# **LP® ArmorStrand™ Panel\***

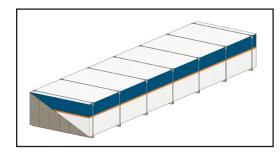
#### **APPLICATION INSTRUCTIONS**

38, 76 and 190 Series Smooth Finish Strand Substrate Panel Under Textured Finish Coatings



#### **ON SITE STORAGE**

- Store off the ground well-supported, on a flat, well-drained surface. Store products under a roof or separate waterproof covering. (See diagram 1a)
- Additional support may be required to achieve a safe clearance from the ground.
- When the waterproof covering is removed cut all unit banding.
- Keep panels clean and dry. Inspect prior to installation.



1a

### **PREPARATION**

#### General

- At the time of manufacture, LP® ArmorStrand™ panel meets or exceeds the performance standards set forth in ICC-ES Acceptance Criteria AC321 and has achieved code recognition under the ICC-ES Evaluation Report ESR-1301, and HUD recognition under HUD-MR-1318. For copies of ESR-1301, visit <a href="http://lpcorp.com/resources/product-literature/">http://lpcorp.com/resources/product-literature/</a> or <a href="http://www.icc-es.org/reports/pdf">http://www.icc-es.org/reports/pdf</a> files/ICC-ES/ESR-1301.pdf.
- LP ArmorStrand panel may be used as bracing method WSP for conventional wood-framed walls as specified in 2015 IRC Section R602.10.4.
- LP AmorStrand panel is a full thickness DOC PS 2 compliant panel as shown in the APA Trademark. Allowable Shearwall Design values can be based on Table 4.3A of the 2015 Edition of SDPWS.
- Minimum 6 inch clearance must be maintained between panel and finish grade.
- · Panel applied adjacent to porches, patios, walks, etc. must have a clearance of at least 1 inch above any surface.
- Minimum 1 inch clearance at intersection with roof line.
- All exposed wood substrate must be finished in a manner that prevents moisture intrusion and water buildup.
- When using wet blown cellulose insulation, adequate drying time must be allowed prior to enclosing the wall cavity.
- Do not use staples.
- LP ArmorStrand panel must not be in direct contact with masonry, concrete, brick, stone, or mortar.

### **Stud Spacing**

• 38 Series and 76 Series LP ArmorStrand panel must be installed on 16 inch o.c. framing only. When installing on 24 inch o.c. framing, 190 Series LP ArmorStrand panel is required.

#### **Trim**

- LP® SmartSide® trim is recommended. The LP SmartSide siding limited warranty does not provide a remedy for damage caused by other trim or foam accent products.
- Trim must only be installed over LP ArmorStrand panel.
- Trim and fascia must be applied in a manner that will not allow moisture intrusion or water buildup.

<sup>\*</sup> Also know as LP® SmartSide® Strand Substrate Panel Siding

# LP ArmorStrand Panel

#### **PREPARATION**

#### **Water-Resistive Barrier**

- A properly installed breathable water-resistive barrier is required behind the LP®ArmorStrand™ panel.
- Consult your local building code for details.
- LP will assume no responsibility for water penetration.

### **Gaps and Sealant**

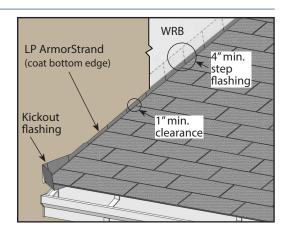
• Seal all gaps with textured finish coatings or an exterior-quality, non-hardening, paintable sealant. Use Class 25 or higher exterior sealant meeting the ASTM C920 Standard Specification for Elastomeric Joint Sealants. Follow the sealant manufacturer's instructions for application.

#### **Moisture Control**

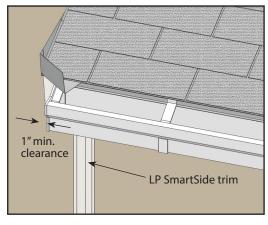
- Moisture control and moisture vapor control are critical elements of proper housing design and construction. Check your
  local building codes for application procedures for handling moisture and water vapor in your area.
- Follow all applicable building code specifications relating to prevention of moisture intrusion into the wall assembly. LP ArmorStrand panel is a wood product, and, as with all wood products, must be kept free from excessive moisture. Products subject to the following conditions will be excluded from warranty coverage: Lack of proper ventilation; exposure to constant or repetitive sources of water such as sprinklers, condensation, inadequate flashing; improper sealing; or failure to follow common building practices that prevent moisture intrusion into the wall system may cause damage.
- As with all wood products, do not apply LP ArmorStrand panel 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 panel.
- · Gutters with kick-out flashing and eave drip edge are recommended for control of roof water run off.

#### **Water Runoff Control**

- Properly installed flashing materials will help direct water away from common water collecting areas.
- All flashing material shall be metal or another durable material that under normal outdoor environmental conditions will last for a period of not less than 50 years.
- All flashing materials must have a minimum 4 inch upper leg.
   Add a 4 inch wide adhesive flashing to flashing legs less than
   4 inches.
- Properly integrate flashing with the secondary WRB. Use housewrap, flashing tape, kickout flashing, step flashing, Z-flashing, drip edge, gutters or other items as needed to maintain the counterflashing principle.
- Install kickout flashing to direct the water into the gutter. (See diagram 2a)
- Install step flashing that has a minimum 4 inch upper leg. (See diagram 2a)
- Maintain a minimum 1 inch clearance between the end of the gutter and the adjoining wall to allow for proper maintenance of the siding. (See diagram 2b)
- Do not extend the siding or trim into the kickout flashing or gutter.



2a



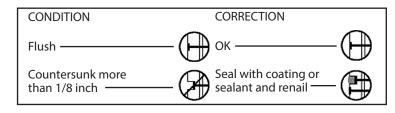
2b

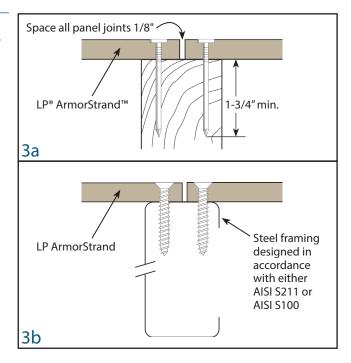
#### **Fastening Instructions**

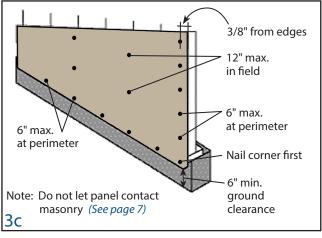
- Use minimum 8d (0.131 inch diameter shank), hot-dipped galvanized (ASTM A153 or equal) nail with a 0.281 inch diameter head for 38 Series and 76 Series panels when fastening to wood framing. Do not use electroplated fasteners.
- Use minimum 10d (0.148 inch diameter shank), hot-dipped galvanized (ASTM A153 or equal) nail with a 0.312 inch diameter head for 190 Series panels when fastening to wood framing. Do not use electroplated fasteners.
- Fully penetrate structural framing a minimum of 1-3/4 inches. (See diagram 3a)
- Panels may be attached to code-approved corrosion resistant steel stud framing with minimum #8 hot dipped galvanized, tapered head, self-drilling screw with a minimum head diameter of 0.270 inch. (Consult your local code for additional fastening and structural requirements.) (See diagram 3b)
- Fastening (nail or screw) schedule is 6 inches maximum along edges and 12 inches maximum at intermediate framing in the field of the panel. (See diagrams 3c and 4a)
- Panels must be installed vertically. All edges must be supported with blocking or framing. (See diagram 4b)

#### Caution

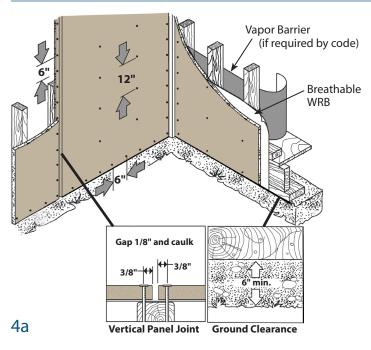
- 38 Series and 76 Series panels must be installed on framing spaced no greater than 16 inch o.c. When installing on 24 inch o.c. framing a 190 Series panel is required.
- Backside of panel must not come in contact with masonry foundation. (See page 7)
- Do not force siding into place. Maintain the illustrated 1/8 inch space at the joint to allow for expansion while the panel equilibrates with the local environment. (See diagram 3a and 3b)
- Do not overdrive nails.

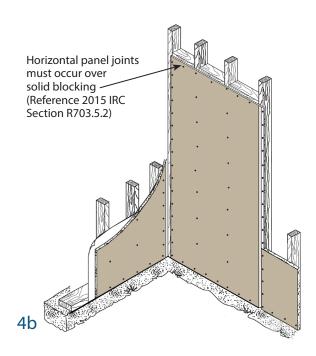






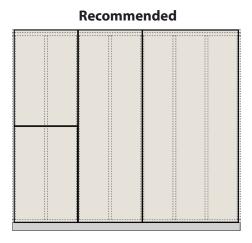
### **Spacing and Clearances**

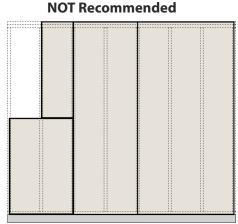




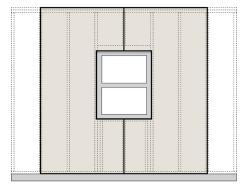
#### **Panel Size Limitations**

- To use the full strength of panels, avoid installing panel pieces that span less than 24 inches in any direction.
- Do not piece in scrap material when it can be avoided.
- Design professionals may reference APA D510C Panel Design Specification Section 4.5.5.
- Around windows and doors install panels in a manner that will create the least amount of seams.
- Avoid adding horizontal seams when possible.

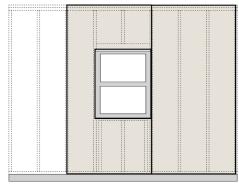




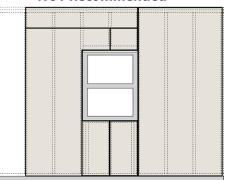




Recommended



**NOT Recommended** 

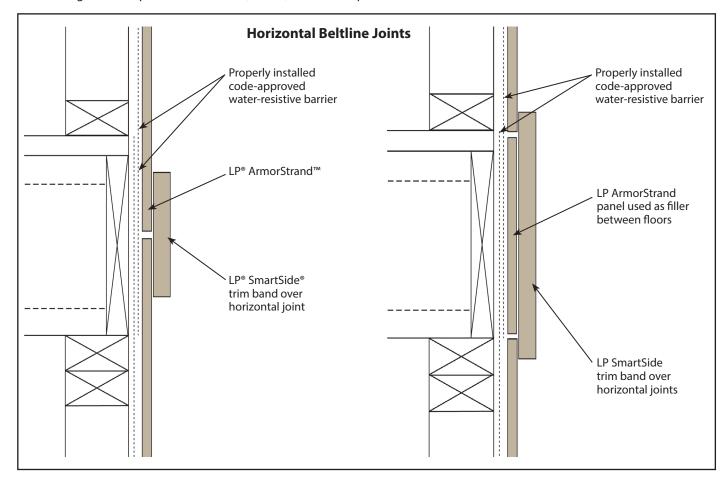


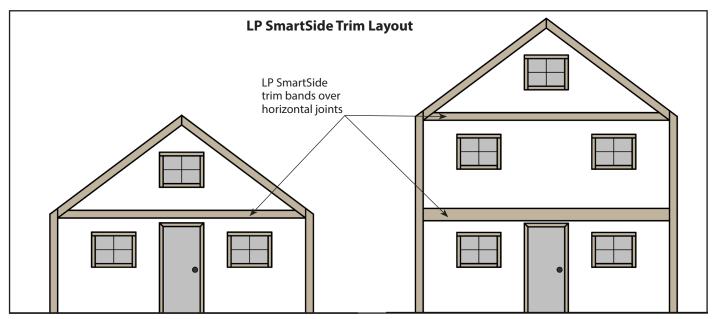
# **LP ArmorStrand Panel**

## **INSTALLATION**

### **Horizontal Joint Details**

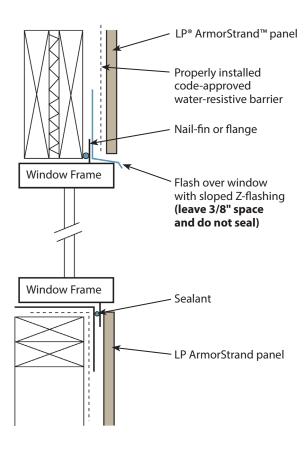
- Finish all wall joints according to the texture finish coating manufacturer's installation guide and specifications.
- For multi-story buildings, make provisions at horizontal joints for settling and shrinkage of framing.
- Trim bands are required over horizontal panel seams.
- When using 76 Series panels utilize 8 foot, 9 foot, and 10 foot panel sizes as needed to minimize horizontal seams.

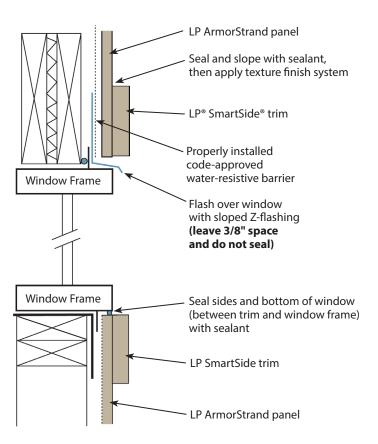




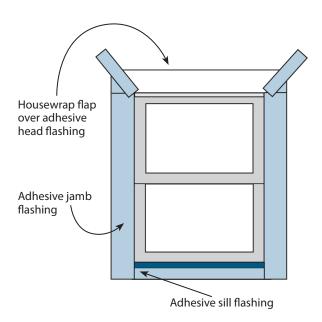
#### **Doors, Windows and Flashing**

• Install windows and doors according to the window and door manufacturer's instructions.





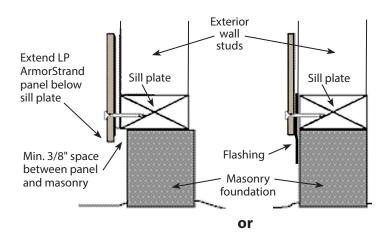
- Apply flashing around windows per the window and flashing manufacturers' instructions.
- Properly install and flash window according to the flashing, housewrap, and window manufacturers' specifications.
- Note: Install and flash window and other wall penetrations prior to applying the LP ArmorStrand panel.
- Properly flash all wall penetrations and integrate flashing materials with the water-resistive barrier.

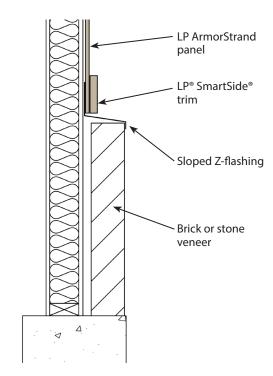


### **Siding Must Not be in Contact with Masonry**

 Provide a capillary break between LP® ArmorStrand™ panel and masonry foundation. Use a minimum 3/8" space or flashing between the materials. When using flashing, use a straight flashing or roll-on adhesive flashing to reduce potential hazard from protruding edges.

#### LP®ArmorStrand™ Panel at Foundation





LP ArmorStrand Panel Adjoining Brick or Stone Veneer

### **Finishing Instructions**

• Refer to the textured finish coatings manufacturer's installation guide and specifications.

DO NOT USE WITH STANDARD PAINT FINISHES. THIS SIDING IS SPECIFICALLY ENGINEERED FOR TEXTURED ACRYLIC FINISHES.

#### **LIMITED WARRANTY**

The Louisiana-Pacific Corporation ("LP") LP® ArmorStrand™ (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. Products affected by a failure to follow such application, finishing or maintenance instructions ("Affected Products") will be excluded from coverage under the Warranty.

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

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

For a copy of the warranty or installation and technical support, visit the LP Web site at: WARRANTY REMEDIES ARE NOT AVAILABLE IF REQUIREMENTS ARE NOT FOLLOWED.

# www.lpcorp.com

or for additional support call 800-450-6106

**Cal. Prop 65 Warning:** Use of this product may result in exposure to wood dust, known to the State of California to cause cancer.



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> www.lpcorp.com www.lpsmartside.com

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