



WeatherLogic[®]

AIR & WATER BARRIER

INSTALLATION MANUAL





WeatherLogic®

AIR & WATER BARRIER

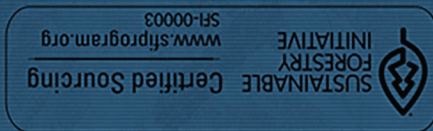
PRODUCT OVERVIEW

The LP WeatherLogic® panel is a water-resistive overlay permanently bonded to an LP OSB that is APA Structural I Rated Sheathing. Edges are sealed to reduce water intrusion into the panel. Seams between panels are sealed with LP WeatherLogic® Seam & Flashing Tape, a pressure-sensitive, acrylic-based tape specially formulated to create an effective, water-resistive air barrier for the structure.

LP engineered wood panels are dimensionally stable with consistent density and thickness that form the foundation of a strong building envelope.

The LP WeatherLogic system has been rigorously tested and passes widely recognized ASTM tests for strength, durability and water/air barriers. The product is covered by APA Product Report® PR-N138 and Intertek® code compliance research report CCRR-0319.

For more product information, visit LPCorp.com/WeatherLogic. For an installation video guide and other installation tips, please visit LPCorp.com/InstallWeatherLogic.



**APA PR-N138
INTERTEK CCRR-0319**



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TESTING AND CERTIFICATIONS

Property	Performance Standard	Test Results
Performance category & Panel grade	PS 2	7/16 through 5/8 Structural I Rated Sheathing
Water vapor transmission	ASTM E96 – Method B	5.35 perms
Air barrier assembly test	ASTM E2357	< 0.04 cfm/ft ² at 0.3 inch w.g. (<0.20 L/s·m ² at 75 Pa)
Tape performance	AAMA 711-13	Approved
Water resistance	ASTM D2247	Pass
Water penetration	ASTM E331	Pass

STORAGE AND HANDLING

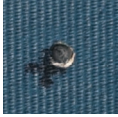


- Store LP WeatherLogic® panels off the ground, well-supported, on a flat surface and under wrap or under a roof.
- Do not stack higher than four units. Space unit stacks a minimum of 6" on all sides.
- LP WeatherLogic panels are packaged with a weather-resistant unit cover to provide protection on the jobsite prior to installation. Replace cover over unused portion of panels. Keep panels clean and dry. Inspect prior to application.
- If possible, store LP WeatherLogic Seam & Flashing Tape indoors, in a conditioned environment, to avoid temperature extremes.

GENERAL INFORMATION - PANELS

- LP WeatherLogic panels are sized nominally to 4' x 8', 4' x 9' and 4' x 10' (reduced 1/8" to allow for proper spacing during installation). Custom lengths may be available as special order.
 - LP WeatherLogic panels shall be designed and installed as wall and roof sheathing in accordance with the appropriate Performance Category.
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GENERAL INFORMATION - PANELS (CONTINUED)

- Comply with all OSHA and local safety code guidelines. Wear skid-resistant shoes when installing LP WeatherLogic roof panels and roofing.
- Install LP WeatherLogic® panels in accordance with all code requirements for untreated sheathing.
- Install LP WeatherLogic panels with the water-resistant barrier facing outward.
- Be careful not to overdrive fasteners. Cover overdriven fasteners with a 4" length of LP WeatherLogic Seam & Flashing Tape centered over the nail. (LP defines overdriven as when the head of the fastener breaks the face of the panel so that wood is visible.) Optionally, overdriven nails can be sealed with a liquid-applied flashing (see GENERAL INFORMATION - TAPE). 
- Minor chips, cuts and scratches are to be repaired by covering them with a length of LP WeatherLogic tape, using the squeegee to apply securely. The tape should be long enough to extend 2" past the chip, cut or scratch. Optionally, seal with a liquid-applied flashing (see GENERAL INFORMATION - TAPE).
- The LP WeatherLogic system must be covered with exterior cladding or roofing within six months following initial panel installation. Prior to cladding, inspect all taped seams and flashing to ensure proper application throughout. Repair or replace any misapplied or damaged tape prior to cladding.
- For wall applications where more than one layer of water-resistive barrier (WRB) is required (e.g. stucco), install additional WRB layers over LP WeatherLogic system. LP WeatherLogic Air & Water Barrier is only the first WRB layer.
- For roof applications where more than one layer of underlayment is required, install a layer of approved underlayment over the LP WeatherLogic system. LP WeatherLogic Air & Water Barrier is only the first layer of underlayment.
- The LP WeatherLogic system complies with the 2020 Florida Building Code as the underlayment for roof coverings in accordance with Sections 1507.1.1.1 Method 3 and 1507.1.1.3 Method 2 of the 2020 FBC, Building; and Sections R905.1.1.1 Method 3 and R905.1.1.3 Method 2 of the 2020 FBC, Residential.
- Where an ice barrier is required, install the ice barrier directly to the LP WeatherLogic system. Use the WeatherLogic Seam & Flashing Tape to seal the upper edge of the ice barrier to the panel. LP WeatherLogic Air & Water Barrier does not replace an ice barrier.

GENERAL INFORMATION - TAPE

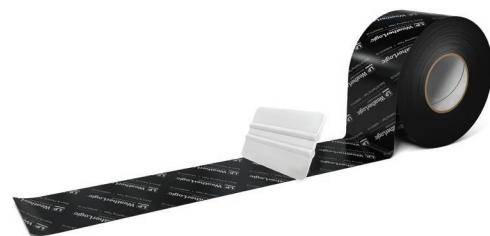
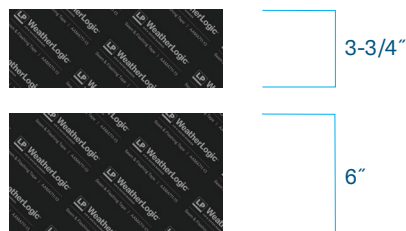
LP WeatherLogic® Seam & Flashing Tape is required to seal the panel joints (seams) of the LP WeatherLogic system. The tape can also be used for basic flashing such as window and door openings, straight material transitions, straight-sided penetrations that have flanges and boots for pipe penetrations. However, other code-approved materials may be used for flashing. Self-adhering flashing must be certified to AAMA 711-13 and liquid-applied flashing must be certified to AAMA 714-15 (or newer), or use a flexible flashing evaluated to ICC-ES Acceptance Criteria for Flexible Flashing Materials (AC148).

- Use only LP WeatherLogic tape to cover the seams between adjacent panel edges. Tape may be either 3-3/4" or 6" wide.
- Install LP WeatherLogic tape only when outside temperatures are greater than 14° F (-10° C). Wipe away any debris and foreign substances from the water-resistant barrier surface, and ensure the surface is clean, dry and free from frost before taping.
- Place LP WeatherLogic tape carefully. Center the tape over the panel seam. The tape may be off-center up to 1/2".
- The LP WeatherLogic tape is pressure sensitive. While installing a piece of tape *and prior to applying pressure to the tape*, the tape may be immediately peeled back once to reposition.
- Once each piece of tape is in its final position, use included squeegee to firmly smooth tape to adhere, removing wrinkles and bubbles. Streaks on the tape after use of the squeegee indicate proper adherence.
- The tape can take up to 24 hours to reach maximum adhesion, depending on temperature.
- If an edge of LP WeatherLogic tape does not seal for any reason, peel off and replace with a fresh piece of tape.
- Install LP WeatherLogic tape, working from bottom toward top, overlapping from above to create a shingle effect.

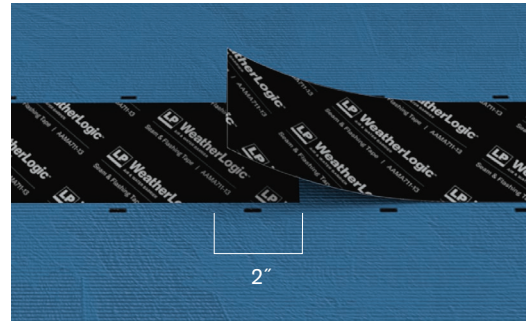
NOTE: When panel seam tape intersects with tape used as flashing, follow the rules in SEAM TAPE - LAPPING to properly shingle the tape.

SEAM TAPE AVAILABILITY

LP WeatherLogic tape rolls are available in 3-3/4" and 6" widths. The 6" width is recommended for window flashing, especially when wider trim products are used. The 6" width is also preferred for inside and outside corners on walls and for ridge, hip and valley seams. A squeegee is enclosed in every box to help firmly adhere the tape.



SEAM TAPE - LAPPING



- Use one continuous piece of LP WeatherLogic® Seam & Flashing Tape to cover seams where possible. If needed to complete a straight run, overlap ends of tape at least 2".
 - Vertical seams: bottom end of tape above overlaps top end of tape below.
 - Horizontal seams: tape may lap left-to-right or right-to-left.



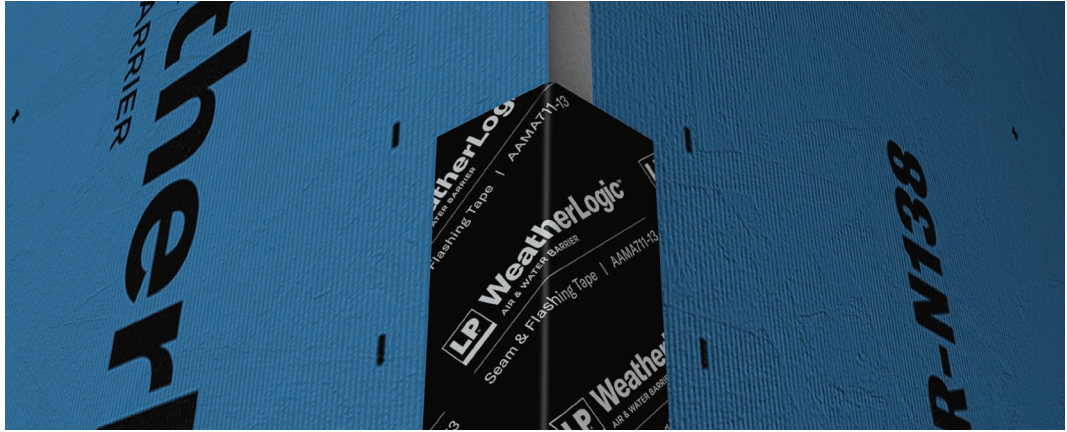
- Where horizontal and vertical seams intersect, lap tape as follows:
 - Vertical seam crosses horizontal seam: vertical tape overlaps horizontal tape or shingle tape as shown.
 - Vertical seam terminates at horizontal seam:
 - ⊥ lap: vertical tape overlaps horizontal tape.
 - ⊤ lap: horizontal tape overlaps vertical tape.
 - Horizontal seam terminates at vertical seam (⊢ or ⊣): vertical tape overlaps horizontal tape.
 - For tape terminating under an overlapping tape, the end of the terminating tape should extend at least 1" under the overlapping tape. Do NOT extend more than halfway under the overlapping tape to ensure sufficient surface area for the overlapping tape to bond to the panel.

PANEL INSTALLATION - WALLS



- LP WeatherLogic® panels may be installed vertically or horizontally on walls.
- Space all panel edges 1/8".
- Attach panels to wall studs in accordance with project specifications. In the absence of project specifications, follow typical residential wall sheathing nailing:
 - Use minimum 6d (2" x 0.113" diameter) common nails for panels up to 1/2" thick, 8d (2-1/2" x 0.131" diameter) common nails for panels up to 5/8" thick. Do not use nails larger than 10d common (3" x 0.148" diameter). Staples and other code-approved fasteners may be used as approved by the building official.
 - Space nails 6" oc along panel edges and 12" oc in the field of the panel. Minimum permitted nail spacing is 3" oc.
 - Place nails 3/8" from all panel edges.

SEAM TAPE - CORNERS



Outside corners:

- 6" LP WeatherLogic® Seam & Flashing Tape is recommended. Center tape over corner. Fully adhere half of tape width to one side and then tightly wrap over corner to adhere tape to adjacent side.
- Alternatively, two layers of 3-3/4" LP WeatherLogic tape can be used.
 - Adhere first layer of tape 2" to one side and fold over the corner.
 - Adhere second layer of tape 2" to the opposite side and fold over corner to overlap first tape.



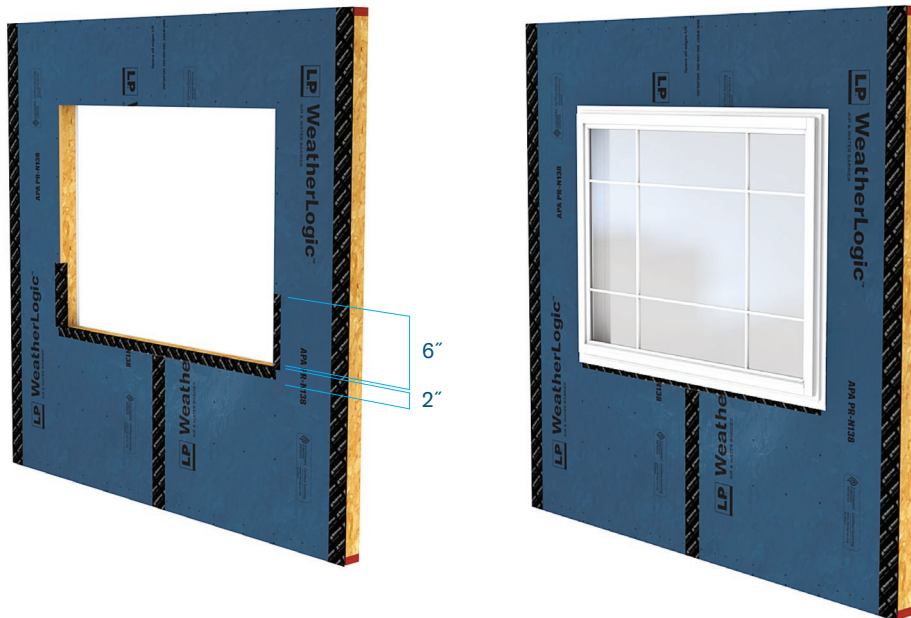
Inside corners:

- 6" LP WeatherLogic Seam & Flashing Tape is recommended. Center tape in the corner. Use the included squeegee to tightly push and crease the center of the tape fully into the corner. Adhere tape to both sides of corner.
- Alternatively, two layers of 3-3/4" LP WeatherLogic tape can be used.
 - Apply first layer of tape to one side of corner, leaving 1" to adhere to opposite side. Use squeegee to crease and tightly push the tape into the corner.
 - Apply second layer of tape to other side of corner, leaving 1" to adhere over first tape on opposite side. Use squeegee to crease and tightly push the tape into the corner.

WINDOW INSTALLATION

Windows with nailing flanges:

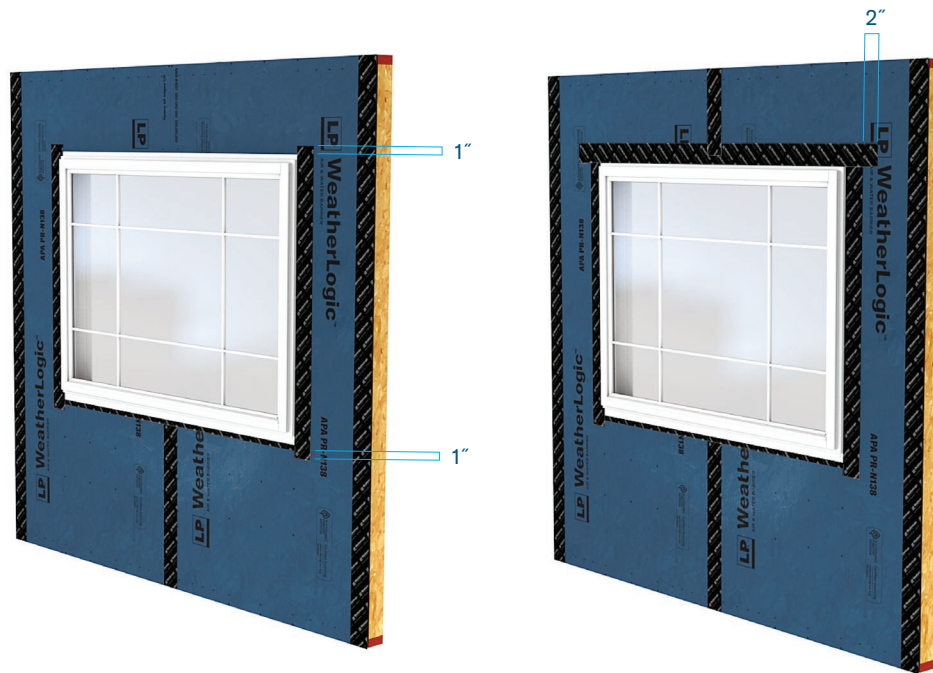
- Install pan flashing:
 - 6" LP WeatherLogic® Seam & Flashing Tape is recommended.
 - Cut tape at least 12" longer than the length of the sill to wrap a minimum of 6" up the jambs.
 - Align the tape on the sill so that approximately 2" of the tape can be folded onto the face of panel. Fit the tape tightly into the corners using the squeegee.
 - At the corners of the sill and jambs, carefully cut the overhanging portion of tape along the folds up to the face of the panel. Do NOT overcut. Fold the overhanging tape onto the faces of the LP WeatherLogic panel.
- Install the window in accordance with the window manufacturer's instructions.



WINDOW INSTALLATION (CONTINUED)

Flash window:

- Apply LP WeatherLogic® Seam & Flashing Tape to both jamb flanges. Center tape on flanges and extend approximately 1" past the head flange and at least 1" past the sill flange. Do NOT extend the tape more than 1-1/4" above the head flange to ensure sufficient surface area for the overlapping tape (next step) to bond to the panel.
- Apply tape across the head flange of the window. Extend at least 2" past the top ends of the jamb flange tape.
- If a drip edge is installed at the head of the window, apply tape to seal the top of the drip edge. The tape should extend at least 2" past each end and at least 2" onto the panel face and cover all fasteners used to attach the drip edge. If the fasteners are placed so that the standard 3-3/4" tape cannot cover and extend 2" onto the panel, use the 6" tape or shingle multiple rows of 3-3/4" tape so that a layer above overlaps the layer below.

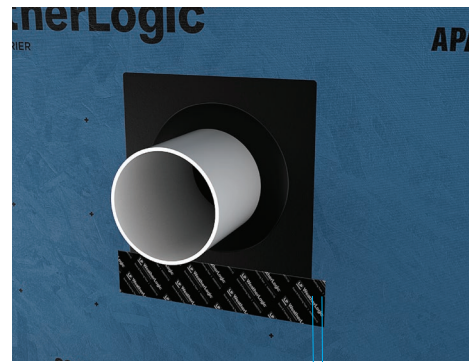
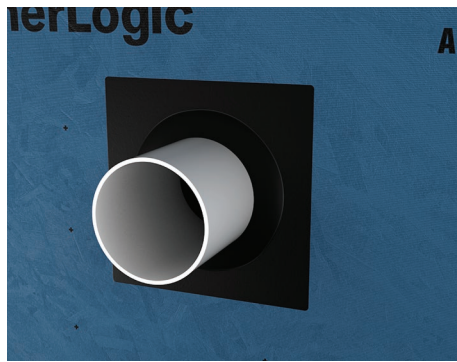


DOOR INSTALLATION



- Apply LP WeatherLogic® Seam & Flashing Tape to the jambs: Cut tape to fit the vertical length of the jamb and align so that approximately 2" of the tape can be folded onto the face of panel.
- Install the door in accordance with the door manufacturer's instructions.
- If molding is installed, seal molding to face of panel with an approved sealant.
- If a drip edge is installed at the head of the door, apply a piece of tape to extend 2" past each end of the drip edge. The tape should extend at least 2" above the drip edge onto the panel face.

WALL PENETRATIONS



Penetrations with flanges (and straight sides):

- If used as an air barrier, apply LP WeatherLogic® Seam & Flashing Tape across the bottom. Center tape on the edge of the flange and extend approximately 1" past both sides. Do NOT extend tape more than 1-1/4" past the side flanges to ensure sufficient surface area for overlapping tape (next step) to bond to the panel.
- Apply tape to both side flanges. Center tape on flanges and extend approximately 1" past the top flange and at least 1" past the bottom flange tape. Do NOT extend tape more than 1-1/4" above the top flange to ensure sufficient surface area for overlapping tape (next step) to bond to the panel. The tape can extend more than 1" below the bottom flange tape.
- Apply tape to the top flange. Center tape on the flange and extend at least 2" past both pieces of side flange tape.
- For straight-sided shapes other than rectangular, repeat the step for each "side flange," working from bottom to top of the penetration.

Penetrations without flanges (or with curved sides):

- Option 1: Use an approved flashing boot over the penetration. Secure the boot in accordance with the boot manufacturer's instructions and tape the boot to the panel with LP WeatherLogic Seam & Flashing Tape according to "Penetrations with Flanges" instructions.
- Option 2: Use a flexible ("stretch") adhesive-backed flashing tape approved to AAMA 711-13, a liquid-applied flashing certified to AAMA 714-15 (or newer) or a flexible flashing evaluated to ICC-ES Acceptance Criteria for Flexible Flashing Materials (AC148). Install in accordance with the manufacturer's instructions.

FOUNDATION TRANSITION



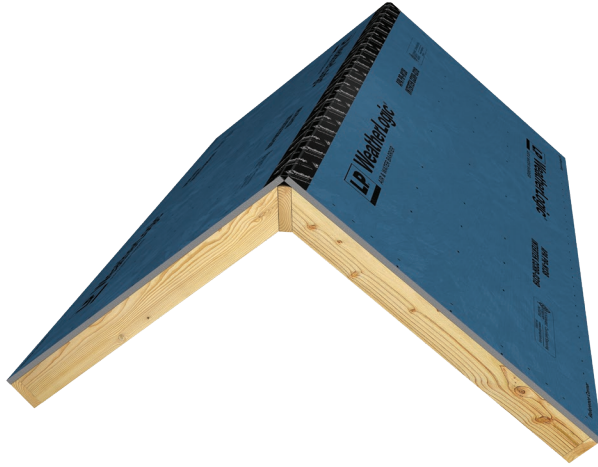
- LP WeatherLogic® panels are NOT preservative treated and must be installed with code-required clearance from the ground to the bottom edge of the panel.
- When the panel is flush with the face of the foundation, provide a 1/2" gap between the bottom edge of the panel and the foundation.
- Attach approved drip edge when required by code.
- Apply LP WeatherLogic® Seam & Flashing Tape to seal the top of the drip edge. The tape should extend at least 2" past each end and extend at least 2" onto the panel face and cover all fasteners used to attach the drip edge. If the fasteners are placed so that the standard 3-3/4" tape cannot cover and extend 2" onto the panel, use the 6" tape or shingle multiple rows of 3-3/4" tape so that a layer above overlaps the layer below.

PANEL INSTALLATION - ROOFS

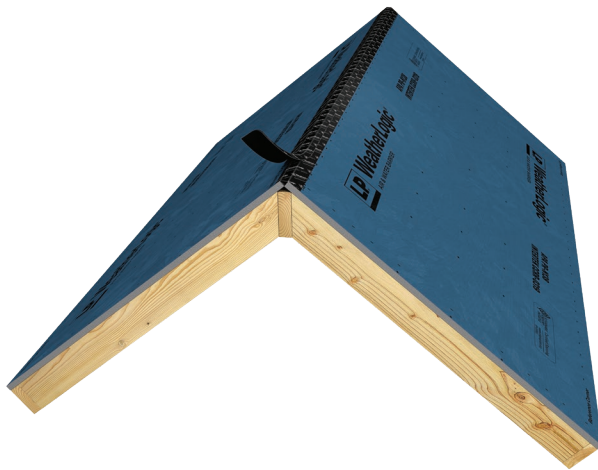


- The LP WeatherLogic® system can be used with asphalt shingles, metal roof shingles and panels, clay and concrete tiles, slate and slate-type shingles, and wood shingles and shakes. Follow roofing manufacturer's instructions for installing roofing.
- Install only on roofs with a 2/12 pitch or greater as required for the roofing system.
- LP WeatherLogic panels must be installed horizontally with the long direction across the roof trusses/rafters for at least two spans.
- 7/16 Performance Category panels spanning more than 16" require the unsupported panel edges be blocked or H-clips must be installed midway between roof trusses/rafters.
- Space all panel edges 1/8".
- Attach panels to roof trusses or rafters in accordance with project specifications. In the absence of project specifications, follow typical residential roof sheathing nailing:
 - Use minimum 8d (2.5" x 0.131" diameter) common nails. Do not use nails larger than 10d common (3" x 0.148" diameter). Staples and other code-approved fasteners may be used as approved by the building official.
 - Space nails 6" oc along panel edges and 12" oc in the field of the panel. Minimum permitted nail spacing is 3" oc.
 - Place nails 3/8" from all panel edges.

SEAM TAPE - RIDGES & HIPS



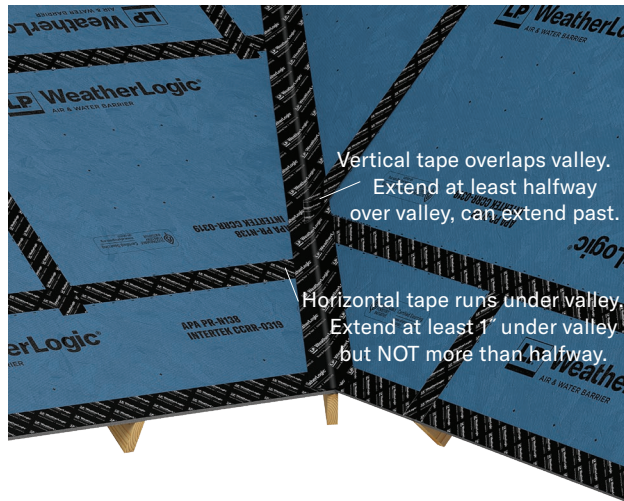
- 6" LP WeatherLogic® Seam & Flashing Tape is recommended. Center tape over ridge/hip. Fully adhere half of tape width to one side and then tightly wrap over ridge/hip to adhere tape to adjacent side.



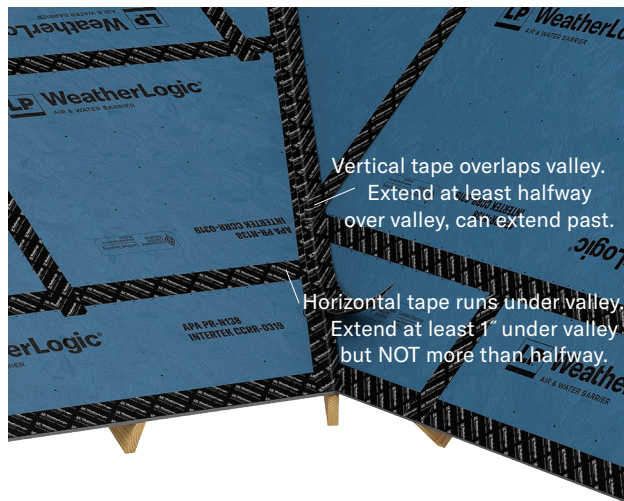
- Alternatively, two layers of 3-3/4" LP WeatherLogic tape can be used.
 - Adhere first layer of tape 2" to one side and fold over the ridge/hip.
 - Adhere second layer of tape 2" to the opposite side and fold over ridge/hip to overlap first tape.

NOTE: For continuous ridge and hip vents, cut out the tape along the ridge/hip as needed when installing the vents.

SEAM TAPE - VALLEYS

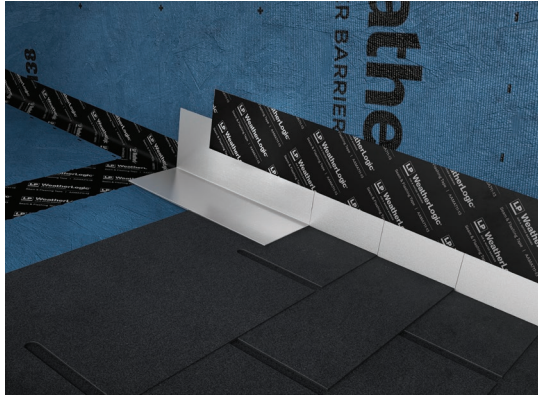


- 6" LP WeatherLogic® Seam & Flashing Tape is recommended. Center tape in the valley. Use the included squeegee to crease and tightly push the center of the tape fully into valley. Adhere tape to both sides of valley.



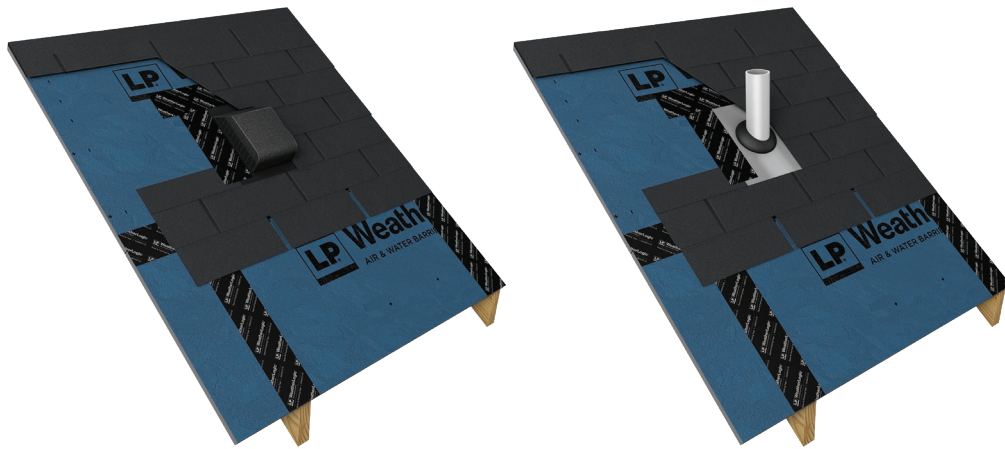
- Alternatively, two layers of 3-3/4" LP WeatherLogic tape can be used.
 - Apply first layer of tape to one side of valley, leaving 1" to adhere to opposite side. Use squeegee to crease and tightly push the tape into the valley.
- NOTE: If valley sides are uneven, apply first layer of tape to the short side.
- Apply second layer of tape to other side of valley, leaving 1" to adhere over first tape on opposite side. Use squeegee to crease and tightly push the tape into the valley.

SEAM TAPE - ROOF-WALL TRANSITIONS



- Tape roof-wall seam as an “inside corner.”
- Install flashing at roof-wall transition as required by code.
- Apply LP WeatherLogic® Seam & Flashing Tape to seal the top of the flashing. The tape should extend at least 2” onto the panel face and cover all fasteners used to attach the flashing. If the fasteners are placed so that the standard 3-3/4” tape cannot cover and extend 2” onto the panel, use the 6” tape or shingle multiple rows of 3-3/4” tape so that a layer above overlaps the layer below and covers the fasteners.

ROOF PENETRATIONS - STRAIGHT SIDES



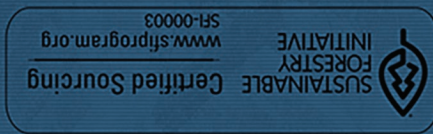
- Install vent or pipe boot per manufacturer’s instructions.
- Apply LP WeatherLogic Seam & Flashing Tape to both vent/boot side flanges. Center tape on flanges and, starting near the bottom, overlap tape on roofing so it will not be exposed after roofing is completed. Extend the tape approximately 1” past the top flange. Do NOT extend tape more than 1-1/4” above the top flange to ensure sufficient surface area for overlapping tape (next step) to bond to the panel.
- Apply tape across the top flange. Center tape on flange and extend at least 2” past both pieces of side flange tape.



WeatherLogic®

AIR & WATER BARRIER

MOISTURE MANAGEMENT TECHNOLOGY FOR A BETTER BUILD™



APA PR-N138
INTERTEK GCRR-0319

DEFEND YOUR BUILD™

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⚠ 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.

Failure to follow these installation instructions may damage the product and void the warranty as well as cause injury or death.

LPWRB0075 12/2020