

LP BuilderSeries™

LAP SIDING

CEDAR TEXTURE
PRIMED (GREY)
SMARTLOCK™ LAP SIDING

GENERAL

- At the time of manufacture, siding meets or exceeds the performance standards AC321 and has achieved APA recognition under PR-N140, and HUD recognition under HUD-MR-1318c. For copies of Product Approvals go online at <https://lpcorp.com/resources/product-literature/> or call LP Customer Support at 888-820-0325.
- Minimum 6 inch (152 mm) clearance must be maintained between siding and finish grade (ground cover). (Diagram 4b)
- Siding applied adjacent to surfaces such as porches, patios, balconies, walking surfaces or porch columns must have a clearance of at least 1 inch (25 mm) above any horizontal surface. Clearance may be reduced to 3/8 inch (10 mm) for:
 - Porches, patios, balconies, or walking surfaces that slope away from the structure or the surface provides gaps that allow water to flow through so that it cannot accumulate, and are covered by a roof, not an eave or overhang; or
 - Porch columns with walking surfaces that slope away from the structure or the surface provides gaps that allow water to flow through so that it cannot accumulate.
- Minimum 1 inch (25 mm) clearance at intersection with roof line. (Diagram 2a)
- Apply and maintain siding in a manner that prevents moisture intrusion and water buildup.
- All wood substrate that is exposed to the weather must be sealed in a manner that prevents moisture intrusion and water build up.
 - Seal ALL exposed cuts of siding and trim. Field spray applied paint on cuts are not recommended.
 - Sealing can be accomplished by applying a paint or a sealant according to the manufacturer's requirements.
 - Butt joints that are finished in one of the four options in the Butt Joint Section on page 4 are considered sealed from the weather.
- **DO NOT USE STAPLES.**
- SIDING MUST NOT BE IN DIRECT CONTACT WITH MASONRY, CONCRETE, BRICK, STONE, STUCCO OR MORTAR.
- Eight inch wide LP BuilderSeries™ SmartLock™ lap siding may be ripped to narrower width to accommodate a reduced reveal.
 - The target width must maintain a 1 inch (25 mm) overlap.
 - The SmartLock™ factory drip edge must be maintained and installed facing down to provide the 1 inch (25 mm) self-aligning feature.
 - The ripped horizontal edge must be installed facing up.
 - Alteration of the product width must not interfere with any other aspect of the application instructions.

STORAGE

- Store off the ground well supported, on a flat surface, under a roof or separate waterproof covering.
- Keep siding clean and dry. Inspect prior to application.

STUD SPACING

- Lap siding may be installed direct to studs spaced a maximum of 16 inches (406 mm) o.c.
- See page 3 for Alternate Fastening Options direct to WSP sheathing, SIP or ICF Assemblies, or direct to steel studs.

MOISTURE

- Moisture control and moisture vapor control are critical elements of proper housing design.
 - Check your local building code for application procedures or handling moisture and water vapor in your area.
 - Do not apply engineered wood siding to a structure having excessive moisture conditions such as drying concrete, plaster or wet blown cellulose insulation.
 - If such conditions exist, the building should be well ventilated to allow it to dry prior to the application of the siding.
 - When using wet blown cellulose insulation it must not be in direct contact with the siding and it must be allowed to dry a minimum of 24 hours or longer if specified by the insulation manufacturer.
- Siding must not be installed on green or crooked structural framing members.
- Do not apply siding over rain-soaked or buckled sheathing.

WATER-RESISTANT BARRIER (WRB)

- A properly installed WRB is required behind siding.
 - Consult your local building code for details.
- The LP BuilderSeries™ lap siding limited warranty does not expressly or implicitly cover water penetration.
 - LP does not assume responsibility for any water penetration.

GAPS & SEALANTS

- Seal all gaps with a high-quality, non-hardening, paintable sealant meeting ASTM C920, minimum Class 25.
- Follow the sealant manufacturer's instructions for application.

FLASHING WINDOWS, DOORS & OPENINGS

- All openings and penetrations must be properly sealed or flashed in a manner that prevents moisture intrusion or buildup. (Diagram 6d)

SMARTLOCK™

- LP BuilderSeries™ SmartLock™ Lap Siding is made with a helpful self-aligning feature designed to assist in installing the siding straight and level.

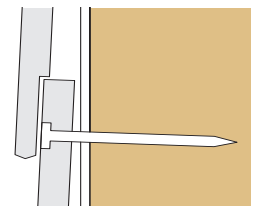
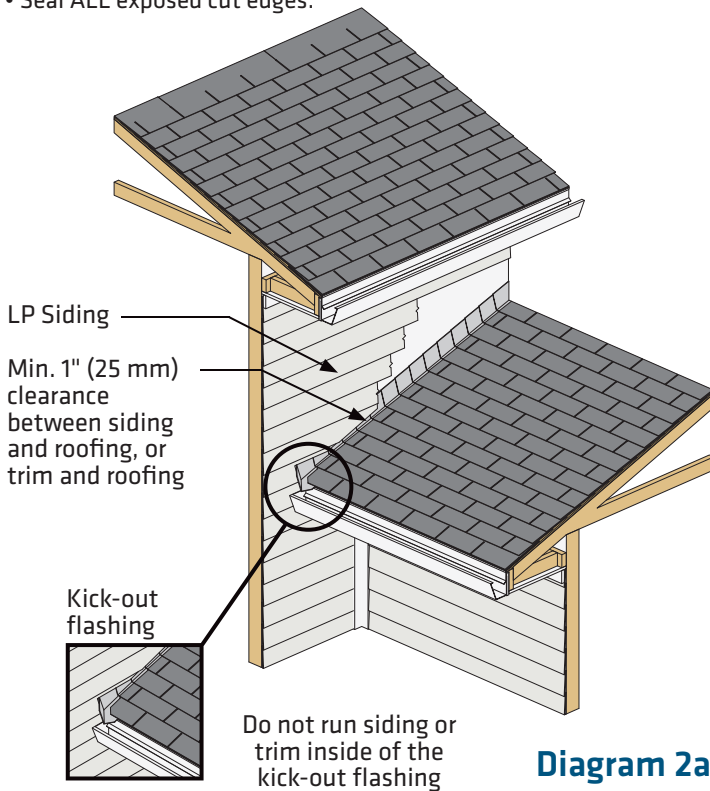


Diagram 1

KICK-OUT FLASHING

- Install kick-out flashing to direct the water into the gutter.
- Install step flashing with minimum 4 inch (102 mm) upper leg.
- Properly integrate flashing with the secondary water-resistant barrier. Use housewrap, flashing tape, Z-flashing, or other items as needed to maintain the counterflashing principle.
- **DO NOT extend the siding or trim into the kick-out flashing or gutter.**
- Maintain a clearance between the end of the gutter and the adjoining wall to allow for proper maintenance of the siding.
- Seal ALL exposed cut edges.



TRIM

- Trim should be thick enough so the lap siding does not extend beyond the face of the trim, use a minimum 440 Series trim. (Diagram 6e and 6f)
 - If lap siding reveal desired is less than 7 inches use a minimum 540 Series trim.
- Trim must be applied in a manner that will not allow moisture intrusion or water buildup. (Diagram 6d)
- See page 6 for Outside and Inside Corner Trim details. (Diagram 6e, 6f, 6g and 6h)
- Siding is not designed and/or manufactured to be used as trim.

FINISHING INSTRUCTIONS

- Climb cut the surface of the siding such that the rotation of the blade cuts downward on the primed surface.
- **Seal all exposed surfaces, including all drip edges or where water will hang.**
- Apply finish coat as soon as possible or within 180 days of application.

- Follow the coating manufacturer's application and maintenance instructions.
- 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.
- For best results use satin or semi-gloss finish.

DO NOT USE: Stain or vinyl-based paint (vinyl acetate or PVA)

NAILING INSTRUCTIONS - DIRECT TO STUD

- LP BuilderSeries™ SmartLock™ lap siding may be attached direct to studs spaced a maximum of 16 inches (406 mm) o.c.
 - Check your local building codes before installing siding to confirm if wood structural panel wall sheathing is required.
- Butt joints should be staggered over successive courses.
- Siding shall be installed with top (blind) nailing, with the nails placed 3/8 inch (10 mm) from either end and a minimum of 3/4 inch (19 mm) from the top edge of the board. (Diagram 4e)
- Fasteners will be exposed on lap siding located immediately below window sills, fascia boards and horizontal trim.
 - Space fasteners a maximum of 8 inch (203 mm) o.c. below window sills, fascia boards and horizontal trim. (Diagram 6)
- Overlap successive courses of siding a minimum 1 inch (25 mm) using the SmartLock self-aligning feature. (Diagram 2b)
- Use a minimum 0.113 inch smooth shank diameter, hot-dip galvanized nail (ASTM A153) or equivalent. Fasteners shall be corrosion resistant and capable of preventing rust, stain and deterioration under normal outdoor environmental conditions for a period of no less than 25 years.
 - A minimum 0.092 inch smooth shank diameter nail may be substituted depending on the wind pressure, wind speed and wind exposure category limitations in APA Product Report PR-N140.
- Penetrate structural framing or wood structural panels and structural framing a minimum of 1-1/2 inches (38 mm).
- Nail from the center of the siding toward the ends, or from one end to the other end. NEVER nail from the ends of the siding toward the middle.
- Shim siding at studs as needed to avoid drawing siding against uneven walls.

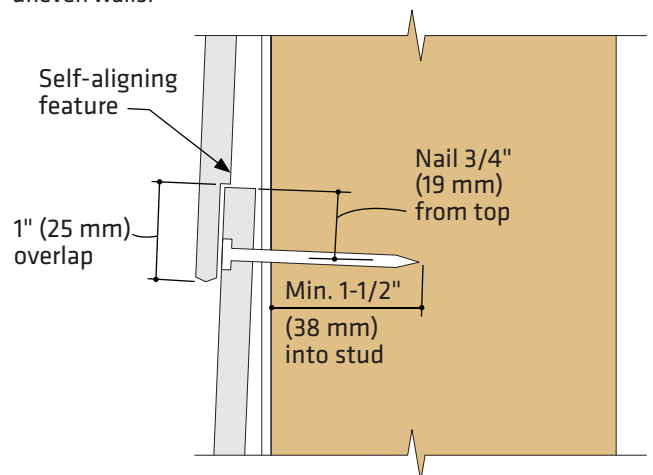


Diagram 2b SmartLock™ feature (Direct to Stud Application)

ALTERNATE FASTENING OPTION TO SIP ASSEMBLIES OR WOOD STRUCTURAL PANEL (WSP) WALL SHEATHING

- WSP wall sheathing must be a minimum 7/16 Category with an APA Trademark that contains the consensus Standard DOC PS 2.
- LP BuilderSeries™ Lap Siding must be fastened with:
 - Minimum 0.092 inch diameter ring shank, hot-dip galvanized nail (ASTM A153) or equivalent.
 - Space ring shank nails depending on the wind pressure, wind speed and wind exposure category limitations in APA Product Report PR-N140, Table 1a or 1b.
 - For alternate fastening option to wood structural panel sheathing only, the nail length must be long enough to fully penetrate sheathing by at least 1/4 inch (6 mm).
 - Ensure that the ring shanks of the nail fully engage the wood structural panel sheathing.

ALTERNATE FASTENING OPTION OVER INSULATED CONCRETE FORMS (ICF) ASSEMBLIES

- LP BuilderSeries™ lap siding must be fastened with:
 - Minimum #8 hot-dip galvanized, tapered head, self-drilling screw.
 - Minimum penetration of 3/8 inch (10 mm) beyond the thickness of the nailing flange.
- Larger screws may be required by the ICF Manufacturer based on the following minimum withdrawal requirements.
 - Minimum withdrawal value of ICF nailing flange must be 50 lbs. with a maximum 12 inches (305 mm) o.c. screw spacing.
 - Minimum withdrawal value of ICF nailing flange must be 31 lbs. with a maximum 6 inches (152 mm) o.c. screw spacing.

ALTERNATE FASTENING OPTION DIRECT TO STEEL STUD FRAMING ASSEMBLIES

- Minimum withdrawal value of the steel framing must be 50 lbs.
 - Refer to the framing manufacturer’s evaluation report.
- LP BuilderSeries™ lap siding must be fastened with:
 - Studs spaced a maximum spacing of 16 inches (406 mm) o.c.
 - Minimum #8 hot-dip galvanized, tapered head, self-drilling screw.
 - Minimum of 5 threads beyond the combined thickness of the siding and steel stud framing.
 - Minimum steel framing thickness of 0.032 inch (8 mm) or 20 gauge.

LAP SIDING INSTALLED OVER EXTERIOR GYPSUM OR FOAM SHEATHING (RIGID FOAM INSULATION)

- LP BuilderSeries™ lap siding may be installed over exterior gypsum or foam sheathing. The following precaution must be followed:
 - Fastener length must be increased to ensure a minimum 1-1/2 inch (38 mm) penetration into structural framing or wood structural panel sheathing and structural framing; **or**
 - For alternate fastening option to wood structural panel sheathing only, the nail length must be long enough to fully penetrate sheathing by at least 1/4 inch (6 mm).
 - Ensure that the ring shanks of the nail fully engage the wood structural panel sheathing.
 - Wall bracing is required in accordance with building code requirements.
 - A water-resistant barrier (WRB) is required in accordance with building code requirements.

- A drainage plane (example: furring strips, drainage mat or drainage board) may be required between siding and WRB, consult local code requirements.

LAP SIDING INSTALLED OVER FOAM SHEATHING (RIGID FOAM INSULATION) UP TO 1 INCH (25 MM) THICK

- Siding may be installed directly over the foam sheathing unless a drainage plane is required by the local building code.
- Use a minimum 0.113 inch smooth shank diameter, hot-dip galvanized nail (ASTM A153) or equivalent.
 - A minimum 0.092 inch smooth shank diameter nail may be substituted depending on the wind pressure, wind speed and wind exposure category limitations in APA Product Report PR-N140.

LAP SIDING INSTALLED OVER FOAM SHEATHING (RIGID FOAM INSULATION) GREATER THAN 1 INCH (25 MM)

- A minimum 1x4 nominal size Southern Pine furring strip with a specific gravity greater than or equal to 0.55 must be installed.
 - Space furring strips no more than 16"o.c. in wind speed areas less than or equal to 200 MPH.
- Use a minimum 0.120 inch ring shank diameter, hot-dip galvanized nail (ASTM A153) or equivalent.
 - Fastener length must be long enough to fully penetrate a minimum 1/2 inch (13 mm) into furring strip.
 - Place fasteners 3/4 inch from top edge of lap siding.
 - Blind nail two fasteners per furring strip (four nails at butt joints) every 16"o.c. (Diagram 4a)
- Siding shall be installed to safely resist all loads, including wind loads, of the locally adopted building codes. The installation of siding shall result in a system that provides a load path that meets the requirements for the transfer of loads from their point of origin through the load-resisting elements to the structure.
 - The mechanical connection of the furring strip to the structure is the responsibility of a design professional.
 - LP assumes no liability for any loss or damage caused by the design of the mechanical connection of the furring strip to the structure and is expressly released by the purchaser or owner from any such loss or liability.

ALTERNATE FASTENING OPTION OVER FOAM SHEATHING (RIGID FOAM INSULATION) GREATER THAN 1 INCH (25 MM)

- Refer to IRC Chapter 7 on Wall Covering for prescriptive siding attachments over foam sheathing up to 4 inch (102 mm) thick direct to wood or steel stud framing.
 - Section 703.15.1 for minimum fastening requirements over foam sheathing to wood framing.
 - Section 703.15.2 for furring minimum fastening requirements over foam sheathing to wood framing.
 - Section 703.16.1 for minimum fastening requirements over foam sheathing to steel studs.
 - Section 703.16.2 for furring minimum fastening requirements over foam sheathing into steel studs.
- LP assumes no liability for any loss or damage caused by the IRC prescriptive design of the mechanical connection of the siding to the structure and is expressly released by the purchaser or owner from any such loss or liability.

Louisiana-Pacific Corporation will assume no responsible for any damage or condition arising from the use of foam sheathing.

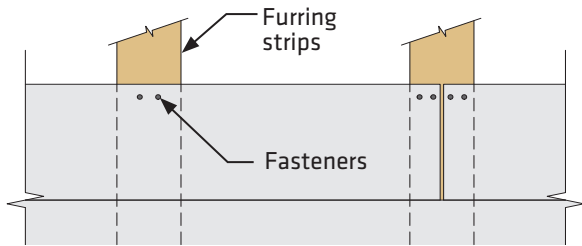


Diagram 4a

OVERLAP, CLEARANCE & NAILING SPACE

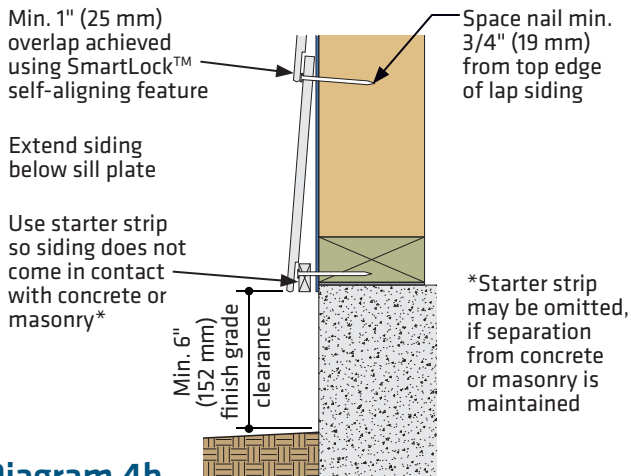


Diagram 4b

Siding Installed Direct to Studs

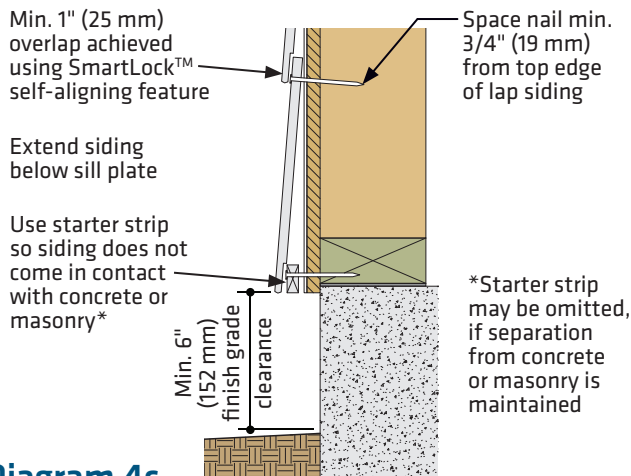
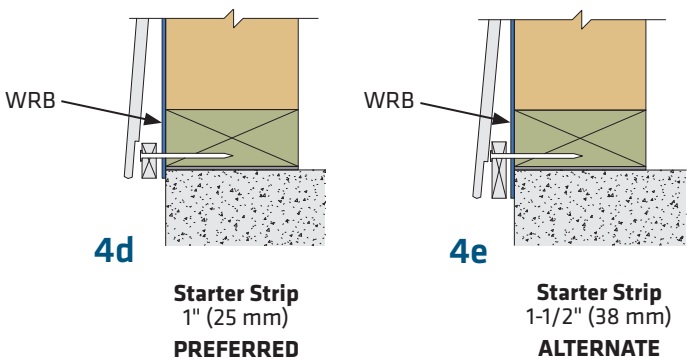


Diagram 4c

Siding Installed over OSB



BUTT JOINTS

- A minimum 3/16 inch (5 mm) gap is required at ALL butt joints.
- Butt joint can be finished in one of four options indicated below:
 1. **If sealant (caulking) option is selected**, seal gap at butt joints with a high-quality exterior sealant meeting ASTM C920, minimum Class 25. (Diagram 4f and 6a)

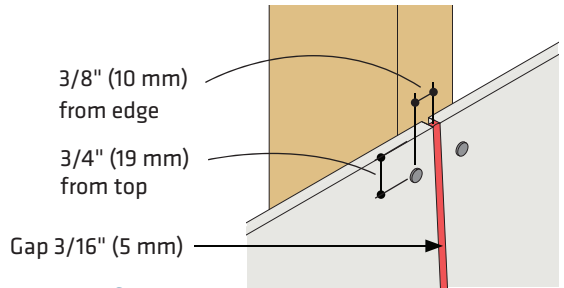


Diagram 4f

2. **If joint moulding option is selected**, add the thickness of the joint moulding web to the butt joint gap retaining a net 3/16 inch (5 mm) space for expansion. (Diagram 4g and 6b)

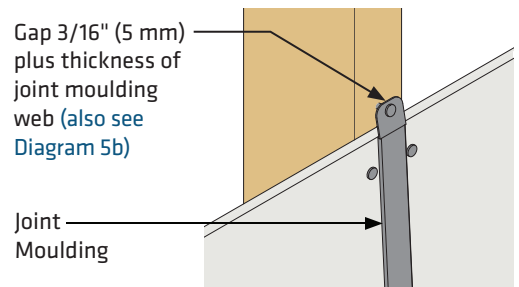


Diagram 4g

3. **If open butt joint (no caulking or moulding) for factory finished siding is selected**, a minimum 4" wide pan flashing is required, factory finished ends must be maintained on both sides of butt joint. (Diagram 4h and 6c)
4. **If open butt joint (no caulking or moulding) for primed siding is selected**, a minimum 4" wide pan flashing is required, factory primed ends must be maintained on both sides of butt joint, in addition the factory primed ends must be coated with an additional layer of high-quality water based primer per coating manufacturers requirements prior to installation of siding. (Diagram 4h and 6c)

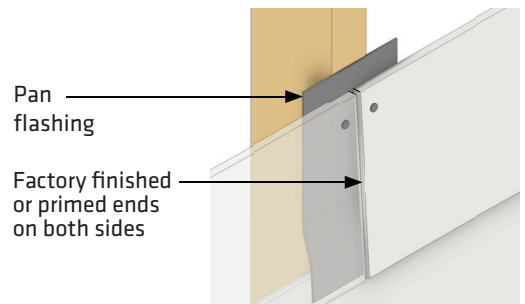


Diagram 4h

- Where siding butts window trim, door casings and masonry, etc. leave a 3/16 inch (5 mm) gap and seal.

- Painting all exposed nail heads is recommended.
- Do not overdrive nails.
 - Nail head should seat snug to face of siding, but not be overdriven to distort the siding surface. (Diagram 5a)

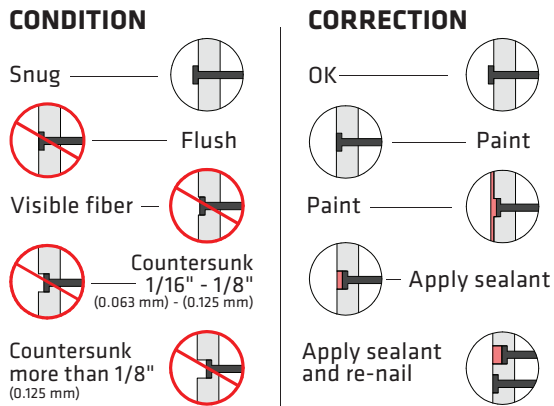


Diagram 5a

1 INCH (25 MM) ROOF & CHIMNEY CLEARANCE

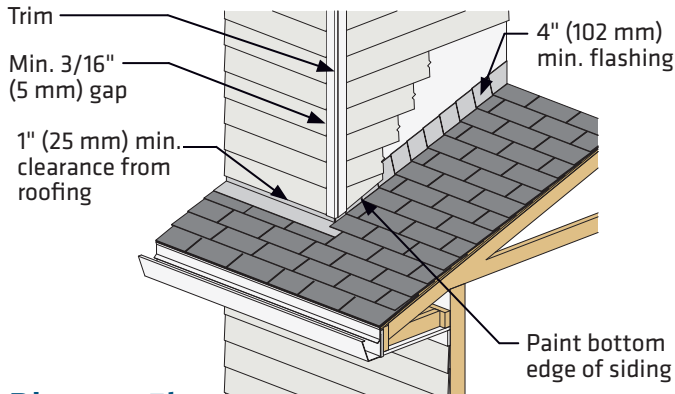


Diagram 5b

EXTERIOR WALL ASSEMBLIES

- LP BuilderSeries™ lap siding may be installed over the exterior portion of a 1-hour fire-resistive exterior wall assembly designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in in the Gypsum Association Fire Resistance Design Manual.

FIND ALL LP BUILDER SERIES™ PRODUCT LITERATURE AT LPCORP.COM/BUILDER SERIES

WARRANTY REMEDIES ARE NOT AVAILABLE IF REQUIREMENTS ARE NOT FOLLOWED.

The Louisiana-Pacific Corporation ("LP") LP BuilderSeries™ Lap Siding (the "Products") limited warranty (the "Warranty") applies only to structures on which the Products have been applied, finished and maintained in accordance with the published application, finishing and maintenance instructions in effect at the time of application. The failure to follow such application, finishing or maintenance instructions will void the Warranty as to the portion of the Products affected by the variance (the "Affected Products").

LP assumes no liability for any loss or damage sustained by the Affected Products and is expressly released by the purchaser or owner from any such loss or liability.

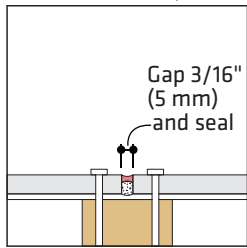
Any modification of the Warranty's application, finishing or maintenance requirements is void unless approved in writing by LP prior to application.

⚠ 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.



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CAULKED BUTT JOINT



or

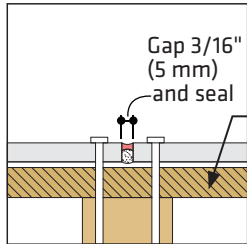
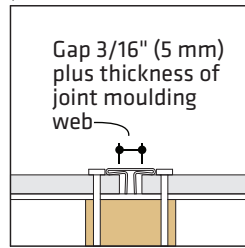


Diagram 6a

JOINT MouldING



or

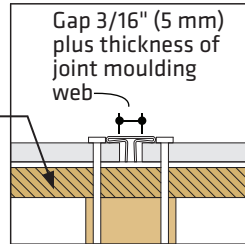
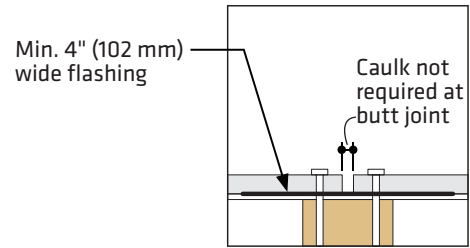


Diagram 6b

PAN FLASHING



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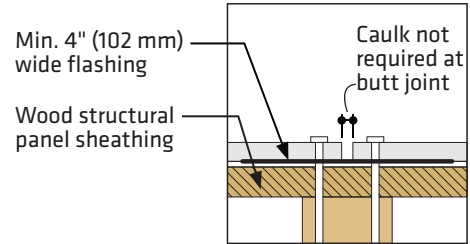


Diagram 6c

OVER DOOR AND WINDOW OPENINGS

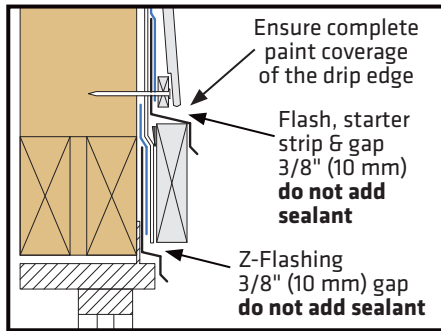


Diagram 6d

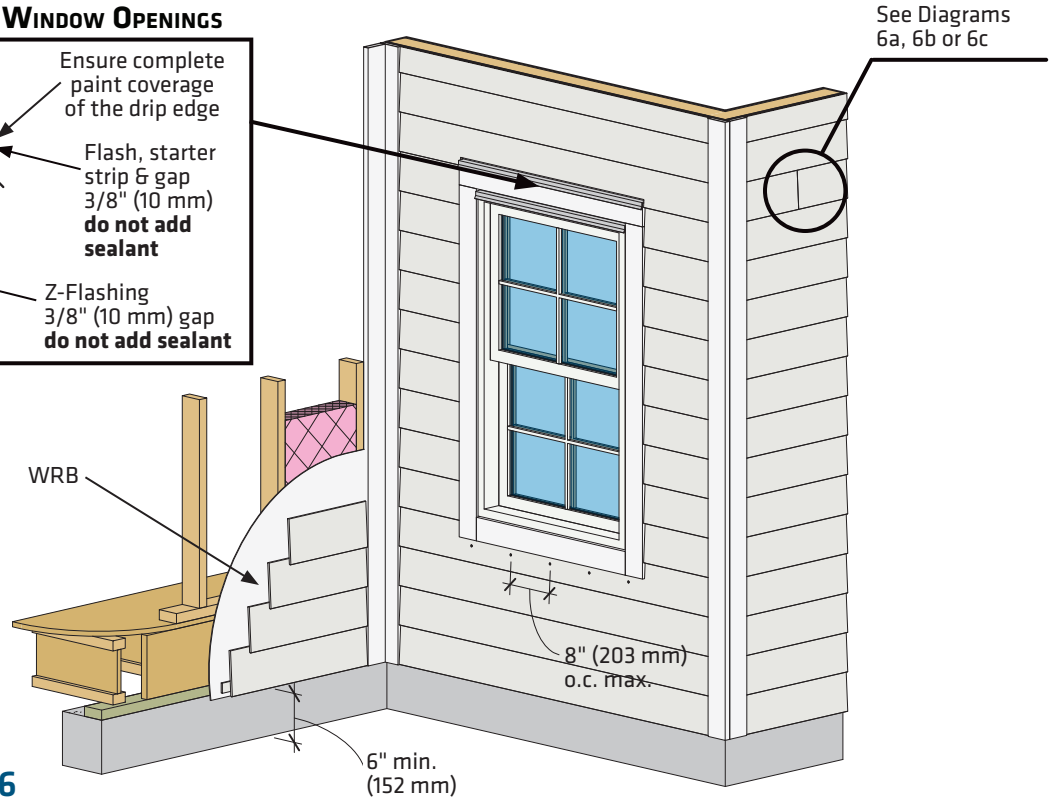
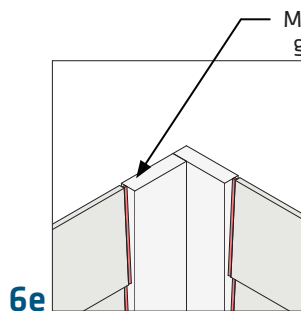
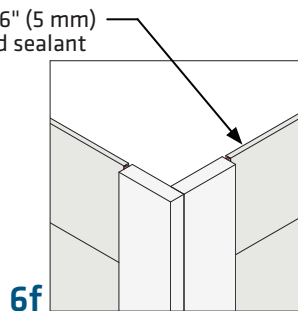


Diagram 6



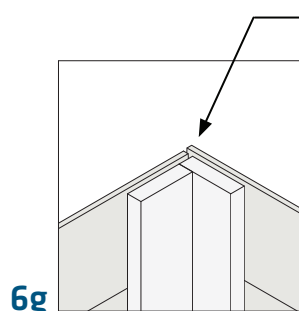
6e

INSIDE CORNER PREFERRED



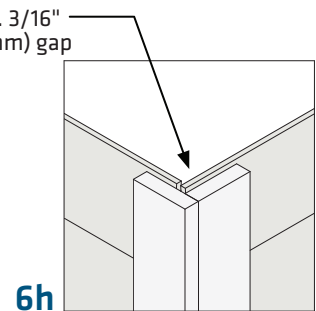
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OUTSIDE CORNER PREFERRED



6g

INSIDE CORNER ALTERNATE



6h

OUTSIDE CORNER ALTERNATE