

DO KIM & ASSOCIATES, LLC
CONSULTING STRUCTURAL ENGINEERS

Florida Board of Engineers Certificate of Authorization No. 26887

Product Evaluation Report

Date: August 13, 2026

Florida Product Approval: **#FL 9103-R9**

Product Category: Panel Walls

Product sub-category: Soffits

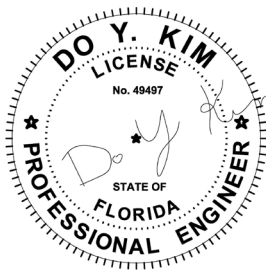
Product Name: LP® SmartSide® Soffit and Rated Sheathing/Ceiling Deck

Manufacturer: LP Building Products
1610 West End Ave, Suite 200
Nashville, TN 37203
(888) 820-0325

Scope:

This product evaluation report issued by Do Kim & Associates, LLC and Do Kim, P.E. for LP Building Solutions is based on Florida Department of Business and Professional Regulation Rule 61G20-3 Method (2) (b) of the State of Florida Product Approval. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or updates.

Do Kim & Associates, LLC and Do Kim, P.E. do not have nor will acquire financial interest in the company manufacturing or distributing the product or in any other entity involved in the approval process of the product named herein. This product has been evaluated for use in locations adhering to the Florida Building Code 9th Edition (FBC).



Do Y
Kim

Digitally signed
by Do Y Kim
Date: 2026.09.04
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Do Kim, P.E.
FL #49497

Supporting Documents

1. Drawings:
 - a. Application Instructions, LP® SmartSide® ExpertFinish Trim & Siding.
 - b. APA-The Engineered Wood Association Product Report PR-N117, Revised June 23, 2026.
2. Reference Test Reports:
 - a. Approved test lab: Architectural Testing, Inc., 130 Derry Court, York, PA 17406. Test reports referenced:
 - i. Report No. 79279.01-122-18 (01/07/08)
 1. Testing per Miami-Dade County Checklist #0475 For the Approval of: Durability of Wood-base Structural Composite Lumber and Panels
 2. ASTM D4761-02 Standard Test Methods for Mechanical Properties of Lumber and Wood-Based Structural Material
 3. ASTM D1716-06 Standard Test Methods for Mechanical Fasteners in Wood
 - ii. Report No. 78294.01-401-18 (12/03/07)
 1. TAS 202-94, Criteria for Testing Impact and Non-Impact Resistant Building Envelope Components Using Uniform Static Air Pressure Loading
 2. TAS 203-94, Criteria for Testing Products Subject to Cyclic Wind Pressure Loading
3. Calculations
 - a. Standards referenced:
 - i. ASCE 7-22, Chapter 30, Wind Loads: Components and Cladding.
 1. Calculations are based on Enclosed Building condition and assumed design parameters in PR-N117. Design wind speed and exposure information in the PR-N117 tables are consistent with calculations of ASCE 7-22.
 - ii. ICC Evaluation Service, Inc. Acceptance Criteria for Treated-Engineered-Wood Siding, AC321 (2026).
4. LP® SmartSide® Model Product Names
 - a. LP® SmartSide® Soffit is a primed soffit product.
 - b. Both primed and prefinished soffits are available vented or non-vented.
 - c. LP® SmartSide® ExpertFinish® is a prefinished soffit product.
 - d. LP® SmartSide® ExpertFinish® Nickel Gap Lap Siding used as porch ceiling or soffit.
5. Application Instructions
 - a. Models:
 - i. Installation fastening requirements as outlined in the APA PR-N117 document have been reviewed and evaluated by Do Kim, P.E. based on comparative and/or rational analysis and have been determined to be in accordance to accepted engineering practice. Installation allowable loads per APA PR-N117 document shall be the minimum allowable design pressures as determined in accordance to the FBC 9th Edition (FBC).

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- ii. When stainless steel nails are required under Section 1711, embedment lengths in PR-N117 shall be increased by a factor of 1.3 or as approved by a licensed design professional.
- 6. Applicable FBC Sections
 - a. Chapter 14 Exterior Walls
 - i. Section 1404.1 General
 - ii. Section 1405.2 Weather Protection
 - iii. Section 1405.5 Wood Veneers
 - iv. Section 1405.17 Fastening
 - b. Chapter 16 Structural Design
 - i. Section 1604.3.1 Deflections
 - ii. Section 1609.1 Applications
 - iii. Section 1616.3.1 HVHZ Allowable Deflections
 - c. Chapter 17 Special Inspections and Tests
 - i. Section 1711 Corrosion Resistance-Saltwater Environments
 - 1. Section 1711.1 Fasteners and connectors exposed to saltwater environments.
 - 2. Table 1711.1-CORROSION RESISTANCE OF FASTENERS AND CONNECTORS
 - d. Chapter 23 Wood
 - i. Section 2304.6 Exterior Wall Sheathing
 - ii. Section 2304.6.1 Wood Structural Panel Sheathing
 - iii. Section 2315.1.11
- 7. Other
 - a. Quality Assurance of LP® SmartSide® Soffit by APA - The Engineered Wood Association (FBC Organization #QUA2521) that manufacturer is within a quality assurance program for this product under Rule 61G20-3.

Limitations and Condition of Use

1. This product has been designed and tested in accordance with the Florida Building Code 9th Edition (FBC). Models are inclusive of the HVHZ.
2. No missile impact resistance has not been tested.
3. Each product listed above shall be installed in strict compliance with its respective Product Evaluation Document along with all components noted herein.
4. Application instructions in PR-N117 are based on enclosed building condition for wind design pressure.
5. Use of each product shall be in strict accordance with its Product Approval Evaluation Documents.
6. Fasteners shall meet or exceed the Corrosion Resistance requirements of Section 1711 and Table 1711.1.
7. Fire-resistant construction: Wood structural panels that are not fire-treated have been shown to meet a Class III (or C) category for flame spread. Where otherwise specified, fire-resistant construction shall be in accordance with the recommendations in APA Product Guide: Fire-Rated Systems, Form W305.
8. Deflection limits and allowable spans per Product Approval Evaluation Documents are in accordance to L/120 in non-HVHZ per Chapter 16 Table 1604.3 deflection limits. Deflection limits and allowable spans per Product Approval Evaluation Documents are in accordance to L/180 in HVHZ per Chapter 16 Section 1616.3.1 deflection limits.
9. All supporting host structures shall be designed to resist all superimposed loads.
10. All components which are permanently installed shall be protected against corrosion, contamination, and other such damage.



PRODUCT REPORT[®]

LP[®] SmartSide[®] and LP[®] SmartSide[®] ExpertFinish[®] Soffit and Rated Sheathing/Ceiling Deck and

PR-N117

Revised June 23, 2026

LP[®] SmartSide[®] and LP[®] SmartSide[®] ExpertFinish[®]

Treated-Engineered-Wood Nickel Gap Lap as porch ceiling or soffit

Louisiana-Pacific Corporation

Product: LP[®] SmartSide[®] and LP[®] SmartSide[®] ExpertFinish[®] Soffit and Rated Sheathing/Ceiling Deck and LP[®] SmartSide[®] and LP[®] SmartSide[®] ExpertFinish[®] Treated-Engineered-Wood Nickel Gap Lap as porch ceiling or soffit

Louisiana-Pacific Corporation, 1610 West End Ave, Suite 200, Nashville, TN 37203

(888) 820-0325

www.lpcorp.com

1. Basis of the product report:

- 2024 International Building Code (IBC): Section 104.2.3 Alternative materials
- 2021, 2018, and 2015 International Building Code (IBC): Section 104.11 Alternative materials
- 2024 International Residential Code (IRC): Section R104.2.2 Alternative materials
- 2021, 2018, and 2015 International Residential Code (IRC): Section R104.11 Alternative materials
- DOC PS 2-18 Performance Standard for Wood Structural Panels
- APA PRP-108 Performance Standards and Qualification Policy for Wood Structural Panels
- 2021 and 2015 ANSI/AWC Special Design Provisions for Wind and Seismic (SDPWS) recognized in the 2024 and 2021, 2018 and 2015 IBC, respectively
- ASCE 7-22, ASCE 7-16, and ASCE 7-10 Minimum Design Loads for Buildings and Other Structures
- APA Reports T92Q-17, T92Q-22, T94Q-17, T2000Q-21, T2007P-37, T2015Q-40, and T2015Q-41, and other qualification data

2. Product description:

Louisiana-Pacific Corporation (LP[®]) SmartSide[®] and LP[®] SmartSide[®] ExpertFinish[®] Soffit and Rated Sheathing/Ceiling Deck panels and LP[®] SmartSide[®] and LP[®] SmartSide[®] ExpertFinish[®] Treated-Engineered-Wood Nickel Gap Lap are made with strands of various wood species and strand classifications in accordance with the in-plant manufacturing standard approved by APA, overlaid with a resin-treated paper, and available with either a smooth or embossed surface texture. LP SmartSide and LP SmartSide ExpertFinish Soffit and Rated Sheathing/Ceiling Deck panels are available in 3/8, 7/16, and 19/32 Performance Categories. They are available as 4x8-foot or 4x9-foot panels or cut to 12, 16, or 24-inch widths, in lengths up to 16 feet. The panels are treated with Zinc Borate for fungal decay and termite resistance. The efficacy of the preservative treatment is outside the scope of this report and the APA certification program. The soffit panels are intended for use as closed soffits at a 24 o.c. Span Rating with the panel strength axis perpendicular to supports. The Rated Sheathing/Ceiling Deck panels are intended for use as open soffits at a 24/16 Span Rating with the panel strength axis perpendicular to supports.

Vented soffit products are available in a 3/8 Performance Category, widths of 12, 16, or 24 inches, and 16 feet in length. Refer to the manufacturer's application instructions for details on the configuration of the vented soffit products.

LP® SmartSide® and LP® SmartSide® ExpertFinish® Nickel Gap Lap Siding is treated with Zinc Borate for decay and insect resistance. The efficacy of the preservative treatment of the LP SmartSide siding is outside the scope of this report and the APA certification program. The lap siding includes shiplap edges, which results in a flat siding profile when installed, and is available in 1/2 Performance Category with a nominal width of 8 inches and in lengths up to 16 feet. Refer to the manufacturer's application instructions on soffits for details on the Nickel Gap Lap Siding installed as porch ceiling or soffit.

3. Design properties:

Design wind loads for vented and non-vented LP SmartSide Soffit products are listed in Table 1 and 2, respectively, based on the design procedures in ASCE 7-22.

Design wind loads for LP SmartSide and LP SmartSide ExpertFinish Nickel Gap Lap Siding used as porch ceiling or soffit are listed in Table 3 based on the design procedures in ASCE 7-22.

4. Product installation:

LP SmartSide Soffit and Rated Sheathing/Ceiling Deck shall be installed in accordance with the recommendations provided by the manufacturer ([Product Literature | LP Building Solutions](#)) and APA *Engineered Wood Construction Guide*, Form E30 (www.apawood.org/resource-library).

LP SmartSide and LP SmartSide ExpertFinish Nickel Gap Lap Siding shall be installed in accordance with the recommendations provided by the manufacturer ([Product Literature | LP Building Solutions](#))

The maximum span shall be in accordance with the Span Rating shown in the trademark for the intended application.

5. Fire-resistant construction:

Wood structural panels that are not fire-retardant-treated have been shown to meet Class III (or C) category for flame spread. Unless otherwise specified, fire-resistant construction shall be in accordance with the recommendations provided in APA *Fire-Rated Systems*, Form W305 (see link above). Vented soffit products have not been evaluated for fire rating.

6. Limitations:

- a) LP SmartSide and LP SmartSide ExpertFinish Soffit panels shall be used only as closed soffits at a 24 inches o.c. Span Rating with the panel strength axis perpendicular to supports.
- b) LP SmartSide and LP SmartSide ExpertFinish Rated Sheathing/Ceiling Deck panels shall be used only for open soffits or sheathing at a 24/16 Span Rating (refer to trademark) with the panel strength axis perpendicular to supports.
- c) LP SmartSide and LP SmartSide ExpertFinish Soffit must be finished in accordance with recommendations provided by the manufacturer and APA *Engineered Wood Construction Guide*, Form E30 (see links above).
- d) The efficacy of the preservative treatment of the LP SmartSide and LP SmartSide ExpertFinish Treated-Engineered-Wood Nickel Gap Lap is outside the scope of this report and the APA certification program.
- e) LP SmartSide and LP SmartSide ExpertFinish Soffit and Rated Sheathing/Ceiling Deck panels and LP SmartSide and LP SmartSide ExpertFinish Treated-Engineered-Wood Nickel Gap Lap are produced at Louisiana-Pacific Corporation facilities in Dawson Creek, BC, Hayward, WI, Houlton, ME, Newberry, MI, Sagola, MI, Swan Valley, MB, Tomahawk, WI, and Two Harbors, MN, under a quality assurance program audited by APA. The efficacy of the preservative treatment is outside the scope of this report and the APA certification program.

f) This report is subject to re-examination in one year.

7. Identification:

LP® SmartSide® and LP® SmartSide® ExpertFinish® Soffit and Rated Sheathing/Ceiling Deck panels described in this report are identified by a label bearing the manufacturer's name (Louisiana-Pacific Corporation) and/or trademark, the APA assigned plant number (402 for the Dawson Creek, BC plant, 357 for the Hayward, WI plant, 368 for the Houlton, ME plant, 416 for the Newberry, MI plant, 407 for the Sagola, MI plant, 457 for the Swan Valley, MB plant, 435 for the Tomahawk, WI plant, or 399 for the Two Harbors, MN plant), the product Performance Category, the Span Rating, the Exposure Rating, the APA logo, the report number PR-N117, and a means of identifying the date of manufacture.

Table 1. **Maximum V_{ult} or V for vented^(a) LP® SmartSide® and LP® SmartSide® ExpertFinish® Soffit^(b)**

Minimum Nail Diameter ^(c) (inches)	Min. Nail Penetration in Framing (inches)	Performance Category	Support Spacing ^(d) (in.)	Panel Nail Spacing		Maximum Ultimate Wind Pressure (psf)	Maximum V _{ult} or V ^(e) (mph)		
				Edges (in. o.c.)	Field (in. o.c.)		Wind Exposure Category		
							B	C	D
0.092	1.5	3/8	24	6	12	29	105	90	NP ^(g)
					6	58	150	130	120
0.113	2.0	3/8 & 7/16	24	6	12	49	140	120	110
					6	98	200 ^(f)	170 ^(h)	150 ^(h)
0.113	1.9	19/32	24	6	12	45	130	115	105
					6	91	180	160	150
					4	136	200 ^(f)	200 ^(f)	200 ^(f)

For **SI**: 1 inch = 25.4 mm, 1 psf = 47.88 Pa, 1 mph = 0.447 m/s.

(a) Available vented area of 5 inches² per linear foot of soffit or 10 inches² per linear foot of soffit.

(b) Panels shall be applied with strength axis across supports.

(c) Fasteners shall be a hot-dip galvanized (ASTM A153) or equivalent, plain (smooth) shank nails. Fastener dimensions are as specified in ASTM F1667.

(d) Supporting framing must have a minimum specific gravity of 0.42.

(e) Wind pressures acting toward and away from building surfaces, at 30-ft height in Zone 5 with smallest effective area per Chapter 26 of ASCE 7-22, ASCE 7-16, and ASCE 7-10, Section R301.2.1 of the 2024 through 2015 IRC, and Section 1609.1.1 of the 2024 through 2015 IBC.

(f) Table R301.2.1(1) of the 2024 and 2021 IRC and Table R301.2(2) of the 2018 and 2015 IRC is limited to a maximum ultimate design wind speed, V_{ult} , of 180 mph.

(g) Not permitted.

(h) Limited by panel capacity, use 19/32 vented soffit with 4-inch field nailing for 180 mph wind speed.

Table 2. **Maximum V_{ult} or V for non-vented LP® SmartSide® and LP® SmartSide® ExpertFinish® Soffit^(a)**

Minimum Nail Diameter ^(b) (inches)	Min. Nail Penetration in Framing (inches)	Performance Category	Support Spacing ^(c) (in.)	Panel Nail Spacing		Maximum Ultimate Wind Pressure (psf)	Maximum V _{ult} or V ^(d) (mph)		
				Edges (in. o.c.)	Field (in. o.c.)		Wind Exposure Category		
							B	C	D
0.092	1.5	3/8	24	6	12	29	105	90	NP ^(f)
					6	58	150	130	120
0.113	2.1	3/8	24	6	12	51	140	120	110
					6	101	200 ^(e)	170	150
					4	124	200 ^(e)	180	170 ^(g)
0.113	2.0	7/16	24	6	12	49	140	120	110
					6	98	200 ^(e)	170	150
					4	147	200 ^(e)	200 ^(e)	180
0.113	1.9	19/32	24	6	12	45	130	115	105
					6	91	180	160	150
					4	136	200 ^(e)	200 ^(e)	180

For **SI**: 1 inch = 25.4 mm, 1 psf = 47.88 Pa, 1 mph = 0.447 m/s.

(a) Panels shall be applied with strength axis across supports.

(b) Fasteners shall be a hot-dip galvanized (ASTM A153) or equivalent, plain (smooth) shank nails. Fastener dimensions are as specified in ASTM F1667.

(c) Supporting framing must have a minimum specific gravity of 0.42.

(d) Wind pressures acting toward and away from building surfaces, at 30-ft height in Zone 5 with smallest effective area per Chapter 26 of ASCE 7-22, ASCE 7-16, and ASCE 7-10, Section R301.2.1 of the 2024 through 2015 IRC, and Section 1609.1.1 of the 2024 through 2015 IBC.

(e) Table R301.2.1(1) of the 2024 and 2021 IRC and Table R301.2(2) of the 2018 and 2015 IRC is limited to a maximum ultimate design wind speed, V_{ult} , of 180 mph.

(f) Not permitted.

(g) Limited by panel capacity, use 7/16 or greater non-vented soffit for 180 mph wind speed.

Table 3. **Maximum V_{ult} or V_{LP} SmartSide® and LP® SmartSide® ExpertFinish® Nickel Gap Lap Siding used as porch ceiling or soffit^(a)**

Minimum Nail Diameter ^(b) (inches)	Min. Nail Penetration in Framing (inches)	Support Spacing ^(c) (in.)	Lap Nailing ^(d)	Maximum Ultimate Wind Pressure (psf)	Maximum V_{ult} or $V^{(e)}$ (mph)		
					Wind Exposure Category		
					B	C	D
0.092	1.4	24	Shiplap	40	120	105	95
			Intermediate	80	180	150	140
0.113	2.0	24	Shiplap	71	170	140	130
			Intermediate	133	200 ^(f)	180	180

For **SI**: 1 inch = 25.4 mm, 1 psf = 47.88 Pa, 1 mph = 0.447 m/s.

^(a) ½ Performance Category Nickel Gap Lap siding shall be installed following manufacturer's recommendations.

^(b) Fasteners shall be a hot-dip galvanized (ASTM A153) or equivalent, plain (smooth) shank nails. Fastener dimensions are as specified in ASTM F1667. Assumed penetration depth of fastener into framing is the nail length minus 0.5-inches.

^(c) Supporting framing must have a minimum specific gravity of 0.42.

^(d) Shiplap edge nailing is one nail driven through the shiplap edge at top and bottom of lap siding. Intermediate nailing is one additional nail driven at the center of the width, following the manufacturer's recommendations.

^(e) Wind pressures acting toward and away from building surfaces, at 30-ft height in Zone 5 with smallest effective area per Chapter 26 of ASCE 7-22, ASCE 7-16, and ASCE 7-10, Section R301.2.1 of the 2024 through 2015 IRC, and Section 1609.1.1 of the 2024 through 2015 IBC.

^(f) Table R301.2.1(1) of the 2024 and 2021 IRC and Table R301.2(2) of the 2018 and 2015 IRC is limited to a maximum ultimate design wind speed, V_{ult} , of 180 mph.

APA – The Engineered Wood Association is an approved national standards developer accredited by American National Standards Institute (ANSI). APA publishes ANSI standards and Voluntary Product Standards for wood structural panels and engineered wood products. APA is an accredited certification body under ISO/IEC 17065 by Standards Council of Canada (SCC), an accredited inspection agency under ISO/IEC 17020 by ANSI National Accreditation Board (ANAB), and an accredited testing organization under ISO/IEC 17025 by ANAB. APA is also an approved Product Certification Agency, Testing Laboratory, Quality Assurance Entity, Validation Entity, and Product Evaluation Entity by the State of Florida, and an approved testing laboratory by City of Los Angeles.

**APA – THE ENGINEERED WOOD ASSOCIATION
HEADQUARTERS**

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DISCLAIMER

APA Product Report® is a trademark of *APA – The Engineered Wood Association*, Tacoma, Washington. The information contained herein is based on the product evaluation in accordance with the references noted in this report. No warranties, express or implied, including as to fitness for a particular purpose, are made regarding this report. Neither APA nor its members shall be liable, or assume any legal liability or responsibility, for damages, direct or indirect, arising from the use, application of, and/or reference to opinions, findings, conclusions or recommendations included in this report. Consult your local jurisdiction or design professional to assure compliance with code, construction, and performance requirements. Because APA has no control over quality of workmanship or the conditions under which engineered wood products are used, it cannot accept responsibility for product performance or designs as actually constructed.



38, 76 AND 190 SERIES CEDAR TEXTURE, BRUSHED SMOOTH PREFINISHED VENTED AND NON-VENTED SOFFIT

LOUISIANA-PACIFIC CORPORATION PERIODICALLY UPDATES AND REVISES ITS PRODUCT INFORMATION AND APPLICATION, CARE, AND MAINTENANCE INSTRUCTIONS. WARRANTY REMEDIES ARE NOT AVAILABLE IF THESE INSTRUCTIONS ARE NOT FOLLOWED. THE INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

FIND ALL LP® SMARTSIDE® PRODUCT LITERATURE AT LPCORP.COM/PRODUCT-LITERATURE

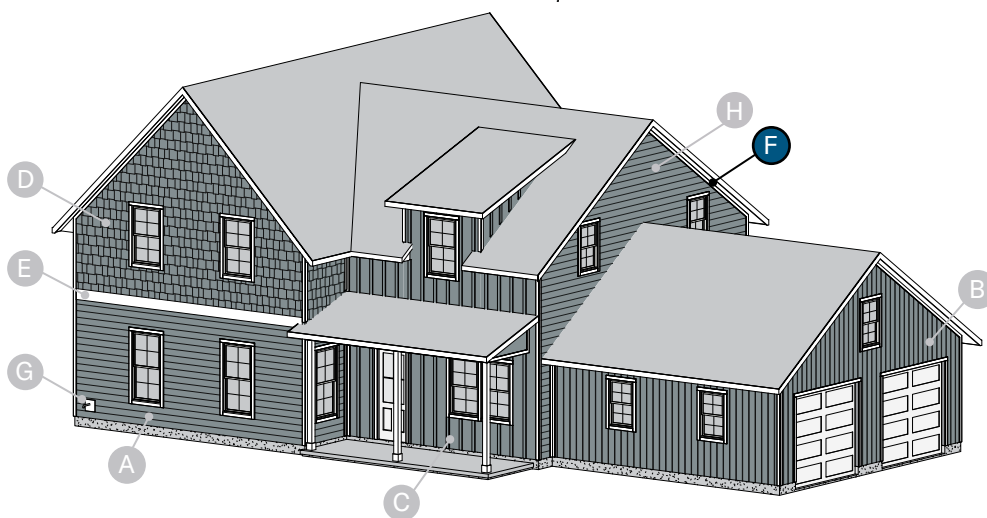
LP® SmartSide® ExpertFinish® Soffit is covered under the LP® SmartSide® ExpertFinish® Prorated 50-Year and 15-Year Limited Warranty. Refer to the warranty, which is available online, for complete terms and conditions. Product must be transported, stored, handled, installed, finished, and maintained in accordance with all published application, finishing, care, and maintenance instructions, technical notes, and bulletins (collectively, "Instructions") in effect at the time of installation.

Failure to follow such Instructions will make the limited warranty inapplicable as to the products affected by such failure. No modification or exception to these Instructions and no non-published recommendations are valid unless issued in writing on a project-specific basis by LP's Sr. Director of Technology prior to application. Always check and comply with local building codes. Even where these instructions approve installation over certain substrates or incorporate requirements of building codes, LP's liability for the performance of the product is limited as expressly provided in the Limited Warranty.

⚠ WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to P65Warnings.ca.gov/wood-dust.

PRODUCT LEGEND

- A LP® SmartSide® ExpertFinish® Lap Joint Siding
- B LP® SmartSide® ExpertFinish® Panel Siding
- C LP® SmartSide® ExpertFinish® Vertical Siding
- D LP® SmartSide® ExpertFinish® Cedar Shake
- E LP® SmartSide® ExpertFinish® Trim & Fascia
- F LP® SmartSide® ExpertFinish® Soffit
- G LP® SmartSide® ExpertFinish® Accessories
- H LP® SmartSide® ExpertFinish® Nickel Gap Siding



GENERAL INFORMATION

HANDLING

- Handle prefinished LP SmartSide ExpertFinish soffit with extreme care during storage and application.
 - When unpackaging siding, cut the clear shrink-wrap along the full-length and back of siding to avoid cutting, dragging and scuffing of the painted surface.
 - If siding is restacked after removing clear shrink-wrap, make sure to keep slip between painted surface and back of the siding.

STORAGE

- Store off the ground well supported, on a flat well-drained surface. If delivered without a pallet, additional support may be required to provide a minimum 2 inch (51 mm) clearance of Prefinished siding from the ground.
- Store Prefinished siding under a roof or separate waterproof covering until the siding is installed on the structure. **The clear shrink-wrap is perforated and does not provide protection from water intrusion.**
 - Protect the Prefinished siding at the end of each installation day by moving siding back under a roof or reapply a waterproof covering.
- Do not install if any type of residue is detected on the surface. Follow Residue Removal Guidelines in [Technical Bulletin #053](#).



**Soffit Panel
Figure 1a**

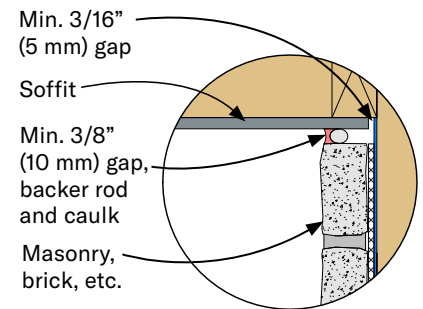


**Cut-to-Width Soffit
Figure 1b**

GENERAL INFORMATION (CONT'D.)

BEFORE YOU BEGIN

- At the time of manufacture, soffit has achieved code recognition by APA in accordance with PR-N117 as RATED SHEATHING-CEILING DECK (RS-CD). For copies of product approvals go online at lpcorp.com/product-literature or call LP Customer Support at 888-820-0325.
- Space ends and edges a min. 3/16 inch (5 mm) where soffit is adjacent to other building materials and apply sealant (caulk). (Figure 2a)
 - Exception: Soffit panel applied in an open soffit application. (Figure 9a)
 - Exception: Trim, frieze board or siding may lightly touch soffit. (Figure 9a)
- Ends and edges must be supported. Additional 2x blocking may need to be installed for larger soffit widths.
 - Complete perimeter 2x framing support is required for all soffit.
- Soffit must not be in direct contact with masonry, concrete, brick, stone, stucco or mortar. Provide a min. 3/8" (10 mm) gap and fill with backer rod and sealant. (Figure 2b)
- Do not use staples.
 - Exception: Refer to **Alternate Fastening Options - Staples in Open Soffit Applications** on [page 9](#).



Open Soffit

Figure 2b

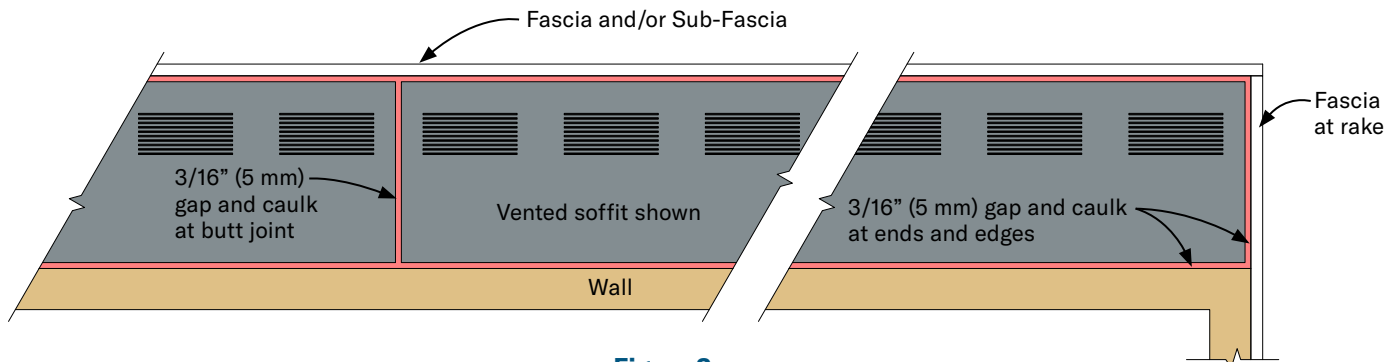
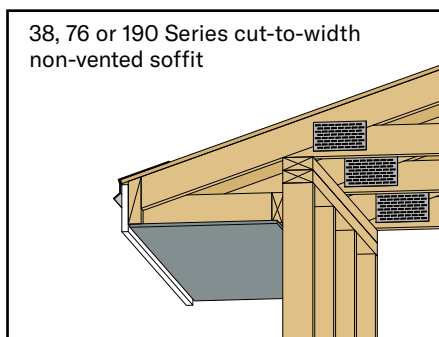


Figure 2a

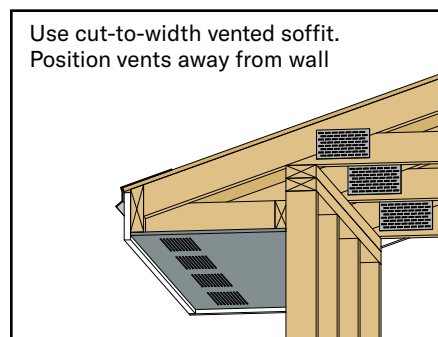
LIMITATIONS

- LP® SmartSide® Soffit products are not designed for and are not suitable for use as siding.
 - Exception: Dual Use Soffit/Siding products APA Trademark stamped both **CUSTOM PRODUCT - SOFFITS** and **RATED SIDING - SHEATHING** may be used in siding applications.
- Soffit is available in cut-to-width (CTW) options in 12 inch (305 mm), 16 inch (406 mm) and 24 inch (610 mm) widths.
 - CTW soffit is available in vented and non-vented options. (Figure 2c, 2d)
 - Do not apply CTW soffit in open soffit applications.
- 76 and 190 Series 4 ft. wide soffit panels carry both **CUSTOM PRODUCT - SOFFITS** and **RATED SHEATHING - CEILING DECK (RS-CD)** APA Trademark stamps for soffit applications. (Figure 2e)
 - Soffit panel carrying an RS-CD trademark stamp can be used in an open soffit application as roof sheathing.
 - Install prefinished side of soffit surface facing down toward open framing.



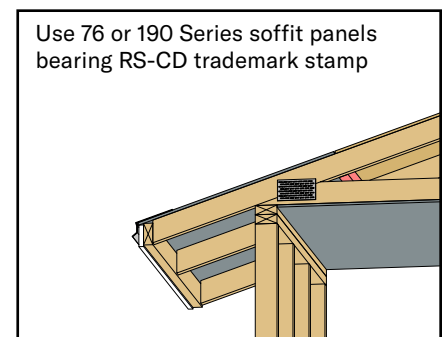
Closed Soffit

Figure 2c



Closed - Vented Soffit

Figure 2d



Open Soffit

Figure 2e

INSTALLATION

FASTENING INSTRUCTIONS

- **Fastener:** Use a min. 0.092 inch shank diameter, hot-dip galvanized nail (ASTM A153) or equivalent; capable of preventing rust, stain and deterioration under normal outdoor environmental conditions for a period of no less than 50 years.
 - A larger shank diameter nail may be required depending on the wind pressure, wind speed and wind exposure category limitations outlined in [PR-N117](#).
- **Fastener placement and length:** ([Figure 3a](#))
 - Place nails a min. 3/8 inch (10 mm) from ends and edges.
 - For **vented** soffit, refer to Table 1 in PR-N117 for nail length requirements.
 - For **non-vented** soffit, refer to Table 2 in PR-N117 for nail length requirements.
- **Fastener spacing:** Max. 6 inches (152 mm) o.c. along perimeter and max. 12 inches (305 mm) o.c. along intermediate supports. ([Figures 3c, 3e](#))
 - A tighter field nailing pattern, or a longer nail may be required depending on the wind pressure, wind speed and wind exposure category limitations outlined in Tables 1 & 2 in PR-N117.
 - Exception: CTW soffit 12 inches (305 mm) wide or less do not require intermediate support. ([Figures 3b](#))
- Nail from the center of the soffit toward the ends, or from one end to the other end.
 - **Do not** nail from each end toward the middle.
- Provide a min. 3/16 inch (5 mm) gap at butt joints. ([Figure 3a](#))
 - Use spacing tool like SIMPLISIDER® siding gauge to achieve proper gapping.
- Attached soffit to min. 2x framing members.
- Butt joints must occur over wood 2x framing members.
 - Additional 2x wood blocking may be required.
- A max. of 24 inches (610 mm) o.c. intermediate support is required for soffit greater than 12 inches (305 mm) wide. ([Figures 3d, 3e](#))
 - 24 inch (610 mm) o.c. intermediate support is **NOT** required for soffit 12 inches (305 mm) wide or less. ([Figures 3b, 3c](#))
- Apply caulk at ends, edges and butt joints. ([Figures 2a](#))

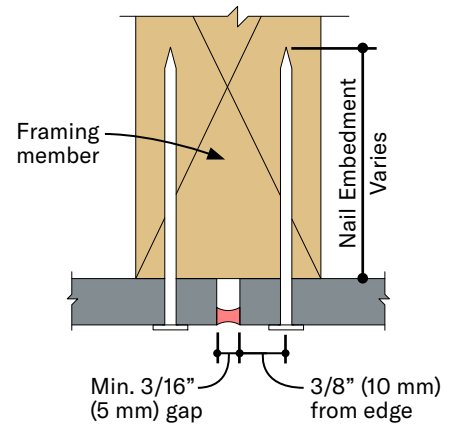
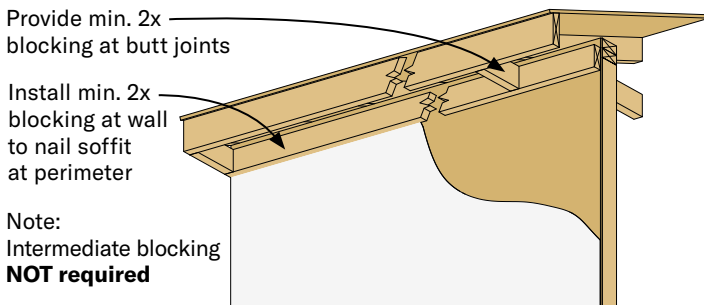
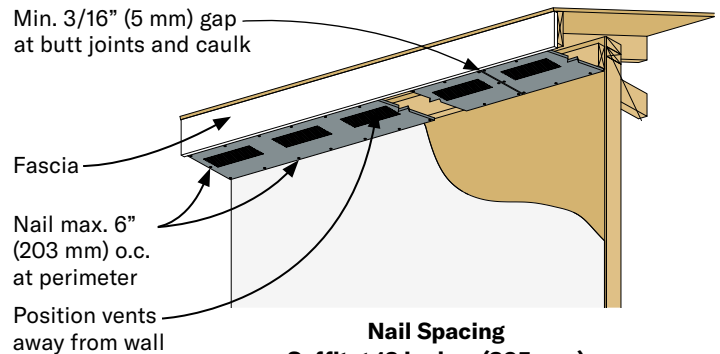


Figure 3a



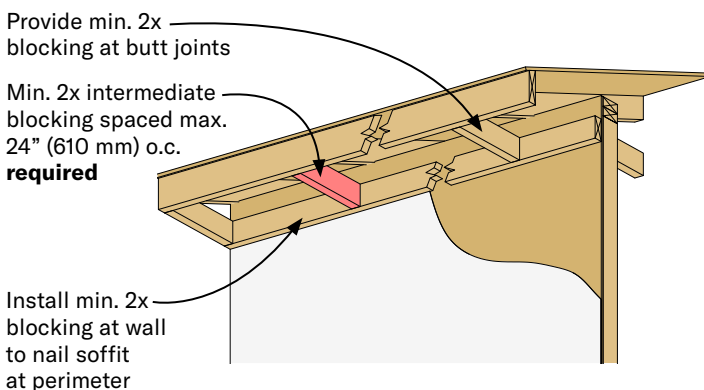
Soffit ≤ 12 inches (305 mm)

Figure 3b



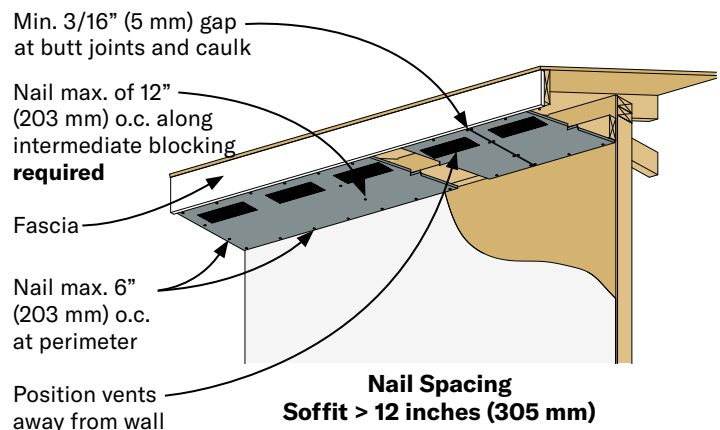
**Nail Spacing
Soffit ≤ 12 inches (305 mm)**

Figure 3c



Soffit > 12 inches (305 mm)

Figure 3d

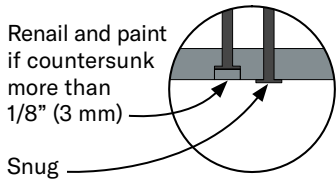


**Nail Spacing
Soffit > 12 inches (305 mm)**

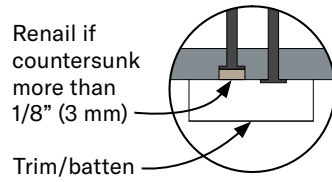
Figure 3e

INSTALLATION (CONTINUED)

- Do not overdrive nails.
 - Nail head should seat snug to face of soffit, but not flush to distort the soffit surface.
 - Face nails: corrections are detailed in [Figures 4e, 4f](#).
- Painting all exposed nail heads is recommended.



**FACE NAILED
CONDITION**
Figure 4e



**BLIND NAILED
CONDITION**
Figure 4f

CLOSED SOFFIT

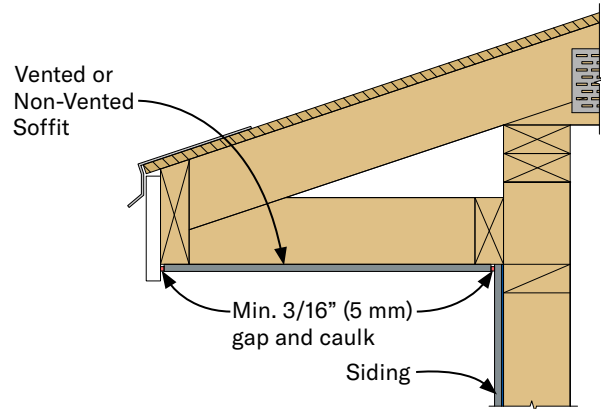
- CTW vented and non-vented soffit is recommended for closed soffit applications at eaves/overhangs or rakes. ([Figures 4a](#))
- If field cut (ripping) is required, remove 3/8 inch (10 mm) less than full width of the eave/overhang to provide for a min. 3/16 inch (5 mm) gap on along edges.

OPEN SOFFIT

- 76 and 190 Series soffit panels APA Trademark stamped RS-CD may be installed prefinished side face down toward open framing as the first row of roof sheathing. ([Figure 4c](#))
 - Install soffit panel with the long dimension or strength axis perpendicular to the rafters, supported along all four edges by framing or solid 2x intermediate blocking.
 - Provide min. 2x intermediate blocking between the rafters so you can nail the soffit to the blocking. ([Figure 4b](#))
 - Leave a min. 1/8 inch (3 mm) space between the edges and ends of the panel.
 - Space nails a max. of every 6 inches (152 mm) o.c. along the perimeter and max. 12 inches (305 mm) o.c. along intermediate supports, unless an enhanced nailing pattern is required by local building code.
 - Protect ends and edges of soffit against exposure to the weather.
 - **Do not use 38 Series soffit for open soffit applications.**

PORCH CEILINGS

- Soffit may be used as porch ceilings. ([Figure 4d](#))
 - Install soffit panel with the long dimension or strength axis perpendicular to the ceiling joists, and supported along all four edges by framing or solid 2x blocking.
 - Provide min. 2x intermediate blocking to fasten soffit at panel edges.
 - Provide min. 3/16 inch (5 mm) gap at panel ends and edges.
 - Space nails a max. of every 6 inches (152 mm) o.c. along the perimeter and max. 12 inches (305 mm) o.c. along intermediate blocking.
 - Battens (trim) may be applied over panel seams at ceiling.



Closed Soffit - Section
Figure 4a

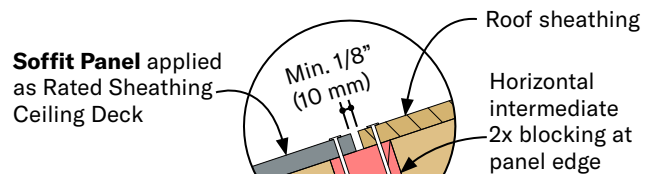
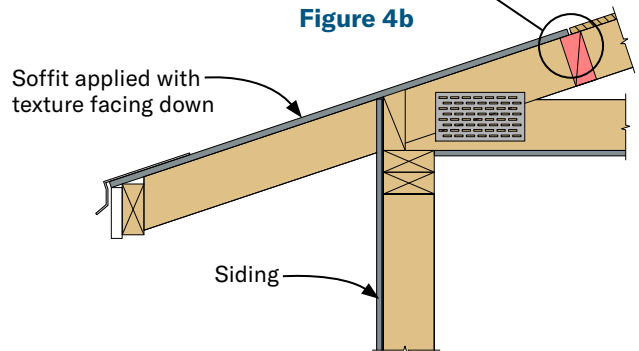
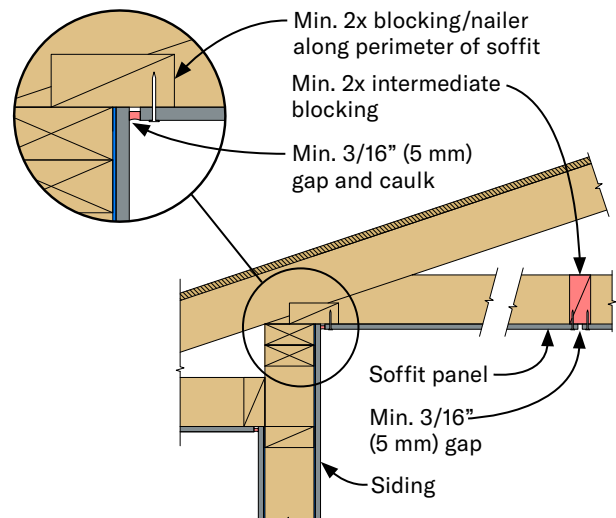


Figure 4b



Open Soffit - Section
Figure 4c

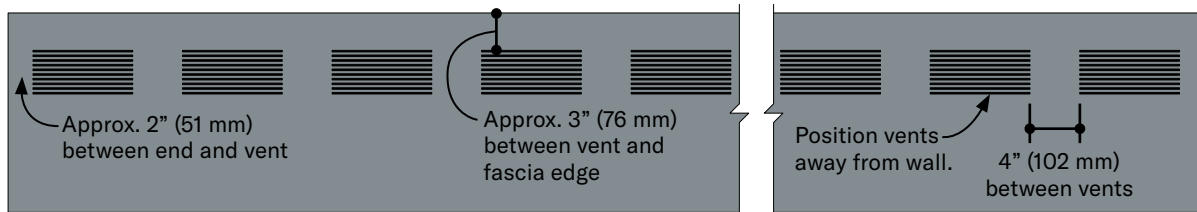


**Soffit Panel
at Porch Ceiling**
Figure 4d

INSTALLATION (CONT'D.)

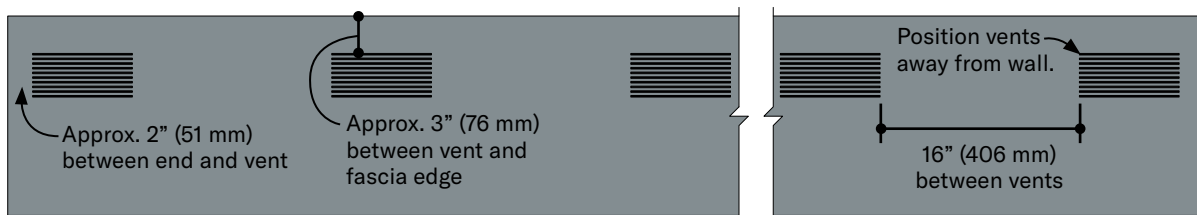
VENTED CUT-TO-WIDTH SOFFIT

- Vented CTW soffit is available in both 5 square inches (3 226 mm) of ventilation per linear foot (Figure 5b), or 10 square inches (6 452 mm) of ventilation per linear foot. (Figure 5a)
- Exhaust ducts shall terminate not less than 3 ft. (914 mm) in any direction from soffit vents. Non-vented soffit may be used to create 3 ft. (914 mm) separation of vents from exhaust duct terminations. Check your local building code for requirements.
- When cutting soffit with a circular saw, orient the prefinished side face down, fully support and brace to reduce vibration.
- Layout and install vented soffit in a manner that eliminates the need to cut through the vents. (Figure 5c)
- The spokes within the vent may distort slightly during equilibration with the local environment. This condition is temporary and the spokes will straighten.
- All CTW soffit vents measure approximately 8 inches (203 mm) x 3.5 inches (89 mm) wide. (Figure 5d)



10 sq. inches of ventilation = 16 vents per 16' (4 877 mm) piece spaced 12" (305 mm) apart

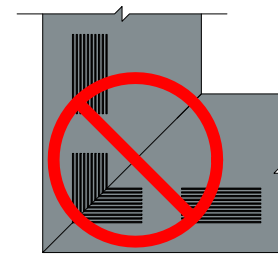
Figure 5a



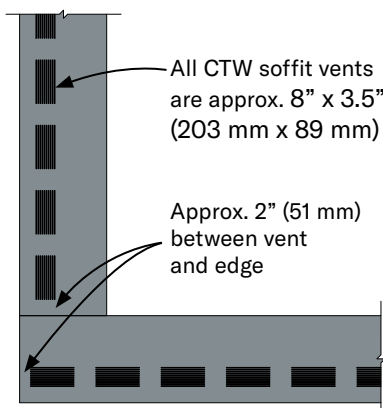
5 sq. inches of ventilation = 8 vents per 16' (4 877 mm) piece spaced 24" (610 mm) apart

Figure 5b

- **Vented Corner with Square-Cut Ends:** (Figure 5d)
Run vented CTW soffit to corner, do not cut through vents.
- Do not make diagonal cuts through the vents. (Figure 5c)
- **Non-Vented Corner with Square-Cut Ends:** (Figure 5e)
You may use both vented or non-vented soffit or a combination of both in your design.
- **Non-Vented Corner with Diagonal-Cut Ends:** (Figure 5f)
The diagonal joint must be supported by framing and properly fastened.

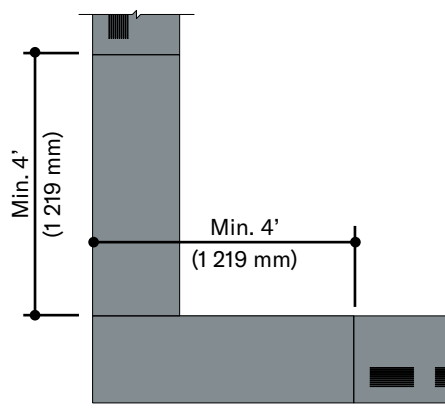


Do Not Cut Through Vents
Figure 5c



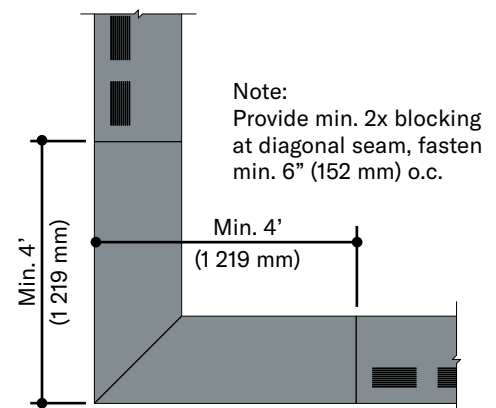
Vented Soffit at Corner
PREFERRED

Figure 5d



Non-Vented Soffit at Corner
PREFERRED

Figure 5e



Diagonal-Cut End at Corner
ALTERNATIVE

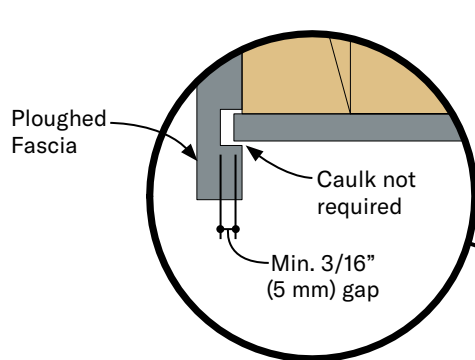
Figure 5f

FIRE-RATING

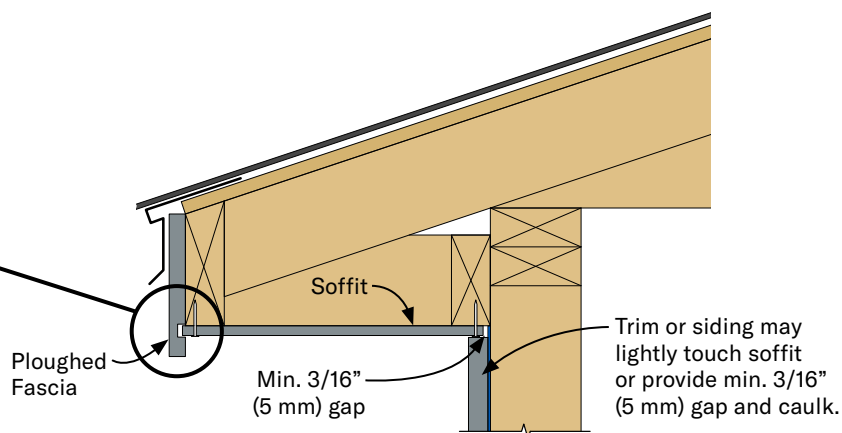
- LP® SmartSide® soffit may be installed over the exterior portion of a 1-hour fire-rated exterior soffit assembly.

LP® SMARTSIDE® SOFFIT WITH LP® SMARTSIDE® PLOUGHED FASCIA

- LP SmartSide Ploughed Fascia is a trim product where the back side is factory routed out to receive soffit. (Figure 6a, 6b)
- Applying LP SmartSide Soffit with LP SmartSide Ploughed Fascia is designed for closed soffit applications only.
 - The ploughed groove in the fascia receives the outside edge of the soffit.
 - You must still maintain a minimum 3/16 inch (5 mm) space around all other ends and edges of the soffit, and apply caulk.
 - Before installing be sure that the soffit framing is straight, square and level.
 - Fasten ploughed fascia meeting the specifications in the LP SmartSide Trim and Fascia Application Instructions.



Ploughed Fascia Detail
Figure 6a

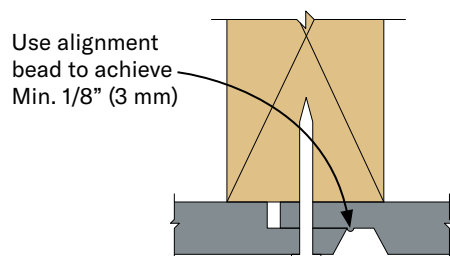


Ploughed Fascia
Figure 6b

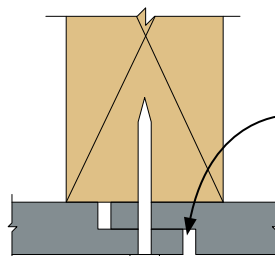
ALTERNATE - PANEL SIDING AS PORCH CEILINGS

FASTENING INSTRUCTIONS

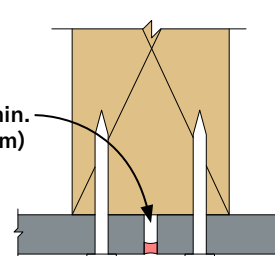
- Penetrate framing a min. of 1-1/2 inches (38 mm).
 - Fasten panel siding using a min. 6 and 12 nailing pattern. This requires one fastener every 6 inches (152 mm) o.c. along the perimeter and 12 inches (305 mm) o.c. in the field.
- A tighter nail pattern of 6 and 6, or a longer nail embedment of 2 inches (51 mm) may be required depending on the wind pressure, wind speed and wind exposure category limitations in [PR-N124](#).
- Panel siding may be applied in porch ceiling applications.
 - Limitation: 190 Series panel siding spanning ceiling joists or trusses spaced a max. 24 inch (610 mm) o.c.
 - Limitation: 38 and 76 Series panel siding spanning ceiling joists or trusses spaced a max. 16 inch (406 mm) o.c.
- Panel siding with alignment bead will help create 1/8 inch (3 mm) gap at butt joint. (Figure 6c)
- Provide min. 1/8" (3 mm) gap at butt joint for panel siding without alignment bead and square edge panel siding. (Figures 6d, 6e)
- Leave min. 3/16 inch (5 mm) gap at all ends and edges. (Figures 2a)



Shiplap Edge with Alignment Bead
Figure 6c



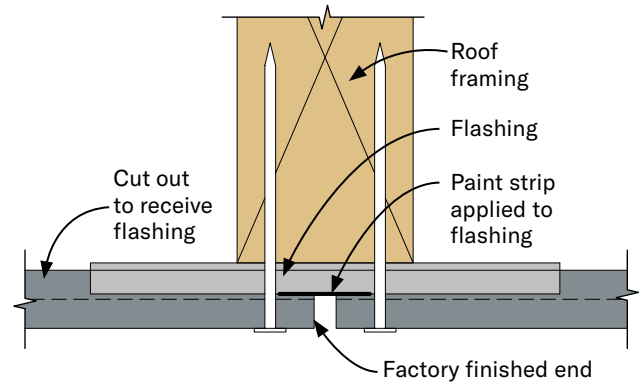
Shiplap Edge without Alignment Bead
Figure 6d



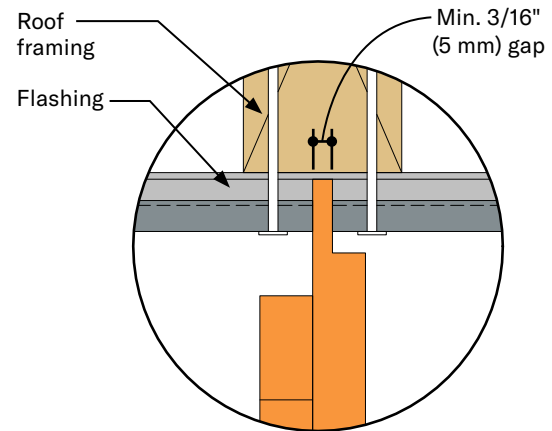
Square Edge
Figure 6e

GENERAL INFORMATION

- LP SmartSide Nickel Gap Siding may be used for porch ceilings or soffit.
 - Nickel Gap Siding is not intended for open soffit as roof sheathing.
- Siding has been manufactured to remove a section of the flange located on the back of siding to accommodate flashing at the butt joint. Ensure this feature and factory prefinished ends are maintained on both sides of the butt joint. (Figure 7a)
 - Recommend using LP Nickel Gap metal flashing, field fabricated metal flashing or non-metal flexible flashing sheet at butt joint for aesthetic purposes.
 - Painting flashing helps to create a more consistent finished appearance but is not required. LP recommends applying a min. 1 inch (25 mm) wide strip of matching paint.
- Roof framing shall be a min. 2x member to obtain min. nail embedment.
 - 2x blocking may be required at ends and edges.
- Ends and edges adjacent to walls may lightly touch.
 - Caulk is not required at these locations.
- Ripping Nickel Gap siding lengthwise may be required when installing siding as porch ceiling or soffit.
- Gap siding a min. of 3/16 inch (5 mm) at butt joints.
- Butt joints must occur over min. 2x wood framing members.
- Spacing tools may be used to obtain 3/16 inch (5 mm) gap at butt joints. (Figure 7c)
 - SIMPLESIDER® siding gauge, or rafter square.
- The following tools may be used to work the siding into place to achieve a min. 1/16 inch (2 mm) to a max. 1/8 inch (3 mm) gap parallel to 16 foot (406 mm) length of the siding.
 - A pull bar typically used to install wood flooring, or
 - Create blocking tool by cutting a section of Nickel Gap siding to assist with firmly tapping siding into place, or
 - 2x wood stud, approx. 16 inches (406 mm) long to assist with firmly tapping siding into place.
- Siding nail requirements:
 - Install siding blind-nailed, place nail in fastener groove. (Figure 7d)
 - Use a min. 0.092 inch shank diameter, hot-dip galvanized (ASTM A153, Class D) or equivalent.
 - A larger 0.113 inch shank diameter nail may be required depending on limitations in PR-N117.
 - Fasten siding perpendicular to framing members spaced a max. 24 inches (610 mm) o.c.
 - Refer to Table 3 in PR-N117 for nail length requirements.
 - Refer to Table 3 in PR-N117 for shi lap edge nailing versus intermediate nailing requirements.
 - Nail head must be snug with flange, so it does not interfere with siding placement or flashing.

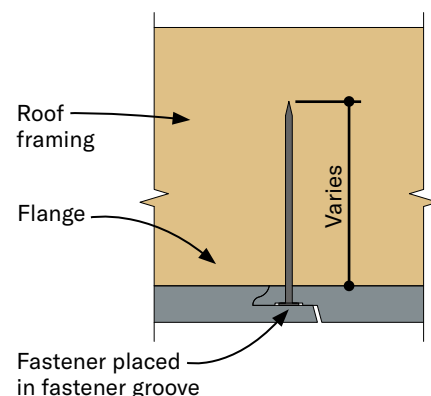


Butt Joint at Ceiling
Figure 7a



Use SIMPLESIDER® siding gauge or rafter square as spacing tool to achieve min. 3/16" (5 mm) gap

Spacing Tool at Butt Joint
Figure 7c

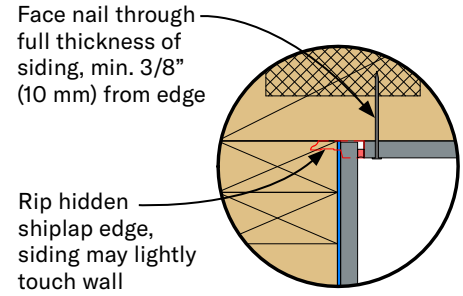
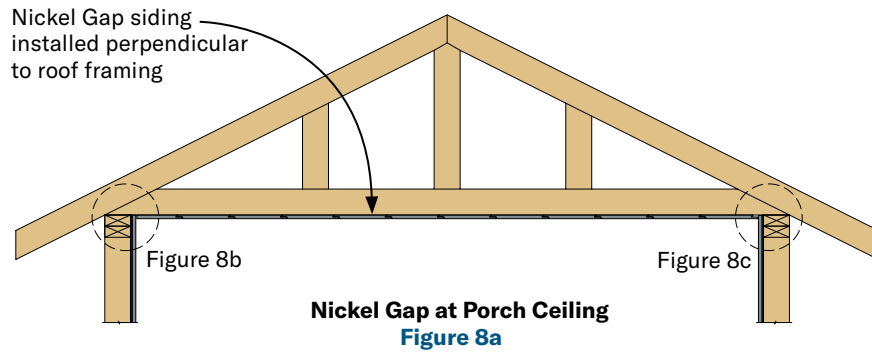


Fastener Groove
Figure 7d

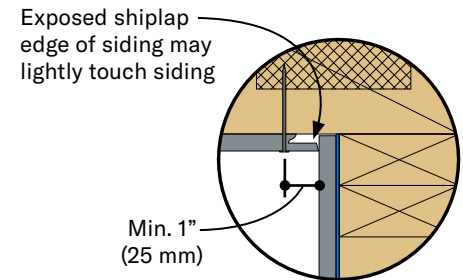
ALTERNATE - LP® SMARTSIDE® NICKEL GAP SIDING AS PORCH CEILING AND SOFFIT (CONT'D.)

PORCH CEILING INSTALLATION

- Begin by installing Nickel Gap per [Figure 8c](#) working to the opposite end as shown in [Figure 8b](#).
- Rip hidden shi lap edge (with fastener groove) when siding is adjacent to wall. ([Figure 8b](#))
 - Ripped edge may lightly touch wall, or provide a min. 3/16 inch (5 mm) gap.
 - Face nail through full thickness a min. 3/8" (10 mm) from edge.
- Exposed shi lap edge may be installed adjacent to siding. ([Figure 8c](#))
 - Nail through full thickness a min. 1 inch (25 mm) from edge of siding.
 - Shi lap edge may lightly touch siding, or provide a min. 3/16 inch (5 mm) gap and caulk, backer rod may be necessary.



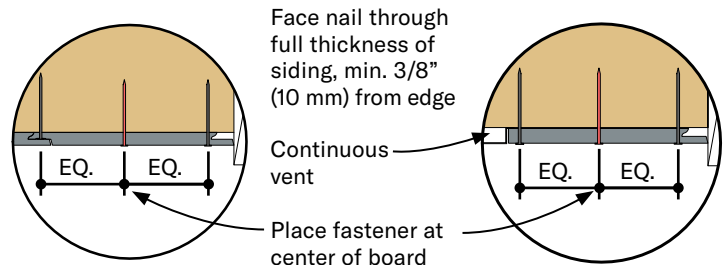
Hidden Shi Lap Edge Detail
Figure 8b



Exposed Shi Lap Edge Detail
Figure 8c

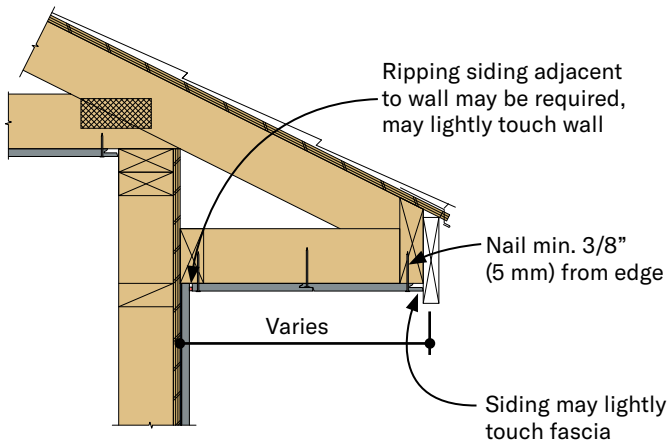
SOFFIT INSTALLATION

- Intermediate nailing may be required depending on the wind pressure, wind speed and wind exposure category limitations in Table 3 in [PR-N117](#). ([Figures 8d, 8e](#))
- Nickel Gap may be installed as soffit. ([Figures 8f, 8g](#))
 - Rip shi lap edge of siding pieces adjacent to wall, siding or fascia.
- Siding may be installed in conjunction with a continuous soffit vent. ([Figure 8g](#))
 - Rip shi lap edge of siding pieces adjacent to vent.
- Paint ripped edges:
 - Edges may lightly touch at these locations, or
 - Provide a min. 3/16 inch (5 mm) gap.

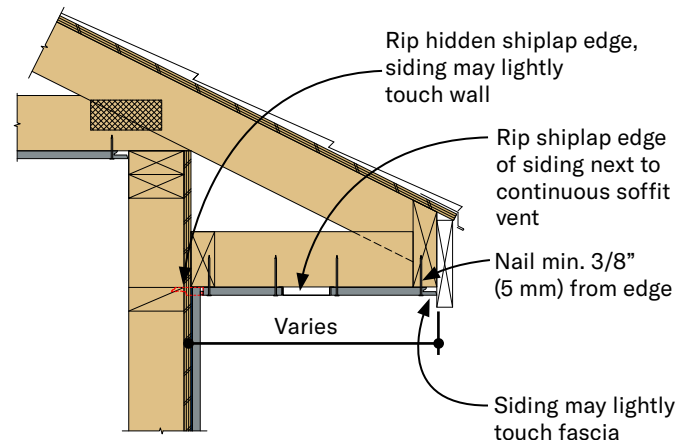


Non-Vented Soffit
Intermediate Nail Option
Figure 8d

Continuous Vented Soffit
Intermediate Nail Option
Figure 8e



Non-Vented Soffit
Figure 8f



Continuous Vented Soffit
Figure 8g

ALTERNATE FASTENING OPTION- STAPLES IN OPEN SOFFIT APPLICATIONS

- Using staples to fasten 76 Series or 190 Series soffit is limited to open soffit applications when used as roof sheathing.
 - Refer to [page 4](#) for open soffit application guidelines.
- Requirements for attaching soffit to roof framing are governed by local building code.
 - Soffit panel must be APA Trademark stamped RS-CD.
 - Refer to Table R602.3(2) – Alternate Attachments to Table R602.3(1) found in the International Residential Code.
 - 76 Series: use a min. 16 gauge staple, with a 7/16 inch (11 mm) crown, and a 1-3/4 inch (45 mm) leg
 - Space fastener a max. 3 inches (76 mm) o.c. at panel ends and 6 inches (152 mm) o.c. at intermediate supports.
 - 190 Series: use a min. 16 gauge staple, with a 7/16 inch (11 mm) crown, and a 2 inch (51 mm) leg
 - Space fastener a max. 4 inches (102 mm) o.c. at panel ends and 8 inches (203 mm) o.c. at intermediate supports.

FINISHING INSTRUCTIONS

- When caulk is required, use a high-quality, non-hardening, paintable sealant meeting ASTM C920, min. Class 25.
 - Follow sealant manufacturer's instructions for application.
- Touch up all cut and exposed surfaces. For best results, use a high-quality 100% acrylic exterior paint specially formulated for use on wood and engineered wood substrates; oil paint is acceptable.
 - DO NOT USE stain or vinyl-based paint.
 - Apply paint as soon as possible or within 180 days.
 - Follow paint manufacturer's instructions for application.
 - Follow LP's Care & Maintenance Instructions.
- Touch up any damage to finish that may occur during application
- Apply touch up paint to cover scratches less than 1 inch (25 mm) in length and less than 1/16 inch (2 mm) wide, exposed nail heads and small nicks.
- Do not apply touch up paint to spots greater than 3/4 inch (19 mm) in diameter.
- Touch up paint should be used sparingly.
 - Apply touch up paint only when air, siding and paint temperature will remain above 50 F until the paint is dried.
 - Store touch up paint between 40°F and 100°F.
 - Shake touch up paint for 90 seconds before every use.
 - Do not use touch up paint if you suspect it has frozen.
 - Do not apply touch up paint to wet siding.
 - Avoid touch up painting when condensation likely to form.
 - Avoid touch up painting when precipitation is possible.
- The touch up paint is air dried, while the factory applied coating is cured using ovens. For this reason, the touch up paint will have some minor differences initially and after time. Minimizing the use of touch up paint is the best approach to help ensure these minor differences are less noticeable.
- Use the appropriate applicator provided in the LP® SmartSide® ExpertFinish® Touch-Up Kit.
 - Nail Head Paint Applicator ([Figure 9a](#))
 - Cut End Paint Applicator ([Figure 9b](#))
- For additional touch-up paint, please call 888-820-0325.



Figure 9a



Figure 9b

DETAILS - SOFFIT AND PORCH CEILING APPLICATIONS

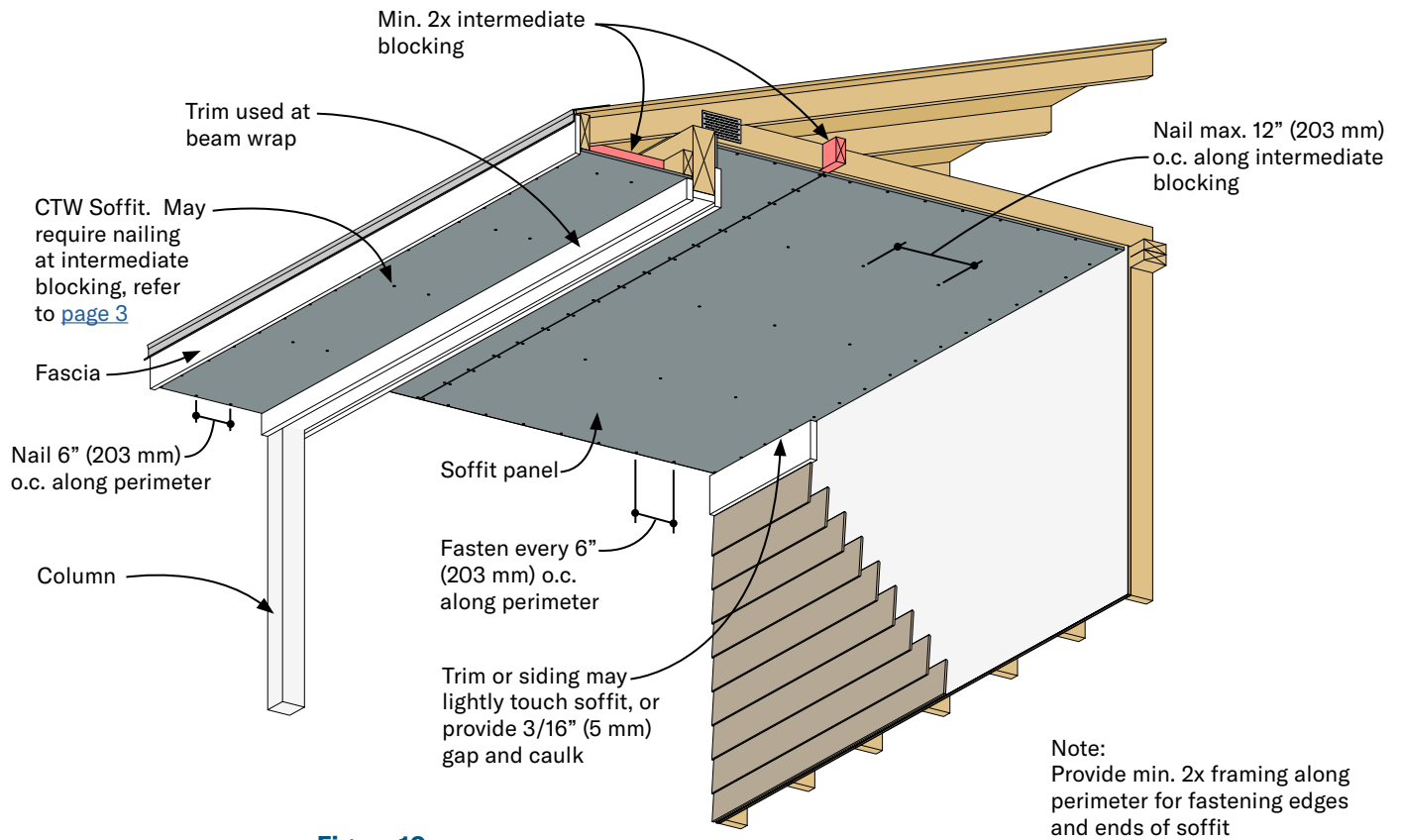


Figure 10a

Application Tips

IMPORTANT Always refer to the complete application instructions for the product you are installing. The application tips provided below are not intended to replace such instructions. Application instructions can be found at LPCorp.com. Failure to follow the full application instructions could cause personal injury or property damage, affect system performance, void any applicable warranty and/or violate applicable building codes.

Exercise safe practices at all times while handling and using this product. Refer to the relevant Safety Data Sheet (SDS) for important information on the safe handling and use of this product. These can be found at LPCorp.com.

- ☐ Refer to Tables 1, 2 or 3 in [PR-N117](#) for nail spacing and penetration into framing.
 - If soffit panel is used as porch ceiling a min. of 1-1/2 inches (38 mm) is required. A longer nail embedment of 2 inches (51 mm) may be required depending on the wind pressure, wind speed and wind exposure category limitations in [PR-N124](#).
- ☐ Nail size:
 - 38 Series soffit or LP® SmartSide® Nickel Gap siding installed as porch ceiling or soffit – use a min. 0.092” shank diameter hot-dip galvanized (ASTM A153) nail; a larger nail shank diameter and length may be required depending on the wind pressure, wind speed and wind exposure category limitations in PR-N117.
 - 76 & 190 Series – use a min. 0.113” shank diameter hot-dip galvanized (ASTM A153) smooth shank nail; a larger nail shank diameter and length may be required depending on the wind pressure, wind speed and wind exposure category limitations in PR-N117.
- ☐ Nail placement – 3/8” (10 mm) from ends and edges
- ☐ Nail spacing:
 - See application instructions for cut-to-width and panel soffit nail spacing guidelines
- ☐ Ripping – not recommended as it will leave the edge unprotected:
 - If soffit is ripped, rip 3/8” (10 mm) less than full width so you can leave a 3/16” (5 mm) space on each side
 - Special care must be taken to seal all exposed wood fiber
 - Sealing can be accomplished by applying paint or caulk
- ☐ Do not overdrive nails – nail head should seat snug to the face of soffit, if overdriven apply caulk and paint
- ☐ Caulk – use a high-quality, non-hardening, paintable exterior sealant meeting ASTM C920, min. Class 25
- ☐ Seal all exposed substrate – sealing can be accomplished by applying a paint or caulk
- ☐ Space all end and edge joints 3/16” (5 mm) and apply caulk
 - Exception - If using soffit panel as roof sheathing 1/8” (3 mm) spacing allowed.
- ☐ Soffit products are not designed for and are not suitable for use as siding.
 - Exception - Soffit panel APA Trademark stamped as **CUSTOM PRODUCTS - SOFFITS** and **RATED SIDING - SHEATHING** can be used as both siding and soffit. Refer to the product catalog for more information
- ☐ 76 or 190 Series soffit panels bearing RS-CD trademark stamp may be used in open soffit applications
- ☐ Soffit must not be in direct contact with CMU, brick, cultured stone, stucco, mortar, etc.
 - Provide a min. 3/8” (10 mm) gap, backer rod and caulk
- ☐ Vented soffit – do not cut through vents
- ☐ Exhaust ducts shall terminate not less than 3’ (914 mm) in any direction from soffit vents
- ☐ Vented cut-to-width soffit – is available with 5 sq. in. (3 226 mm) or 10 sq. in. (6 452 mm) of ventilation per linear foot
- ☐ Trim or siding may lightly touch soffit, or provide min. 3/16” (5 mm) gap and caulk
- ☐ For Limitations of Use – see Application Instructions
- ☐ See Application Instructions for Storage and Handling guidelines



38, 76 AND 190 SERIES CEDAR TEXTURE, BRUSHED SMOOTH PRIMED VENTED AND NON-VENTED SOFFIT

LOUISIANA-PACIFIC CORPORATION PERIODICALLY UPDATES AND REVISES ITS PRODUCT INFORMATION AND APPLICATION, CARE, AND MAINTENANCE INSTRUCTIONS. WARRANTY REMEDIES ARE NOT AVAILABLE IF THESE INSTRUCTIONS ARE NOT FOLLOWED. THE INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

FIND ALL LP® SMARTSIDE® PRODUCT LITERATURE AT LPCORP.COM/PRODUCT-LITERATURE

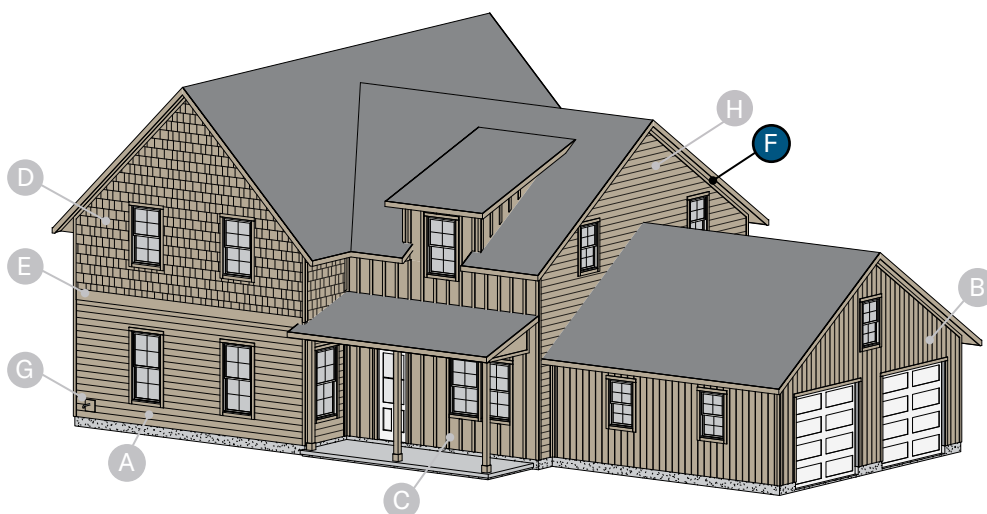
LP® SmartSide® Soffit is covered under the LP® SmartSide® Prorated 50-Year Limited Warranty. Refer to limited warranty at lpcorp.com/product-literature for complete details, including important limitations and exclusions. Product must be transported, stored, handled, installed, finished, and maintained in accordance with all published application, finishing, care, and maintenance instructions, technical notes, and bulletins (collectively, "Instructions") in effect at the time of installation.

Failure to follow such Instructions will make the limited warranty inapplicable as to the products affected by such failure. No modification or exception to these Instructions and no non-published recommendations are valid unless issued in writing on a project-specific basis by LP's Sr. Director of Technology prior to application. Always check and comply with local building codes. Even where these instructions approve installation over certain substrates or incorporate requirements of building codes, LP's liability for the performance of the product is limited as expressly provided in the Limited Warranty.

⚠ WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood-dust.

PRODUCT LEGEND

- A LP® SmartSide® Lap Siding
- B LP® SmartSide® Panel Siding
- C LP® SmartSide® Vertical Siding
- D LP® SmartSide® Cedar Shake
- E LP® SmartSide® Trim & Fascia
- F LP® SmartSide® Soffit
- G LP® SmartSide® Accessories
- H LP® SmartSide® Nickel Gap Siding



GENERAL INFORMATION

HANDLING

- Handle soffit with care during storage, temporary placement, and application.

STORAGE

- Store soffit:
 - Under a roof or waterproof covering (like unit cover/bonnet).
 - Off the ground, on a flat-drained surface using supports that provide a min. 1-1/2 inches (38 mm) clearance from surface.
 - This includes when staging siding around jobsite during installation.
- LP is not responsible for damage due to improper handling and storage of the siding.



**Soffit Panel
Figure 1a**

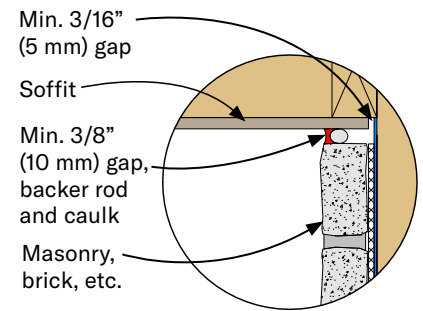


**Cut-to-Width
Soffit
Figure 1b**

GENERAL INFORMATION (CONT'D.)

BEFORE YOU BEGIN

- At the time of manufacture, soffit has achieved code recognition by APA in accordance with PR-N117 as RATED SHEATHING-CEILING DECK (RS-CD). For copies of product approvals go online at lpcorp.com/product-literature or call LP Customer Support at 1-888-820-0325.
- Space ends and edges a min. 3/16 inch (5 mm) where soffit is adjacent to other building materials and apply sealant (caulk). (Figure 2a)
 - Exception: Soffit panel applied in an open soffit application.
 - Exception: Trim, frieze board or siding may lightly touch soffit. (Figure 9a)
- Ends and edges must be supported. Additional 2x blocking may need to be installed for larger soffit widths.
 - Complete perimeter 2x framing support is required for all soffit.
- Soffit must not be in direct contact with masonry, concrete, brick, stone, stucco or mortar. Provide a min. 3/8 inch (10 mm) gap and fill with backer rod and sealant. (Figure 2b)
- Do not use staples.
 - Exception: Refer to **Alternate Fastening Options - Staples in Open Soffit Applications** on [page 9](#).



Open Soffit

Figure 2b

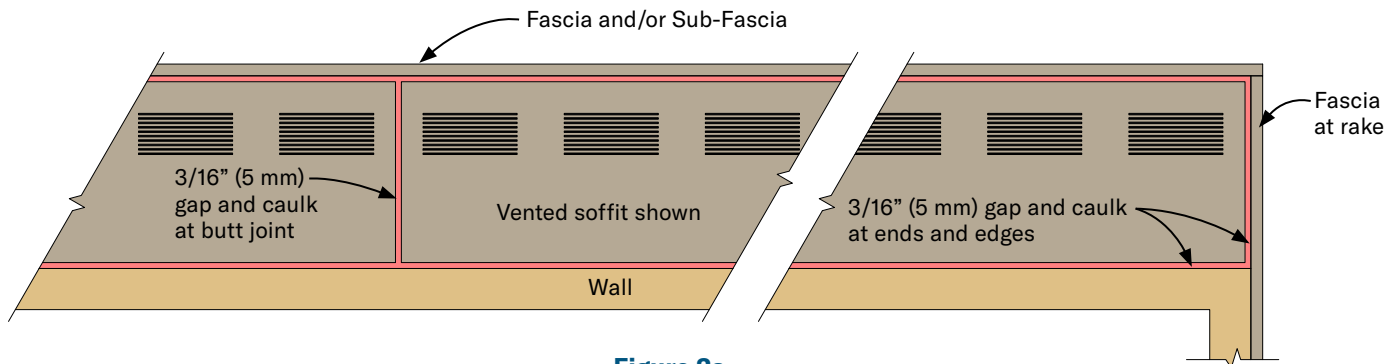
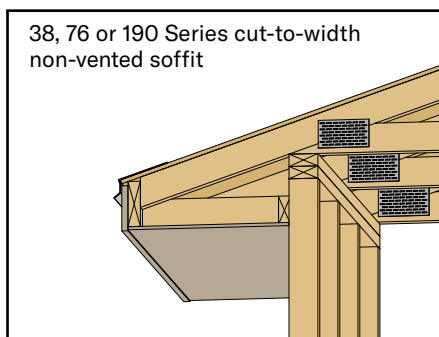


Figure 2a

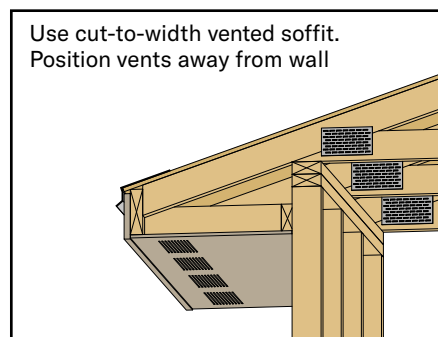
LIMITATIONS

- LP® SmartSide® Soffit products are not designed for and are not suitable for use as siding.
 - Exception: Dual Use Soffit/Siding products APA Trademark stamped both **CUSTOM PRODUCT - SOFFITS** and **RATED SIDING - SHEATHING** may be used in siding applications.
- Soffit is available in cut-to-width (CTW) options in 12 inch (305 mm), 16 inch (406 mm) and 24 inch (610 mm) widths.
 - CTW soffit is available in vented and non-vented options. (Figure 2c, 2d)
 - Do not apply CTW soffit in open soffit applications.
- 76 and 190 Series 4 feet wide soffit panels carry both **CUSTOM PRODUCT - SOFFITS** and **RATED SHEATHING - CEILING DECK (RS-CD)** APA Trademark stamps for soffit applications. (Figure 2e)
 - Soffit panel carrying an RS-CD trademark stamp can be used in an open soffit application as roof sheathing.
 - Install primed soffit surface facing down toward open framing.



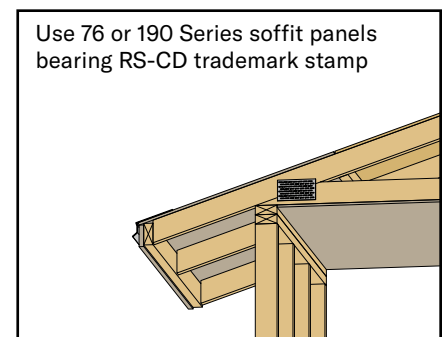
Closed Soffit

Figure 2c



Closed - Vented Soffit

Figure 2d



Open Soffit

Figure 2e

INSTALLATION

FASTENING INSTRUCTIONS

- **Fastener:** Use a min. 0.092 inch shank diameter, hot-dip galvanized nail (ASTM A153) or equivalent; capable of preventing rust, stain and deterioration under normal outdoor environmental conditions for a period of no less than 50 years.
 - A larger shank diameter nail may be required depending on the wind pressure, wind speed and wind exposure category limitations outlined in [PR-N117](#).
- **Fastener placement and length:** ([Figure 3a](#))
 - Place nails a min. 3/8 inch (10 mm) from ends and edges.
 - For **vented** soffit, refer to Table 1 in PR-N117 for nail length requirements.
 - For **non-vented** soffit, refer to Table 2 in PR-N117 for nail length requirements.
- **Fastener spacing:** Max. 6 inches (152 mm) o.c. along perimeter and max. 12 inches (305 mm) o.c. along intermediate supports. ([Figures 3c, 3e](#))
 - A tighter field nailing pattern, or a longer nail may be required depending on the wind pressure, wind speed and wind exposure category limitations outlined in Tables 1 & 2 in PR-N117.
 - Exception: CTW soffit 12 inches (305 mm) wide or less do not require intermediate support. ([Figures 3b](#))
- Nail from the center of the soffit toward the ends, or from one end to the other end.
 - **Do not** nail from each end toward the middle.
- Provide a min. 3/16 inch (5 mm) gap at butt joints. ([Figure 3a](#))
 - Use spacing tool like SIMPLISIDER® siding gauge to achieve proper gapping.
- Attached soffit to min. 2x framing members.
- Butt joints must occur over wood 2x framing members.
 - Additional 2x wood blocking may be required.
- A max. of 24 inches (610 mm) o.c. intermediate support is required for soffit greater than 12 inches (305 mm) wide. ([Figures 3d, 3e](#))
 - 24 inches (610 mm) o.c. intermediate support is **NOT** required for soffit 12 inches (305 mm) wide or less. ([Figures 3b, 3c](#))
- Apply caulk at ends, edges and butt joints. ([Figures 2a](#))

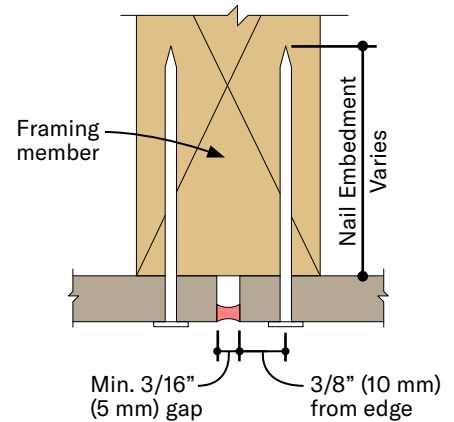
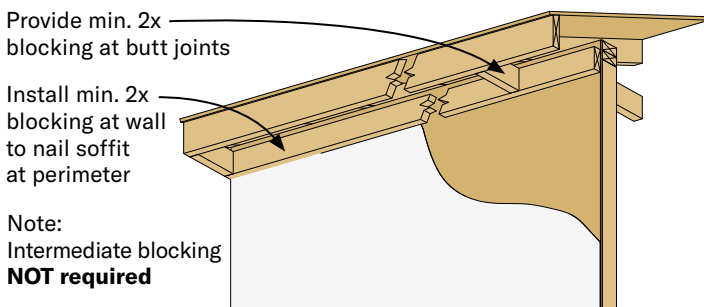
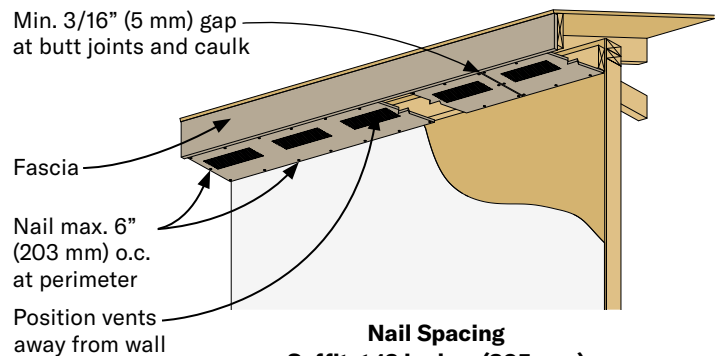


Figure 3a



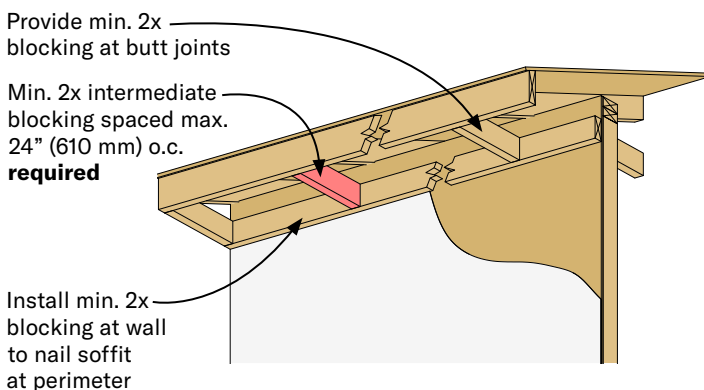
Soffit ≤ 12 inches (305 mm)

Figure 3b



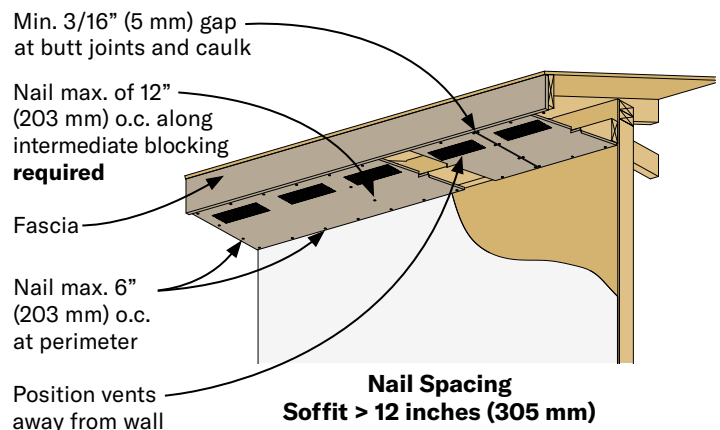
Nail Spacing Soffit ≤ 12 inches (305 mm)

Figure 3c



Soffit > 12 inches (305 mm)

Figure 3d

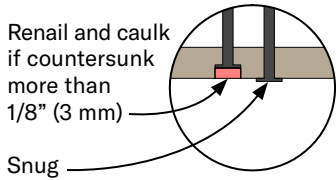


Nail Spacing Soffit > 12 inches (305 mm)

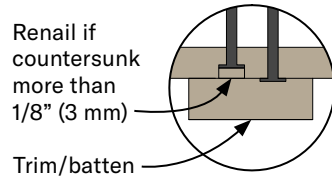
Figure 3e

INSTALLATION (CONT'D.)

- Do not overdrive nails.
 - Nail head should seat snug to face of soffit, but not flush to distort the soffit surface.
 - Face nails: corrections are detailed in [Figures 4e, 4f](#).
- Painting all exposed nail heads is recommended.



**FACE NAILED
CONDITION**
Figure 4e



**BLIND NAILED
CONDITION**
Figure 4f

CLOSED SOFFIT

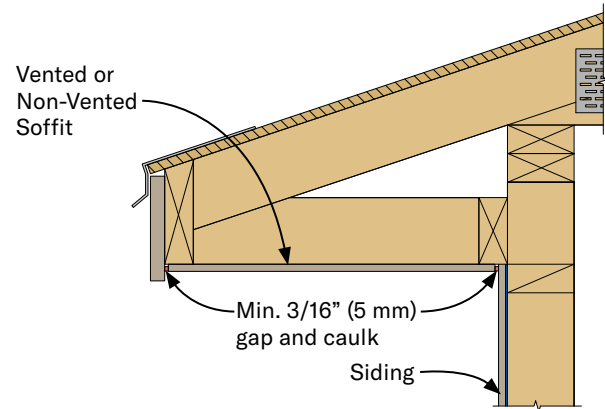
- CTW vented and non-vented soffit is recommended for closed soffit applications at eaves/overhangs or rakes. ([Figures 4a](#))
- If field cut (ripping) is required, remove 3/8 inch (10 mm) less than full width of the eave/overhang to provide for a min. 3/16 inch (5 mm) gap on along edges.

OPEN SOFFIT

- 76 and 190 Series soffit panels APA Trademark stamped RS-CD may be installed prefinished side face down toward open framing as the first row of roof sheathing. ([Figure 4c](#))
 - Install soffit panel with the long dimension or strength axis perpendicular to the rafters, supported along all four edges by framing or solid 2x intermediate blocking.
 - Provide min. 2x intermediate blocking between the rafters so you can nail the soffit to the blocking. ([Figure 4b](#))
 - Leave a min. 1/8 inch (3 mm) space between the edges and ends of the panel.
 - Space nails a max. of every 6 inches (152 mm) o.c. along the perimeter and max. 12 inches (305 mm) o.c. along intermediate supports, unless an enhanced nailing pattern is required by local building code.
 - Protect ends and edges of soffit against exposure to the weather.
 - **Do not use 38 Series soffit for open soffit applications.**

PORCH CEILINGS

- Soffit may be used as porch ceilings. ([Figure 4d](#))
 - Install soffit panel with the long dimension or strength axis perpendicular to the ceiling joists, and supported along all four edges by framing or solid 2x blocking.
 - Provide min. 2x intermediate blocking to fasten soffit at panel edges.
 - Provide min. 3/16 inch (5 mm) gap at panel ends and edges.
 - Space nails a max. of every 6 inches (152 mm) o.c. along the perimeter and max. 12 inches (305 mm) o.c. along intermediate blocking.
 - Battens (trim) may be applied over panel seams at ceiling.



Closed Soffit - Section
Figure 4a

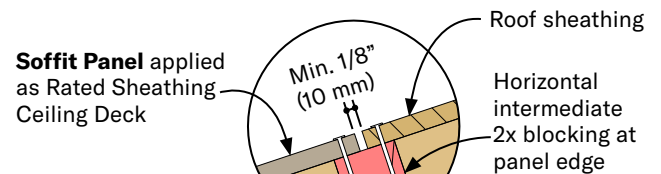
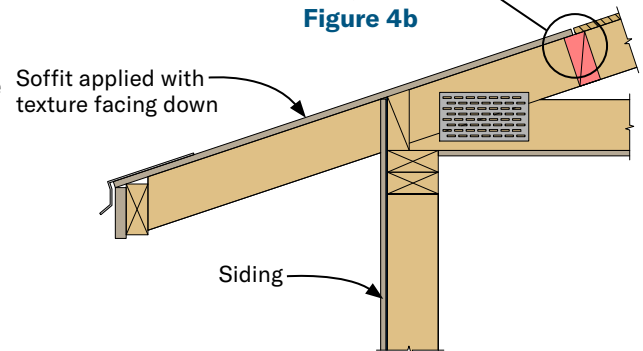
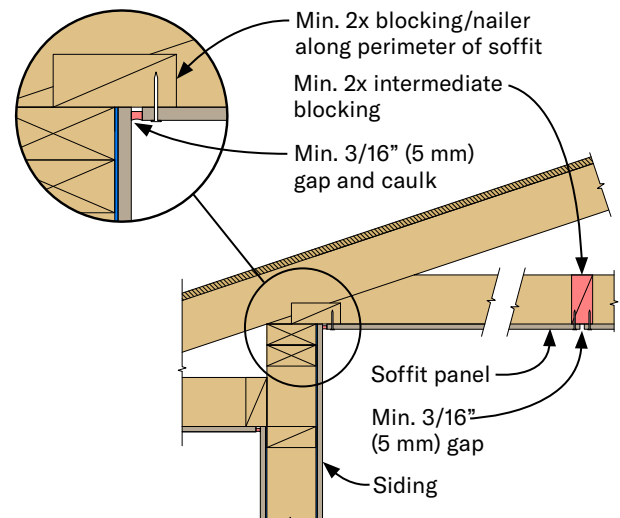


Figure 4b



Open Soffit - Section
Figure 4c

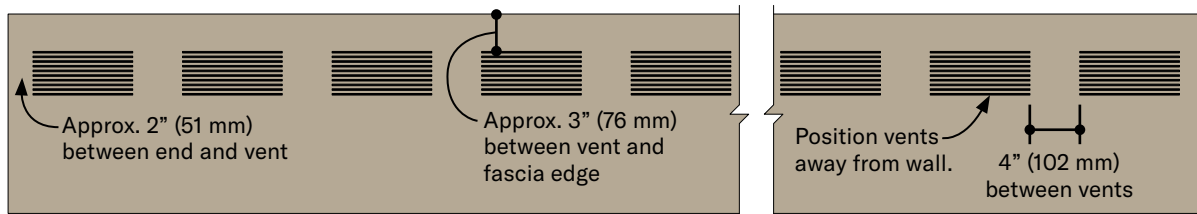


**Soffit Panel
at Porch Ceiling**
Figure 4d

INSTALLATION (CONT'D.)

VENTED CUT-TO-WIDTH SOFFIT

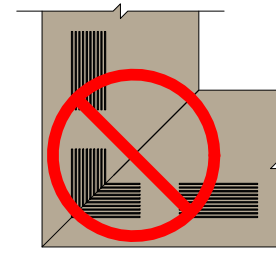
- Vented CTW soffit is available in 10 square inches (6 452 mm) of ventilation per linear foot. (Figure 5a)
- Exhaust ducts shall terminate not less than 3 feet (914 mm) in any direction from soffit vents. Non-vented soffit may be used to create 3 feet (914 mm) separation of vents from exhaust duct terminations. Check your local building code for requirements.
- When cutting soffit with a circular saw, orient the primed face down, fully support and brace to reduce vibration.
- Layout and install vented soffit in a manner that eliminates the need to cut through the vents. (Figure 5c)
- The spokes within the vent may distort slightly during equilibration with the local environment. This condition is temporary and the spokes will straighten.
- All CTW soffit vents measure approximately 8 inches (203 mm) x 3-1/2 inches (89 mm) wide. (Figure 5d)



10 sq. inches of ventilation = 16 vents per 16' (4 877 mm) piece spaced 12" (305 mm) apart

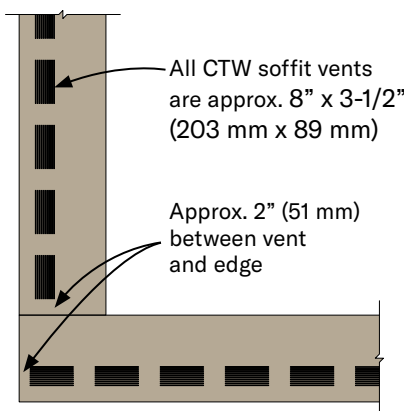
Figure 5a

- **Vented Corner with Square-Cut Ends:** (Figure 5d)
Run vented CTW soffit to corner, do not cut through vents.
- Do not make diagonal cuts through the vents. (Figure 5c)
- **Non-Vented Corner with Square-Cut Ends:** (Figure 5e)
You may use both vented or non-vented soffit or a combination of both in your design.
- **Non-Vented Corner with Diagonal-Cut Ends:** (Figure 5f)
The diagonal joint must be supported by framing and properly fastened.



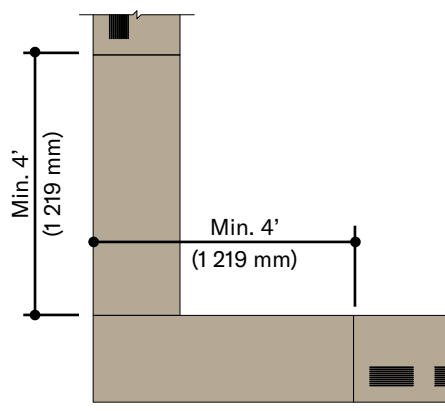
Do Not Cut Through Vents

Figure 5c



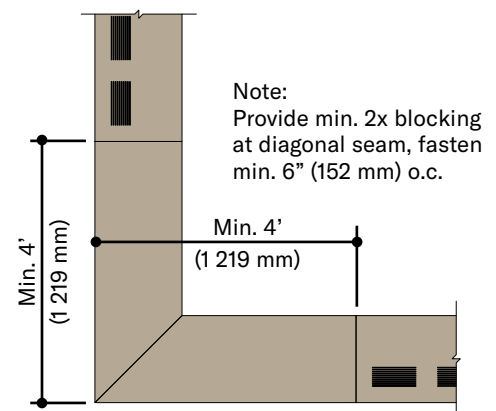
Vented Soffit at Corner
PREFERRED

Figure 5d



Non-Vented Soffit at Corner
PREFERRED

Figure 5e



Diagonal-Cut End at Corner
ALTERNATIVE

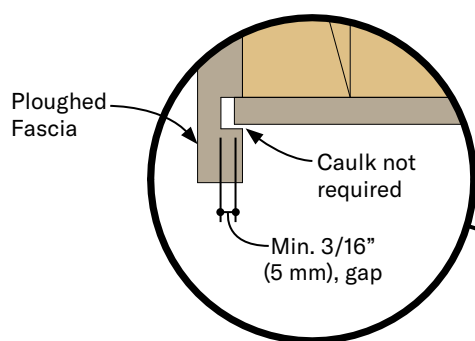
Figure 5f

FIRE-RATING

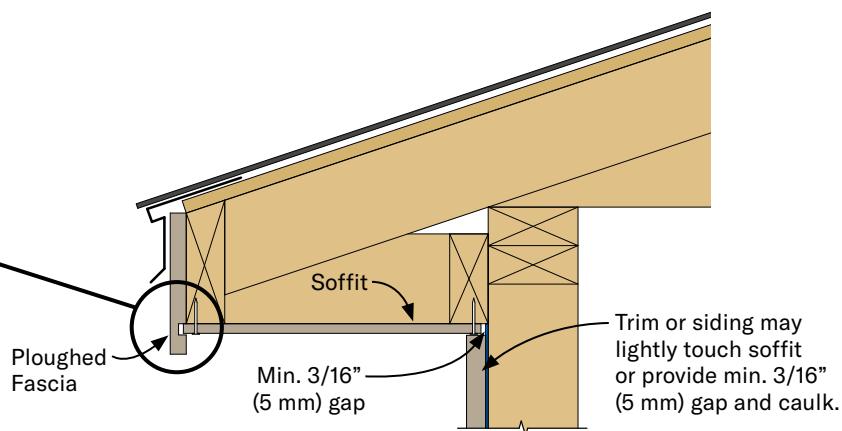
- LP® SmartSide® soffit may be installed over the exterior portion of a 1-hour fire-rated exterior soffit assembly.

LP® SMARTSIDE® SOFFIT WITH LP® SMARTSIDE® PLOUGHED FASCIA

- LP SmartSide Ploughed Fascia is a trim product where the back side is factory routed out to receive soffit. (Figure 6a, 6b)
- Applying LP SmartSide Soffit with LP SmartSide Ploughed Fascia is designed for closed soffit applications only.
 - The ploughed groove in the fascia receives the outside edge of the soffit.
 - You must still maintain a min. 3/16 inch (5 mm) space around all other ends and edges of the soffit, and apply caulk.
 - Before installing, be sure that the soffit framing is straight, square and level.
 - Fasten ploughed fascia meeting the specifications in the LP SmartSide Trim and Fascia Application Instructions.



Ploughed Fascia Detail
Figure 6a

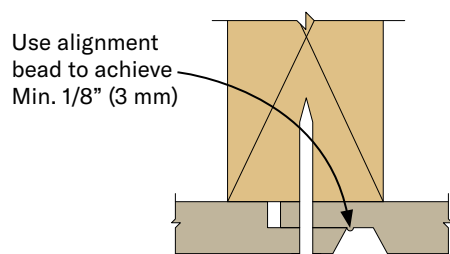


Ploughed Fascia
Figure 6b

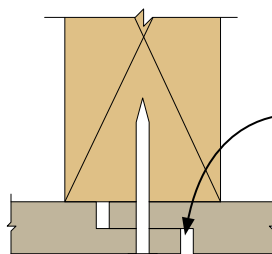
ALTERNATE - PANEL SIDING AS PORCH CEILINGS

FASTENING INSTRUCTIONS

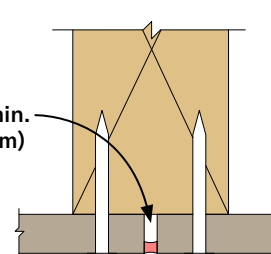
- Penetrate framing a min. of 1-1/2 inches (38 mm).
 - Fasten panel siding using a min. 6 and 12 nailing pattern. This requires one fastener every 6 inches (152 mm) o.c. along the perimeter and 12 inches (305 mm) o.c. in the field.
- A tighter nail pattern of 6 and 6, or a longer nail embedment of 2 inches (51 mm), may be required depending on the wind pressure, wind speed and wind exposure category limitations in [PR-N124](#).
- Panel siding may be applied in porch ceiling applications.
 - Limitation: 190 Series panel siding spanning ceiling joists or trusses spaced a max. 24 inches (610 mm) o.c.
 - Limitation: 38 and 76 Series panel siding spanning ceiling joists or trusses spaced a max. 16 inches (406 mm) o.c.
- Panel siding with alignment bead will help create 1/8 inch (3 mm) gap at butt joint. (Figure 6c)
- Provide min. 1/8 inch (3 mm) gap at butt joint for panel siding without alignment bead and square edge panel siding. (Figures 6d, 6e)
- Leave min. 3/16 inch (5 mm) gap at all ends and edges. (Figures 2a)



Shiplap Edge with Alignment Bead
Figure 6c



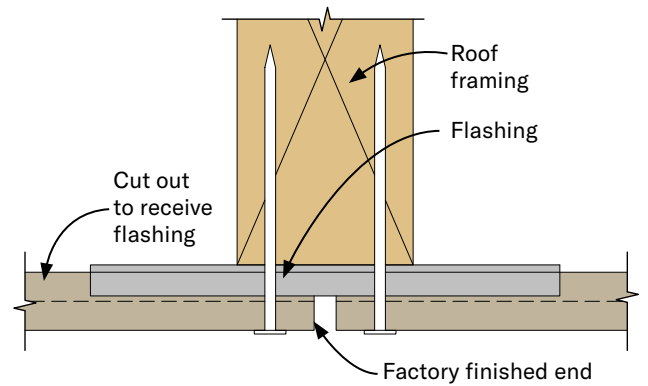
Shiplap Edge without Alignment Bead
Figure 6d



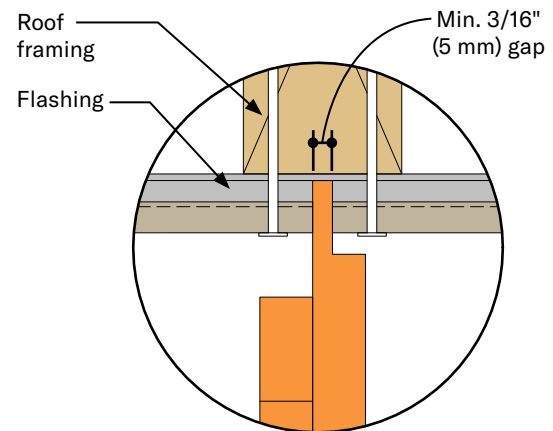
Square Edge
Figure 6e

GENERAL INFORMATION

- LP SmartSide Nickel Gap Siding may be used for porch ceilings or soffit.
 - Nickel Gap Siding is not intended for open soffit as roof sheathing.
- Siding has been manufactured to remove a section of the flange located on the back of siding to accommodate flashing at the butt joint. Ensure this feature and factory prefinished ends are maintained on both sides of the butt joint. (Figure 7a)
 - Recommend using LP Nickel Gap metal flashing, field fabricated metal flashing or non-metal flexible flashing sheet at butt joint for aesthetic purposes.
 - Painting flashing helps to create a more consistent finished appearance, but is not required.
- Roof framing shall be a min. 2x member to obtain min. nail embedment.
 - 2x blocking may be required at ends and edges.
- Ends and edges adjacent to walls may lightly touch.
 - Caulk is not required at these locations.
- Ripping Nickel Gap siding lengthwise may be required when installing siding as porch ceiling or soffit.
- Gap siding a min. of 3/16 inch (5 mm) at butt joints.
- Butt joints must occur over min. 2x wood framing members.
- Spacing tools may be used to obtain 3/16 inch (5 mm) gap at butt joints. (Figure 7c)
 - SIMPLESIDER® siding gauge, or rafter square.
- The following tools may be used to work the siding into place to achieve a min. 1/16 inch (2 mm) to a max. 1/8 inch (3 mm) gap parallel to 16 foot (4 877 mm) length of the siding.
 - A pull bar typically used to install wood flooring, or
 - Create blocking tool by cutting a section of Nickel Gap siding to assist with firmly tapping siding into place, or
 - 2x wood stud, approx. 16 inches (406 mm) long to assist with firmly tapping siding into place.
- Siding nail requirements:
 - Install siding blind-nailed, place nail in fastener groove. (Figure 7d)
 - Use a min. 0.092 inch shank diameter, hot-dip galvanized (ASTM A153, Class D) or equivalent.
 - A larger 0.113 inch shank diameter nail may be required depending on limitations in PR-N117.
 - Fasten siding perpendicular to framing members spaced a max. 24 inches (610 mm) o.c.
 - Refer to Table 3 in PR-N117 for nail length requirements.
 - Refer to Table 3 in PR-N117 for shiplap edge nailing versus intermediate nailing requirements.
 - Nail head must be snug with flange, so it does not interfere with siding placement or flashing.

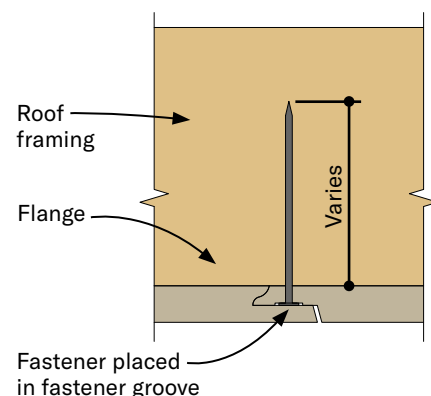


Butt Joint at Ceiling
Figure 7a



Use SIMPLESIDER® siding gauge or rafter square as spacing tool to achieve min. 3/16" (5 mm) gap

Spacing Tool at Butt Joint
Figure 7c

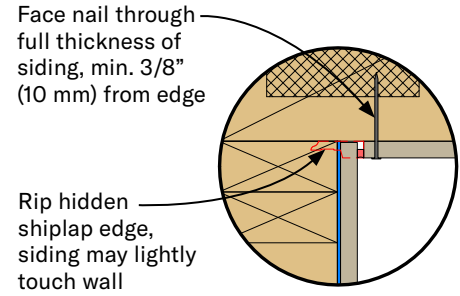
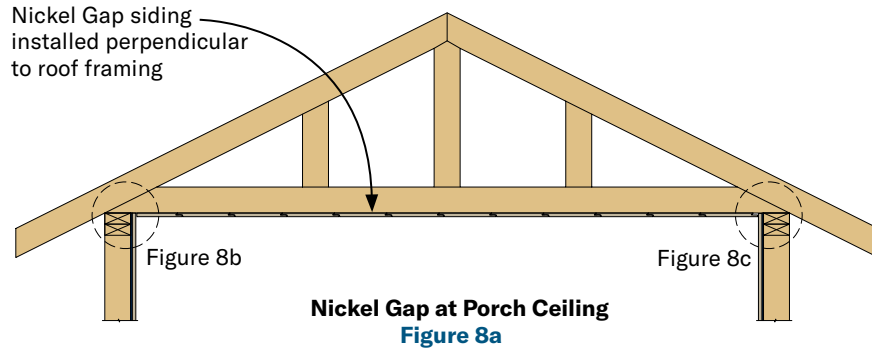


Fastener Groove
Figure 7d

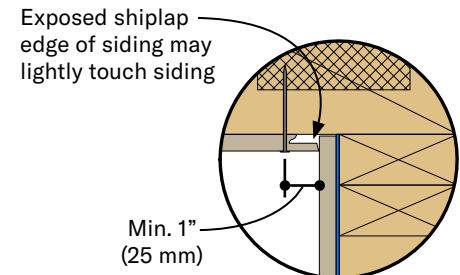
ALTERNATE - LP® SMARTSIDE® NICKEL GAP SIDING AS PORCH CEILING AND SOFFIT (CONT'D.)

PORCH CEILING INSTALLATION

- Begin by installing Nickel Gap per [Figure 8c](#) working to the opposite end as shown in [Figure 8b](#).
- Rip hidden shi lap edge (with fastener groove) when siding is adjacent to wall. ([Figure 8b](#))
 - Ripped edge may lightly touch wall, or provide a min. 3/16 inch (5 mm) gap.
 - Face nail through full thickness a min. 3/8 inch (10 mm) from edge.
- Exposed shi lap edge may be installed adjacent to siding. ([Figure 8c](#))
 - Nail through full thickness a min. 1 inch (25 mm) from edge of siding.
 - Shi lap edge may lightly touch siding, or provide a min. 3/16 inch (5 mm) gap and caulk, backer rod may be necessary.



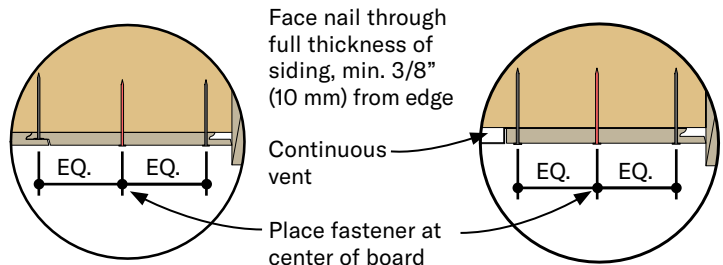
Hidden Shi Lap Edge Detail
Figure 8b



Exposed Shi Lap Edge Detail
Figure 8c

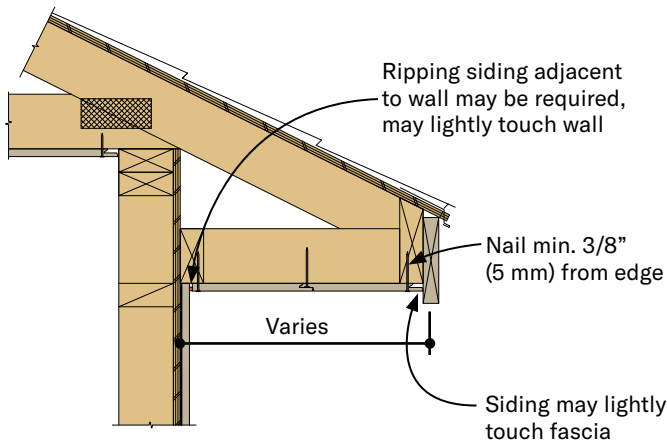
SOFFIT INSTALLATION

- Intermediate nailing may be required depending on the wind pressure, wind speed and wind exposure category limitations in Table 3 in [PR-N117](#). ([Figures 8d, 8e](#))
- Nickel Gap may be installed as soffit. ([Figures 8f, 8g](#))
 - Rip shi lap edge of siding pieces adjacent to wall, siding or fascia.
- Siding may be installed in conjunction with a continuous soffit vent. ([Figure 8g](#))
 - Rip shi lap edge of siding pieces adjacent to vent.
- Paint ripped edges:
 - Edges may lightly touch at these locations, or
 - Provide a min. 3/16 inch (5 mm) gap.

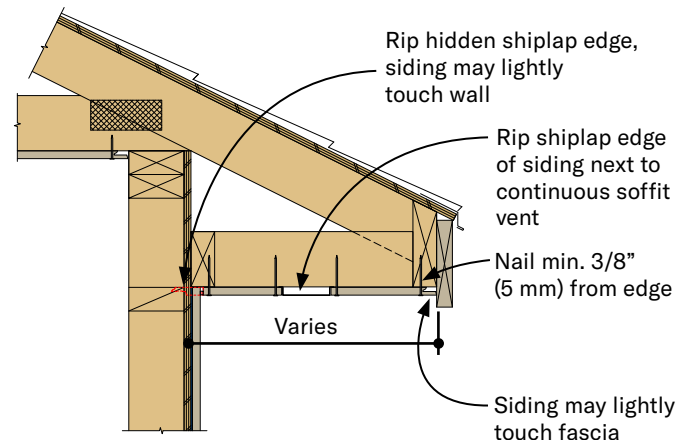


Non-Vented Soffit
Intermediate Nail Option
Figure 8d

Continuous Vented Soffit
Intermediate Nail Option
Figure 8e



Non-Vented Soffit
Figure 8f



Continuous Vented Soffit
Figure 8g

ALTERNATE FASTENING OPTION- STAPLES IN OPEN SOFFIT APPLICATIONS

- Using staples to fasten 76 Series or 190 Series soffit is limited to open soffit applications when used as roof sheathing.
 - Refer to [page 4](#) for open soffit application guidelines.
- Requirements for attaching soffit to roof framing are governed by local building code.
 - Soffit panel must be APA Trademark stamped RS-CD.
 - Refer to Table R602.3(2) – Alternate Attachments to Table R602.3(1) found in the International Residential Code.
 - 76 Series: use a min. 16 gauge staple, with a 7/16 inch (11 mm) crown, and a 1-3/4 inches (45 mm) leg
 - Space fastener a max. 3 inches (76 mm) o.c. at panel ends and 6 inches (152 mm) o.c. at intermediate supports.
 - 190 Series: use a min. 16 gauge staple, with a 7/16 inch (11 mm) crown, and a 2 inches (51 mm) leg
 - Space fastener a max. 4 inches (102 mm) o.c. at panel ends and 8 inches (203 mm) o.c. at intermediate supports.

FINISHING INSTRUCTIONS

- When caulk is required, use a high-quality, non-hardening, paintable sealant meeting ASTM C920, min. Class 25.
 - Follow sealant manufacturer's instructions for application.
- Paint all exposed surfaces, including all drip edges or where water will hang. For best results, use a high-quality 100% acrylic exterior paint specially formulated for use on wood and engineered wood substrates; oil paint is acceptable.
 - DO NOT USE stain or vinyl-based paint.
 - Apply paint as soon as possible and within 180 days.
- Follow paint manufacturer's instructions for application.
- Follow LP's Care & Maintenance Instructions.

CEDAR TEXTURE Soffit:

- For best results, use semi-gloss finish.

BRUSHED SMOOTH Soffit:

- Either flat, satin or semi-gloss coatings can be applied to brushed smooth soffit.
 - Each offers different appearance & maintenance benefits.

DETAILS - SOFFIT AND PORCH CEILING APPLICATIONS

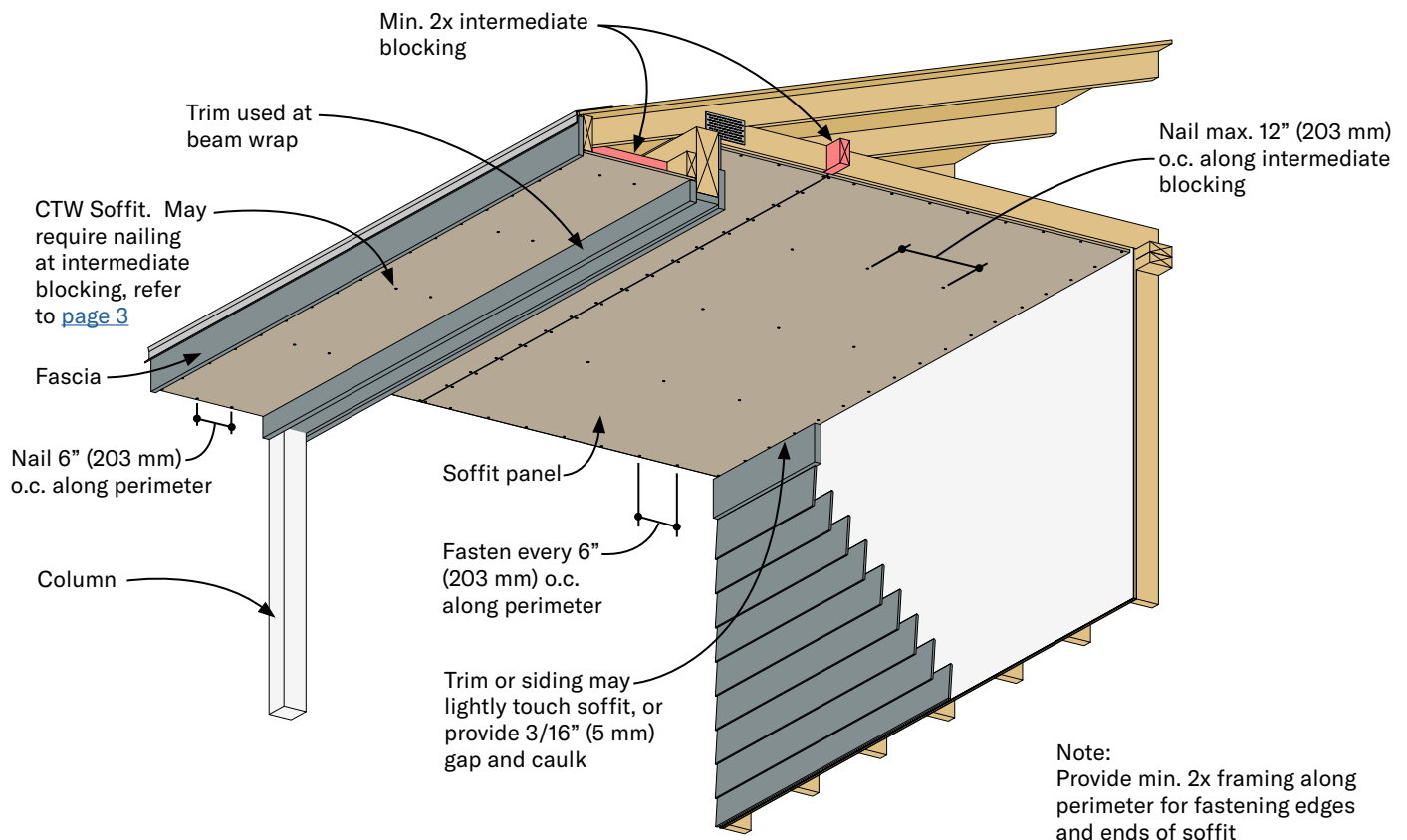


Figure 9a

Application Tips

IMPORTANT Always refer to the complete application instructions for the product you are installing. The application tips provided below are not intended to replace such instructions. Application instructions can be found at LPCorp.com. Failure to follow the full application instructions could cause personal injury or property damage, affect system performance, void any applicable warranty and/or violate applicable building codes.

Exercise safe practices at all times while handling and using this product. Refer to the relevant Safety Data Sheet (SDS) for important information on the safe handling and use of this product. These can be found at LPCorp.com.

- ☐ Refer to Tables 1, 2 or 3 in [PR-N117](#) for nail spacing and penetration into framing.
 - If soffit panel is used as porch ceiling a min. of 1-1/2" (38 mm) is required. A longer nail embedment of 2" (51 mm) may be required depending on the wind pressure, wind speed and wind exposure category limitations in [PR-N124](#).
- ☐ Nail size:
 - 38 Series soffit or LP® SmartSide® Nickel Gap siding installed as porch ceiling or soffit – use a min. 0.092" shank diameter hot-dip galvanized (ASTM A153) nail; a larger nail shank diameter and length may be required depending on the wind pressure, wind speed and wind exposure category limitations in PR-N117.
 - 76 & 190 Series – use a min. 0.113" shank diameter hot-dip galvanized (ASTM A153) smooth shank nail; a larger nail shank diameter and length may be required depending on the wind pressure, wind speed and wind exposure category limitations in PR-N117.
- ☐ Nail placement – 3/8" (10 mm) from ends and edges
- ☐ Nail spacing:
 - See application instructions for cut-to-width and soffit panel nail spacing guidelines
- ☐ Ripping – not recommended as it will leave the edge unprotected:
 - If soffit is ripped, rip 3/8" (10 mm) less than full width so you can leave a 3/16" (5 mm) space on each side
 - Special care must be taken to seal all exposed wood fiber
 - Sealing can be accomplished by applying paint or caulk
- ☐ Do not overdrive nails – nail head should seat snug to the face of soffit, if overdriven apply caulk and paint
- ☐ Caulk – use a high-quality, non-hardening, paintable exterior sealant meeting ASTM C920, min. Class 25
- ☐ Seal all exposed substrate – sealing can be accomplished by applying a paint or caulk
- ☐ Space all end and edge joints 3/16" (5 mm) and apply caulk
 - Exception - If using soffit panel as roof sheathing 1/8" (3 mm) spacing allowed.
- ☐ Soffit products are not designed for and are not suitable for use as siding.
 - Exception - Soffit panel APA Trademark stamped as **CUSTOM PRODUCTS - SOFFITS** and **RATED SIDING - SHEATHING** can be used as both siding and soffit. Refer to the product catalog for more information
- ☐ 76 or 190 Series soffit panels bearing RS-CD trademark stamp may be used in open soffit applications
- ☐ Soffit must not be in direct contact with CMU, brick, cultured stone, stucco, mortar, etc.
 - Provide a min. 3/8" (10 mm) gap, backer rod and caulk
- ☐ Vented soffit – do not cut through vents
- ☐ Exhaust ducts shall terminate not less than 3' (914 mm) in any direction from soffit vents
- ☐ Vented cut-to-width soffit – is available with 10 sq. in. (6 452 mm) of ventilation per linear foot
- ☐ Trim or siding may lightly touch soffit, or provide min. 3/16" (5 mm) gap and caulk
- ☐ For Limitations of Use – see Application Instructions
- ☐ See Application Instructions for Storage and Handling guidelines