



## 38, 76 AND 190 SERIES **SMOOTH FINISH OR CEDAR TEXTURE** PRIMED & PREFINISHED PANEL SIDING

(including SilverTech & SmartFinish)

#### GENERAL

- · At the time of manufacture, siding meets or exceeds the performance standards set forth in ICC-ES AC321 and has achieved code recognition under ESR-1301, CCMC 11826-L, APA recognition under PR-N124, 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.
- · Panel siding with SilverTech or SmartFinish is specifically for sheds and other outdoor structures where the interior wall cavities will remain permanently exposed.
- Non-grooved square edge panel siding may be installed vertically or horizontally. Shiplap edge panel siding is limited to vertical applications. (Figure 5E, 5F and 5G)
- · Minimum 6 inch (152 mm) clearance must be maintained between siding and finish grade (ground cover).
- · Siding applied adjacent to surfaces such as porches, patios, balconies, or walking surfaces (including 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.
- · 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
  - Seal ALL exposed cuts of siding and trim. Field spray applied coatings on cuts are not recommended.
  - Sealing can be accomplished by applying a paint or sealant according to the manufacturer's requirements.
- · LP does not recommend panel siding for use in ICF assemblies. If used, LP will NOT warrant for Buckling and Shrinkage.
- Use nails to fasten panel siding to structural framing.
  - Alternate fasteners such as staples are permissible when allowed by local building code and where the size, embedment, placement and number of alternate fasteners fasteners are designed by a licensed design professional and approved by the local building official.
  - LP will not consider any warranty claims for damage or performance failures to the extent caused by the use of any alternate fasteners.

## GENERAL (CONT.)

 SIDING MUST NOT BE IN DIRECT CONTACT WITH MASONRY, SUCH AS, BUT NOT LIMITED TO CONCRETE, BRICK, STONE, STUCCO OR MORTAR.

## STORAGE AND HANDLING

- · Handle prefinished panel siding with extreme care during storage and application.
- Keep siding clean and dry. Inspect prior to application.
- Store off the ground on a flat surface and under a roof or separate waterproof covering.
  - Additional support may be required to achieve a safe clearance from the ground.
  - When the covering is removed, cut all unit banding.
- · When unpackaging prefinished siding products, cut the full length of the shrink-wrap to avoid dragging and scuffing of the trim or sidings painted surface.
  - All movement or transportation of siding products on the jobsite should be done with slip sheets intact.
  - DO NOT remove slip sheets placed between the trim or siding painted surfaces until each piece is being prepared for installation.
  - Early removal of the slip sheets will leave siding products exposed to possible paint damage before installation.
- Touch up any damage to prefinished siding that may occur during application per the Finishing section in this document or per the Prefinishers specifications.

#### STUD SPACING

- Panel siding with a shiplap joint must be installed with the long dimension vertically on studs.
  - 38 and 76 Series panel siding may be installed directly to studs spaced a maximum of 16 inch (406 mm) o.c.
  - 190 Series panel siding is required when installing directly to studs spaced up to a maximum of 24 inch (610 mm) o.c.

#### MOISTURE

- · Moisture control and water vapor control are critical elements of proper housing design. Check your local building code for application procedures for handling moisture and water vapor.
- As with all wood products, do not apply engineered wood siding to a structure having excessive moisture conditions such as drying concrete, plaster or wet blown cellulose insulation.
- · Siding must not be applied to green or crooked structural framing members.
- · Siding must not be applied over rain-soaked or buckled sheathing materials.
- · Gutters are recommended for control of roof water run off.

## WATER-RESISTIVE BARRIER (WRB)

- A properly installed WRB is required behind siding. Consult your local building code for details.
- The LP SmartSide panel siding limited warranty does not expressly or implicitly cover water penetration.
  - LP does not assume responsibility for any water penetration.
- Sheds and other accessory structures where the interior wall cavities will remain permanently exposed may use LP SmartSide panel siding with SilverTech or SmartFinish and do not require a WRB, if exempt by local building code.

#### GAPS & SEALANTS

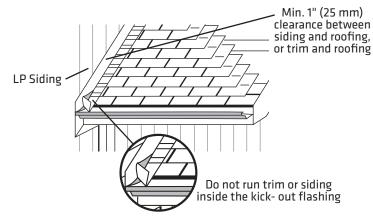
 Seal all gaps with a high-quality, non-hardening, paintable exterior sealant meeting ASTM C920, minimum Class 25.
 Follow the sealant manufacturer's instructions for application.

## FLASHING, WINDOWS, DOORS & OPENINGS

 All openings must be properly sealed or flashed in a manner that prevents moisture intrusion or buildup. Several examples that accomplish this objective are shown on the following pages.

## KICK-OUT FLASHING

- Install kick-out flashing at roof eave-to-wall intersections to direct the water into the gutter.
- Install step flashing at roof-to-wall intersections with a minimum 4 inch (102 mm) upper leg.
- Properly integrate flashing with the water-resistive 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 kick-out flashing or gutter.
- Maintain a minimum 1 inch (25 mm) clearance between the end of the gutter and the adjoining wall to allow for proper maintenance of the siding.



## TRIM

- Trim should be thick enough so the siding does not extend beyond the face of the trim.
- Trim and fascia must be applied in a manner that will not allow moisture intrusion or water buildup.
- LP® SmartSide® siding is not designed and/or manufactured to be used as trim.

## **FINISHING INSTRUCTIONS**

- Climb cut the surface of siding such that rotation of the blade cuts downward on the primed or prefinished siding surface.
- Seal all exposed surfaces, including all drip edges or where water will hang.
- Apply finish coat of paint as soon as possible, and 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.
  - DO NOT USE: stain
  - DO NOT USE: vinyl-based paint (like vinyl acetate or PVA)

## **SMOOTH FINISH Panel Siding:**

- Either flat, satin or semi-gloss coatings can be applied to smooth finish panel siding.
  - Each offers different appearance & maintenance benefits.
  - See Technical Bulletin #049 for additional information.

#### **CEDAR TEXTURE Panel Siding:**

- · For best results use semi-gloss finish.
  - See Technical Bulletin #049 for additional information.

## PREFINISHED PANEL SIDING

- Handle prefinished panel siding with extreme care during storage and application.
  - Do not remove slipsheet while handling or carrying siding on job site as doing so may damage the coating.
  - Touch-up any damage to prefinished siding that may occur during application per the instruction below or the Prefinishers specifications.
  - Touch-up paint should be used sparingly.
  - Carefully apply touch-up paint only to the areas with missing paint. Doing so will allow the touched-up areas to better blend in with the factory applied coating.
  - Apply touch-up paint to cover scratches less than 1 inch in length and less than 1/16 inch wide, exposed nail heads or small nicks.
  - Do not apply touch-up paint to spots greater than 3/4 inch in diameter.
  - Apply touch-up paint only when air, siding and paint temperature are above 50°F and will remain above 50°F for at least 24 hours after application.
  - Shake touch-up paint for 90 seconds before every use.
  - Do not use touch-up if you suspect the paint has frozen.
  - Do not apply touch-up paint to wet siding.
  - Avoid using touch-up when condensation is likely to form.
  - Avoid using touch-up when precipitation is possible.
  - Store touch-up paint between 40°F and 100°F.
- Touch-up paint is air dried, while factory applied paint is generally 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 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 5H)
  - Cut End Paint Applicator. (Figure 5J)

## **NAILING INSTRUCTIONS - DIRECT TO STUDS**

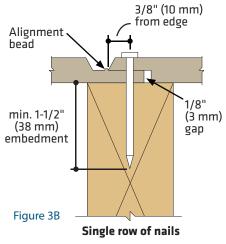
- Penetrate structural framing or wood structural panels and structural framing a minimum of 1-1/2 inches (38 mm).
- A reduction in allowable racking shear capacity is required in Table 1 of both <u>PR-N124</u> and <u>ESR-1301</u> when using panel siding with a shiplap edge.
- For 38 Series panel double nailing procedure meets wall bracing requirements for 5/16 CATEGORY shear wall design value in Table 1.
- For 76 and 190 Series panel single nailing procedure meets wall bracing requirements for 5/16 CATEGORY shear wall design value in Table 1. To meet the equivalent 3/8 CATEGORY shear wall design value, double nailing must be used.
- Align the overlap edge of the panel to the outside edge of the alignment bead on the underlap edge of the adjacent panel as shown in Figure 3B.
  - Doing so will
    maintain the
    1/8" (3 mm)
    expansion gap
    on the back side of the panel seam.

Alignment bead

min. 1-1/2"
(38 mm)
embedment

Figure 3A

Double row of nails



- DO NOT INSTALL OVERLAP EDGE ON TOP OF UNDERLAP ALIGNMENT BEAD.
- Where siding butts window trim, door casings and masonry, etc. leave a 3/16 inch gap and seal.

## **SMOOTH FINISH PANEL ORIENTATION**

- Smooth finish square edge panel siding may be installed in either the horizontal or vertical orientation.
  - For a consistent finish appearance, maintain the same panel orientation throughout the installation. (Either all panels installed vertical or horizontal.)
- Smooth finish panels have a subtle brushstroke texture, this
  texture runs parallel to the long panel direction and can be used
  to identify the panel orientation even after the panels have
  been reduced in size.
  - See photos with directional arrows to familiarize yourself with this feature before beginning installation. (Figure 3C)

## SMOOTH FINISH PANEL ORIENTATION (CONT.)

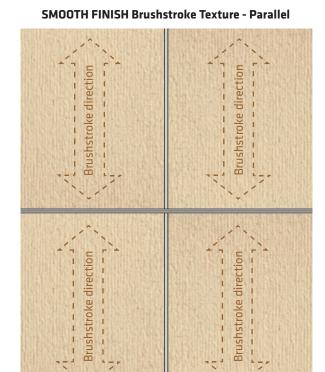


Figure 3C

• **DO NOT** installing panel siding with brushstroke running in different directions. (Figure 3D)

## **SMOOTH FINISH Brushstroke Texture - NOT Parallel**

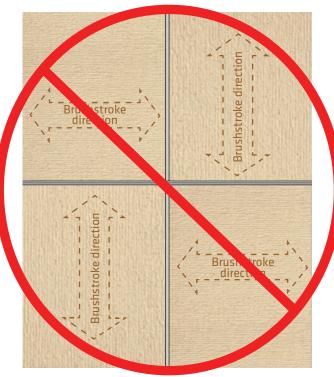


Figure 3D

## NAILING INSTRUCTIONS - DIRECT TO STUDS (CONT.)

- · In braced wall assemblies:
  - Use a minimum (0.113 inch shank diameter) hot-dip galvanized (ASTM A153) or equivalent nail for 38 Series and 76 Series panel siding.
  - Use a minimum (0.131 inch shank diameter) hot-dip galvanized (ASTM A153) or equivalent nail for 190 Series panel siding.
  - When using panel siding as both wall bracing and siding consult Table 1 of APA Product Report PR-N124 or ICC-ES Evaluation Report ESR-1301 for fastener spacing; or consult a design professional.
- · In non-braced wall assemblies:
  - 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 PR-N124 or ESR-1301.

## ALTERNATIVE FASTENING OPTION OVER SIP ASSEMBLIES OR WOOD STRUCTURAL PANEL WALL SHEATHING (WSP)

- WSP wall sheathing must be a minimum 7/16 Category with an APA Trademark that contains the consensus Standard DOC PS 2.
- Panel siding must be fastened with:
  - Minimum (0.092 inch shank diameter) hot-dip galvanized ring shank nail, fastened in a grid a minimum of 8 inches (203 mm) o.c. up to a maximum 16 inches (305 mm) o.c. grid depending on the wind pressure, wind speed and wind exposure category limitations in APA Product Report PR-N124, Table 5a or 5b.
  - Fastener length must be long enough to fully penetration WSP wall sheathing by at least 1/4 inch (6 mm). Ensure that the ring shanks of the nail fully engage the WSP sheathing.

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

- 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.
  - 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.

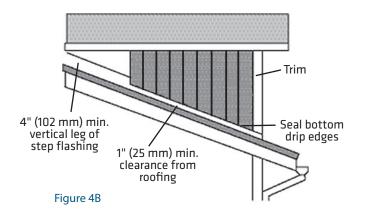
# PANEL SIDING INSTALLED OVER FOAM SHEATHING (RIGID FOAM INSULATION) UP TO 1 INCH (25 MM) THICK

- · Siding may be installed over low-compression foam sheathing.
- Panel siding may be nailed directly over foam sheathing up to 1 inch (25 mm) thick without a reduction in the allowable racking shear capacity (wall bracing capacity).

## PANEL SIDING INSTALLED OVER FOAM SHEATHING (RIGID FOAM INSULATION) GREATER THAN 1 IN (25 MM) THICK

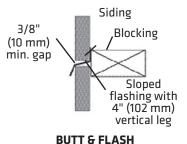
- When panel siding is NOT used as wall bracing, refer to IRC Chapter 7 on Wall Covering for prescriptive siding attachment over foam sheathing up to 4 inch (102 mm) thick direct to wood framing or cold-formed steel framing.
  - Section 703.15.1 for minimum fastening requirements over foam sheathing 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 framing.
  - Section 703.16.2 for furring minimum fastening requirements over foam sheathing into steel framing.
- 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.

## 1 INCH (25 MM) ROOF-TO-WALL OR CHIMNEY INTERSECTION



## PANEL SIDING JOINT DETAILS

## **HORIZONTAL WALL JOINTS**



## Figure 4C

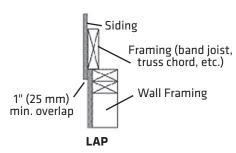
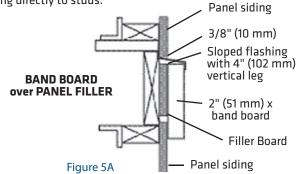


Figure 4E

## PANEL SIDING JOINT DETAILS (CONT.)

#### **HORIZONTAL BANDBOARD**

For multi-story buildings, make provisions at horizontal joints for "settling" shrinkage of framing, especially when applying siding directly to studs.



## **SILL PLATE OPTIONS**

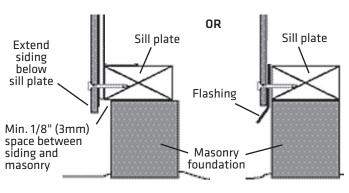
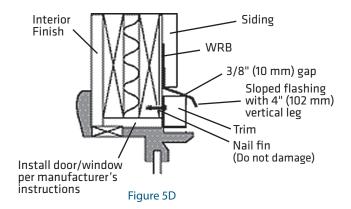
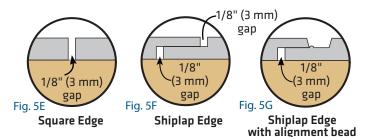


Figure 5B Figure 5C

## Space & Flash Above Doors & Windows



## PANEL EDGES AVAILABLE: SQUARE EDGE, SHIPLAP EDGE AND SHIPLAP EDGE WITH ALIGNMENT BEAD



## **TOUCH-UP KIT**



LP SmartSide panel siding is accepted by the State of California as category 8140- Exterior Wall Siding and Sheathing for Wildland Urban Interface (WUI) applications. For WUI compliance, install panel siding in accordance with Louisiana-Pacific's printed application instructions with the addition of a paintable fire retardant sealant [UL Listed fire caulk, nominal 1/4 inch (6 mm) bead] in the vertical joint, and using an enhanced nailing pattern of 3 inch (76 mm) o.c. perimeter nailing and 8 inch (203 mm) o.c. field nailing. Look for the California State Fire Marshal Office label on LP SmartSide panel siding.

The Louisiana-Pacific Corporation ("LP") LP SmartSideSiding (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.

For a copy of the warranty or for installation and technical support, visit the LP SmartSide product support Web site at:

## www.lpsmartside.com

for for additional support call 888-820-0325.

WARRANTY REMEDIES ARE NOT AVAILABLE IF REQUIREMENTS ARE NOT FOLLOWED.

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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