrier.
6. Flashing.

B. Sustainable Design Submittals:

C. Shop Drawings:

1. Included details of construction and installation.

D. Samples: For each exposed product and texture specified, 12 inches long.

1.5 INFORMATIONAL SUBMITTALS

A. Manufacturer Certificates: Signed by manufacturer certifying that engineered wood cladding complies with requirements specified in "Performance Requirements" Article.

1. Submit evidence of meeting performance requirements.

B. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for engineered wood cladding.

C. Research/Evaluation Reports: For each type of engineered wood cladding required, from ICC-ES.

D. Sample Warranty: For special warranty (Reference 1.11).

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of product.

1.7 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed in packaging acceptable to cladding manufacturer for storage with labels clearly describing contents.

1. Furnish full lengths of engineered wood **[cladding][soffit][and][trim and fascia]** including related accessories, in a quantity equal to **[2 percent]** <insert amount> of amount installed.

1.8 QUALITY ASSURANCE

A. Installer Qualifications:

B. Mockup: Build mockup for engineered wood **[cladding][soffit][and][trim and fascia]** including accessories, to establish quality standards for materials and installation.

1. Build mockup of typical wall area as directed by Architect in size approximately 96 inches (2440 mm) long by 120 inches (3050 mm) by full thickness.
2. Include one window and flashing.
3. Acceptable mock-ups may remain as part of the Work if undamaged at time of Substantial Completion.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations and industry standards.
- B. Store products in manufacturer's labeled packaging until ready for installation. Protect from damage.
- C. Store products off the ground, on a flat surface, and under a roof or separate waterproof covering.

1.10 FIELD 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 limits.

1.11 WARRANTY

- A. Manufacturer's Standard Warranty: Transferable limited warranty.
 1. Warranty Period: Fifty years prorated from date of Substantial Completion.
- B. Special Warranty: Manufacturer agrees to repair or replace products that fail in materials or workmanship within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Structural failures including buckling.
 - b. Deterioration of materials beyond normal weathering.
 - c. Fungal degradation.
 - d. Cracking, peeling, separating, chipping, flaking, or rupturing of resin-impregnated surface overlay.
 - e. Hail damage consisting of a crack, chip, or dent in the surface overlay exceeding 3/8 inch in length or diameter.
 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: Subject to compliance with requirements, provide LP Building Products; LP SmartSide.
- B. Source Limitations: Obtain products, including related accessories, from single source from single manufacturer.

2.2 ENGINEERED WOOD CLADDING

A. Strand Panel Siding: **[38 Series][76 Series][190 Series]**.

- 1. Description: Exterior-grade phenolic resin-saturated paper overlay laminated to EPA-registered zinc-borate-preservative-treated engineered wood siding; structurally rated; AWWA compliant; exposed edges sealed for moisture resistance; acrylic primed for painting.
- 2. Fire Rating: 1 hour per ASTM E119; ASTM E 84 Class C flamespread.
- 3. Texture: Embossed rough-sawn Cedar.
- 4. Grooves: **[Channel grooves 3/8 inch, 4 inches o.c.][Channel grooves 3/8 inch, 8 inches o.c.][None]**.
- 5. Nominal Thickness: **[3/8 inch (9.5 mm)][7/16 inch (11 mm)][19/32 inch (15 mm)]**.
- 6. Length: **[6 feet (1829 mm)] [7 feet (2134 mm)] [8 feet (2438 mm)] [9 feet (2743 mm)] [10 feet (3048 mm)]**.
- 7. Board Width: 48 inches (1220 mm) nominal.
- 8. Edges: Shiplap.

B. Strand Vertical Siding: 38 Series.

- 1. Description: Exterior-grade phenolic resin-saturated paper overlay laminated to EPA-registered zinc-borate-preservative-treated engineered wood siding; AWWA compliant; embossed texture; edges beveled and sealed for moisture resistance; acrylic primed for painting.
 - a. Vertical siding for board and batten applications. Vertical siding or batten may only span one plate to plate. Due to plate shrinkage, each vertical application is not to span beyond one floor to ceiling distance or one floor to top of gable distance.
- 2. Fire Rating: 1 hour per ASTM E119; ASTM E 84 Class C flamespread.
- 3. Texture: Embossed rough-sawn Cedar.
- 4. Nominal Thickness: 3/8 inch (9.5 mm).
- 5. Width: 16 inches (406 mm) nominal.
- 6. Length: 16 feet (4877 mm).

C. Strand Lap Siding: **[38 Series][76 Series]**.

1. Description: Exterior-grade phenolic resin-saturated paper overlay laminated to EPA-registered zinc-borate-preserved-treated engineered wood siding; AWWA compliant; embossed texture; edges beveled and sealed for moisture resistance; acrylic primed for painting.
2. Fire Rating: 1 hour per ASTM E119; ASTM E 84 Class C flamespread.
3. Texture: Embossed rough-sawn Cedar.
4. Nominal Thickness: **[3/8 inch (9.5 mm)][7/16 inch (11 mm)]**.
5. Width: **[6 inches (152 mm) nominal][8 inches (203 mm) nominal][12 inches (305 mm) nominal]**.
6. SmartLock Cedar Grain Size: 8 inches (203 mm) nominal width, 0.375 inch (9.5 mm) thickness.
7. Board Width: 8 inches (203 mm) nominal.
8. Board Length: 16 feet (4877 mm).

D. Fiber Panel Siding: 76 Series.

1. Description: Engineered wood siding complying with ANSI A135.6, with resin and linseed oil impregnated surface; EPA-registered zinc-borate-preserved-treated; AWWA compliant; acrylic primed for painting.
2. Fire Rating: 1 hour per ASTM E119; ASTM E 84 Class C flamespread.
3. Thickness: 7/16 inch (11 mm) nominal, average.
4. Style: **[Reverse Board and Batten][Smooth][Smooth 8" OC Groove][Stucco texture][Cedar texture 8" OC][Cedar texture square edge]**.
5. Width: 48 inches (1220 mm), nominal.
6. Length: **[96 inches (2440 mm)] [108 inches (2740 mm)]**, nominal.

E. Fiber Lap Siding: 120 Series.

1. Description: Engineered wood siding complying with ANSI A135.6, with resin and linseed oil impregnated surface; EPA-registered zinc-borate-preserved-treated; AWWA compliant; acrylic primed for painting.
2. Fire Rating: 1 hour per ASTM E119; ASTM E 84 Class C flamespread.
3. Thickness: 1/2 inch (13 mm) nominal, average.
4. Style: **[12" Triple 4" Bold Profile][12" Double 5" Bold Profile][16" Quad 4" Bold Profile][16" Triple 5" Bold Profile][16" Double 8" Bold Profile][8" Series Self-Aligning Cedar Texture]**.
5. Length: 16 feet (4877 mm).

F. Fiber Lap Siding: 76 Series.

1. Description: Engineered wood siding complying with ANSI A135.6, with resin and linseed oil impregnated surface; EPA-registered zinc-borate-preserved-treated; AWWA compliant; acrylic primed for painting.
2. Fire Rating: 1 hour per ASTM E119; ASTM E 84 Class C flamespread.
3. Thickness: 7/16 inch (11 mm) nominal, average.
4. Style: **[Smooth][Cedar texture][Colonial beaded smooth][Colonial beaded sequoia texture]**.
5. Length: 16 feet (4877 mm).

G. Fiber Shakes:

1. Description: Engineered wood siding complying with ANSI A135.6, with resin and linseed oil impregnated surface; EPA-registered zinc-borate-preserved-treated; AWWA compliant; acrylic primed for painting.
2. Fire Rating: 1 hour per ASTM E119; ASTM E 84 Class C flamespread.
3. Thickness: 7/16 inch (11 mm) nominal, average.
4. Style: Staggered and straight edge.
5. Size: 12 by 48 inches (305 by 1219 mm).

2.3 SOFFIT

A. Strand Soffit Panels:

1. Description: Exterior grade phenolic resin-saturated paper overlay laminated to EPA-registered zinc-borate-preserved-treated engineered wood siding; AWWA compliant; acrylic primed for painting; no grooves; unprimed square edges.
2. Fire Rating: 1 hour per ASTM E119; ASTM E 84 Class C flamespread.
3. Finish: Embossed rough-sawn Cedar.
4. Type: **[Non-Vented, Cut-to-Width Soffit Panel] [Vented, Cut-to-Width Soffit Panel]**.
5. Thickness: **[0.315 inch (8 mm)] [0.375 inch (9.5 mm)] [0.530 inch (13.5 mm)]**.
6. Width: **[8 inches (203 mm) nominal] [12 inches (305 mm) nominal] [16 inches (406 mm) nominal] [24 inches (610 mm) nominal] [48 inches (1219) nominal]**.
7. Length: **[8 feet (2438 mm)] [16 feet (4877 mm)]**.

B. Fiber Soffit Panels: Same material as cladding; no grooves, square edges.

1. Fire Rating: 1 hour ASTM E119 assemblies available; ASTM E 84 Class C flamespread.
2. Thickness: 7/16 inch (11 mm) nominal.
3. Style: **[Cedar grain] [Smooth grain]**.
4. Width: **[15 15/16 inches (405 mm)] [48 inches (1219 mm)]**.
5. Length: **[8 feet (2438 mm)] [9 feet (2743 mm)] [16 feet (4877)]**.

2.4 TRIM AND FASCIA

A. Strand Trim and Fascia: **[190 Series][440 Series][540 Series]** Same material as cladding, **[including fire rating]**.

1. Finish: Embossed rough-sawn Cedar.
2. Thickness: **[0.530 inch (13.5 mm)] [0.625 inch (15 mm)] [0.910 inch (23 mm)]**.
3. Width: **[1.5 inch (38 mm)] [2.5 inch (63 mm)] [3.5 inch (89 mm)] [4.5 inch (114 mm)] [5.5 inch (140 mm)] [7.2 inch (184 mm)] [9.2 inch (235 mm)] [11.2 inch (286 mm)]**.
4. Length: 16 feet (4877 mm).

B. Strand Trim Fascia Boards: Ploughed to receive soffit panel.

1. Thickness: 0.625 inch (15 mm).
2. Width: **[5.5 inch (140 mm)] [7.2 inch (184 mm)]**.
3. Length: 16 feet (4877 mm).

- C. Fiber Trim and Fascia: [190 Series][440 Series][540 Series] Same material as cladding, [including fire rating].
1. Style: [Smooth grain][Cedar grain].
 2. Thickness: [0.625 inch (15 mm)] [0.910 inch (23 mm)].
 3. Width: [2.75 inch (70 mm)][3.5 inch (89 mm)][4.5 inch (114 mm)]5.5 inch (140 mm)][7.25 inch (184 mm)]9.25 inch (235 mm)][11.25 inch (286 mm)].
 4. Length: [8 feet (2438 mm)][12 feet (3658 mm)][16 feet (4877 mm)].

2.5 ACCESSORIES

- A. Fasteners: ASTM A153, hot-dip galvanized or stainless steel nails with 0.113 inch diameter shank and 0.27 inch diameter head, long enough to achieve 1 1-1/2 inch penetration into structural sheathing and framing
- B. Sealant: ASTM C920, minimum Class 25 sealant.
- C. Weather Barrier [**Building Wrap**]: ASTM E1677; made from polyolefin fibers.
1. UV Exposure: Minimum three months.
 2. Seam Tape: Weather barrier manufacturer's standard product.
- D. Drainable Weather Barrier [**Building Wrap**]: ASTM E1677; made from polyolefin fibers.
1. Seam Tape: Weather barrier manufacturer's standard product.
- E. Flashing: [Aluminum][Stainless steel][Galvanized steel] <insert material> at window and door heads and where indicated on Drawings. Refer to Division 07 Section for sheet metal flashing.
1. Aluminum Flashing Finish: [Siliconized polyester coating] [High-performance organic finish] [Factory-prime coating] <Insert finish>.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify location of concealed framing for support and anchorage of engineered wood [**cladding**] [**soffit**][**and**][**trim and fascia**].
- B. Verify that substrate has been installed to permit proper installation of engineered wood [**cladding**] [**soffit**][**and**][**trim and fascia**].

3.2 PREPARATION

- A. Prepare substrates using methods recommended in writing by the cladding manufacturer.

- B. Do not proceed with installation until substrates have been properly prepared and deviations from manufacturer's recommended tolerances are corrected.
- C. Commencement of installation constitutes acceptance of conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
 - 1. Install in accordance with conditions stated in ICC-ES ESR-1301.
 - 2. Properly space joints to allow for equilibration.
- B. Do not install to green wood or crooked structural framing. Do not install over rain soaked or buckled materials. Do not install if excessive moisture is present in the interior, including that from curing concrete and plaster.
- C. Do not cut cladding to fabricate trim; use trim components.
- D. After installation, seal and flash joints except the overlapping horizontal lap joints. Seal around penetrations. Paint exposed cut edges.

3.4 ADJUSTING AND CLEANING

- A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.
- B. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products.

END OF SECTION