



**PEEL AND STICK
UNDERLAYMENT PRODUCTS
ROOF INSTALLATION MANUAL**

ZIPSYSTEM.COM

ATTENTION: This installation guide is intended to provide general information for the designer and end user. The following guidelines will help you safely and properly install ZIP System™ peel and stick underlayment and ZIP System™ peel and stick underlayment HT. We urge you, and anyone installing this product, to read these guidelines in order to minimize any risk of safety hazards and to prevent voiding any applicable warranties. This manual is a general installation guide and does not cover every installation condition. Proper installation shall be deemed to mean the most restrictive requirement specified by (i) Huber Engineered Woods LLC (HEW), (ii) local building code applicable at the time of construction, (iii) engineer or architect of record, or (iv) the government agency having jurisdiction. You are fully and solely responsible for all safety requirements and code compliance. For additional information contact HEW. Please visit Huberwood.com for the most updated version of the document.



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SAFETY GUIDELINES: Follow all OSHA regulations and any other safety guidelines and safety practices during installation.



Use approved safety belts and/or harnesses or other fall protection equipment.



Install ZIP System™ peel and stick underlayment products only in dry conditions and on dry surfaces. Do not install in rain, snow, frost or other slippery conditions.



Wear rubber-soled or other high-traction footwear while installing ZIP System™ peel and stick underlayment products. Do not wear footwear with worn soles or heels.



Ensure the roofing surface is free from oil, chemicals, sawdust, dirt, tools, electrical cords, air hoses, clothing and anything else that might create a tripping hazard.



Install temporary toe boards along the roof sheathing surface as needed.

Dispose of product release liner immediately after removal to avoid tripping or slip hazard.

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OVERVIEW

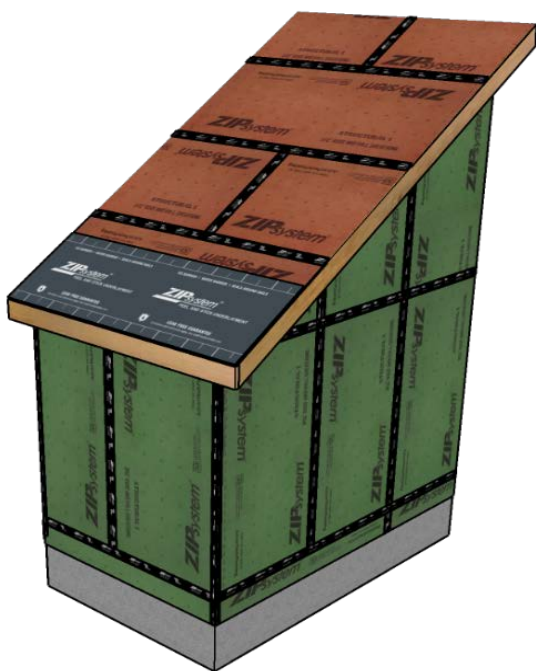
ZIP System™ peel and stick underlayment and ZIP System™ peel and stick underlayment HT (hereafter addressed as ZIP System peel and stick underlayment products unless specified) are self-adhered roofing membranes utilizing a rubberized asphalt adhesive technology. ZIP System™ peel and stick underlayment features a layer of high-density cross-laminated polyethylene film backing. ZIP System™ peel and stick underlayment HT (for use in high temperature applications) features a high-performance polymeric film backing. The products include a release liner designed to protect the membrane adhesive until time of installation and feature a pull cord that enables the liner to be split down the middle for ease of installation. ZIP System™ peel and stick underlayment products are code recognized in ICC-ES ESR-4904.

ZIP System™ peel and stick underlayment products can be used under a range of exterior roof coverings. Approved exterior roof coverings include asphalt and glass fiber mat shingles, clay and concrete tile, metal roof shingles, mineral surface roll roofing, slate and slate-type shingles, wood shakes and shingles, and metal panels¹.

¹ Consult metal roof manufacturer installation guidelines for specific underlayment requirements. Requirements may include but are not limited to the use of underlayments with high temperature performance or installation of multiple underlayment layers.

OVERVIEW

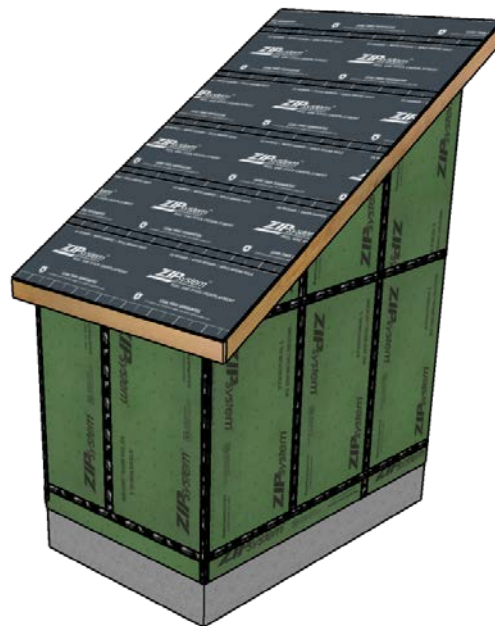
ZIP System™ peel and stick underlayment products can be used as an ice barrier for certain sloped roofs to help prevent water infiltration caused by ice dams. ZIP



System™ peel and stick underlayment products comply with ICC-ES AC48, "Self-adhered Roof Underlayments for Use as Ice Barriers," and satisfy the requirements set forth by ASTM D1970, "Standard Specification for Self-Adhering Modified Bituminous Sheet Materials Use as Steep Roofing Underlayment for Ice Dam Protection".

OVERVIEW

ZIP System™ peel and stick underlayment products can also be used as a continuous roof underlayment to help prevent water infiltration due to wind-drive rain. The products can be used to achieve a sealed roof deck where membranes conforming to the requirements of ASTM D1970 are permitted in accordance with International Residential Code (IRC) Section R905.1.1 and International Building Code (IBC) Section 1507.1.1.



ROOF FIRE CLASSIFICATIONS

Roof assemblies with ZIP System™ peel and stick underlayment products have an Underwriters Laboratories (UL) recognized Class A roof fire classification when used under Class A glass fiber mat shingles; the assemblies have a Class C roof fire classification when used under asphalt organic felt shingles (per ASTM E108/UL790).

AVAILABLE SIZES

ZIP System™ peel and stick underlayment products are available in rolls that are 3 ft. wide x 66.6 ft long. (200 ft² coverage). ZIP System™ peel and stick underlayment products weigh approximately 55 lbs. per roll corresponding to an approximate weight of 0.3 lb/ft² when installed flat.

NOTES AND LIMITATIONS

Please note the following limitations when detailing and installing ZIP System™ peel and stick underlayment products:








ZIP System™ peel and stick underlayment should be covered with the finished roof covering within 90 days of installation. ZIP System™ peel and stick underlayment HT should be covered with the finished roof covering within 120 days of installation.









Not approved for use on roofs with slopes less than 2:12.


NOTES AND LIMITATIONS


-  ZIP System™ peel and stick underlayment products will not adhere properly to substrates below 40° F. Hand-nailed button cap nails may be installed as necessary to hold the underlayment product in place in cold conditions. Do not use roofing nails or staples to attach the underlayment product to the roof deck.
-  ZIP System™ peel and stick underlayment should not be used in applications where the maximum in service temperature will exceed 180° F.
-  ZIP System™ peel and stick underlayment HT should not be used in applications where the maximum in service temperature will exceed 260° F.
-  Do not install under copper, anti-corrosive steel, or zinc metal roofing at high altitudes (above 6,000ft.) due to the low reflectivity, heat absorption and conductivity of the metals.
-  DO NOT USE ZIP System™ peel and stick underlayment products over polysulfides, flexible PVC, or resin (pitch) found in some wood plank decks.


NOTES AND LIMITATIONS


-  DO NOT USE in combination with ethylene propylene diene monomer (EPDM) or thermoplastic polyolefin (TPO) roofing membrane.
-  DO NOT USE with hot asphalt, coal-tar pitch or hot-melt roof covering components.
-  Install ZIP System™ peel and stick underlayment products flat to the structural roof deck without wrinkles that create an entry point for water (fish mouths).
-  Do not install ZIP System™ peel and stick underlayment products over an unsupported gap larger than ½ inch.
-  Do not install fasteners in areas where the ZIP System™ peel and stick underlayment product is unsupported by the roof deck.
-  ZIP System™ products are not warranted for manufactured housing applications that are built under the federal building code administered by the U.S. Department of Housing and Urban Development (HUD).

NOTES AND LIMITATIONS

 Do not use ZIP System™ peel and stick underlayment products to permanently seal around circular roof projections (plumbing vents, pipes, curved walls, etc.) A code compliant boot or other flashing material must be installed above the underlayment product for roof projections.

 Do not use ZIP System™ peel and stick underlayment products in contact with or to seal the annular space for heat-generating exhaust vents, such as dryer vents or chimney flues.

 Finished roof coverings and accessories should be installed per the manufacturer's installation instructions.

 When installing ZIP System™ peel and stick underlayment products over the entire roof deck, follow roof ventilation guidelines of the International Residential Code or International Building Code, as applicable. Always provide proper roof ventilation and insulation to reduce ice dams and minimize risk of condensation. To qualify for the ZIP System™ peel and stick underlayment product Leak Free Guarantee*, the interior side of the ZIP System® roof sheathing must be visible.

*Registration Required. Leak-Free Guarantee applies only when using a ZIP System Roof Assembly. See LeakFreeGuarantee.co for details and the definition of a ZIP System Roof Assembly.

SHELF LIFE, STORAGE, & HANDING



ZIP System™ peel and stick underlayment products have optimal initial adhesion when installed within one year from the date of manufacture. Initial adhesion is dependent on storage conditions.



Store ZIP System™ peel and stick underlayment products in the original, unopened packaging in a dry location away from dirt and debris, and out of direct sunlight if possible.



Do not store ZIP System™ peel and stick underlayment products next to a heat source.



Do not store ZIP System™ peel and stick underlayment products in an area where the ambient temperature will exceed 90° F.

GENERAL INFORMATION AND COMPATIBILITY

COMPATIBILITY WITH ZIP SYSTEM ROOF ASSEMBLY

ZIP System™ peel and stick underlayment products will adhere to all other ZIP System™ products. ZIP System™ flashing tape and stretch tape will adhere to ZIP System™ peel and stick underlayment products; however, ZIP System™ liquid flash IS NOT compatible with and will not adhere to the backing of ZIP System™ peel and stick underlayment products. Do not apply ZIP System™ liquid flash directly over ZIP System™ peel and stick underlayment products.

COMPATIBLE SUBSTRATES

ZIP System™ peel and stick underlayment products must be installed onto a clean, dry, continuous structural sloped roof deck. ZIP System™ peel and stick underlayment products are compatible with ZIP System® sheathing; oriented strand board (OSB); plywood (including pressure treated and fire treated); kiln-dried wood plank; and kiln-dried, untreated dimensional lumber. Please note, the roof deck substrate must be dry and free of any dirt and debris at time of installation. The roof deck must not have voids or damage.

SEALANTS

Use sealants that are recommended by the manufacturer to be compatible with underlayments that have a polyethylene film surface. Perform a field adhesion test in an inconspicuous area prior to use of sealants or roof cement to confirm compatibility with ZIP System™ peel and stick underlayment products. The use of solvent-based sealants; those that cure through solvent evaporation; and hot asphalt, tar or hot-melt sealants in contact with ZIP System™ peel and stick underlayment products is not permitted.

REPAIRING AND PATCHING

When installing ZIP System™ peel and stick underlayment products, use firm hand pressure to ensure the membrane is fully adhered to the substrate. If holes, fish mouths (avenues for water to get underneath the membrane), tears, or damage to the membrane occur, cover the area with a patch of ZIP System™ peel and stick underlayment product that covers the area 6 inches beyond the damage in all directions and apply firm hand pressure.

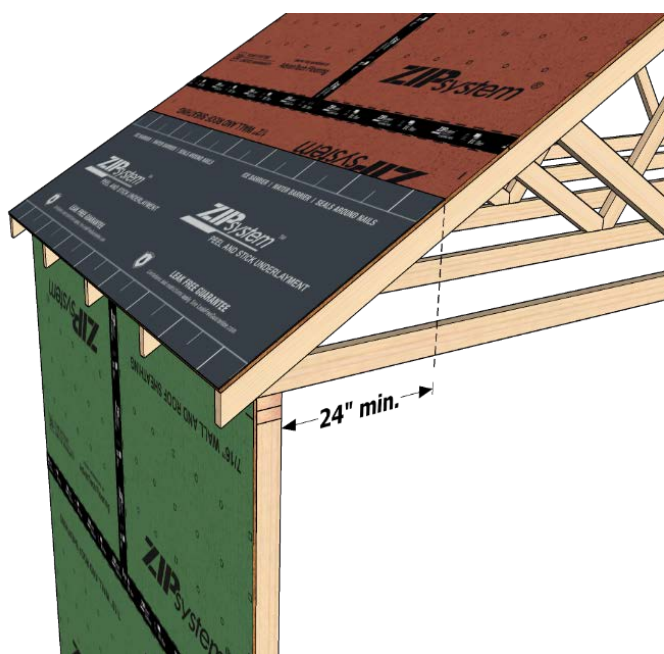
If fasteners that penetrate ZIP System™ peel and stick underlayment products are removed leaving holes in the membrane, the holes must be patched. Patch fastener penetrations left by toe boards after removal using ZIP System™ peel and stick underlayment product or ZIP System™ flashing tape. Do not patch membrane using ZIP System™ liquid flash.

INSTALLATION

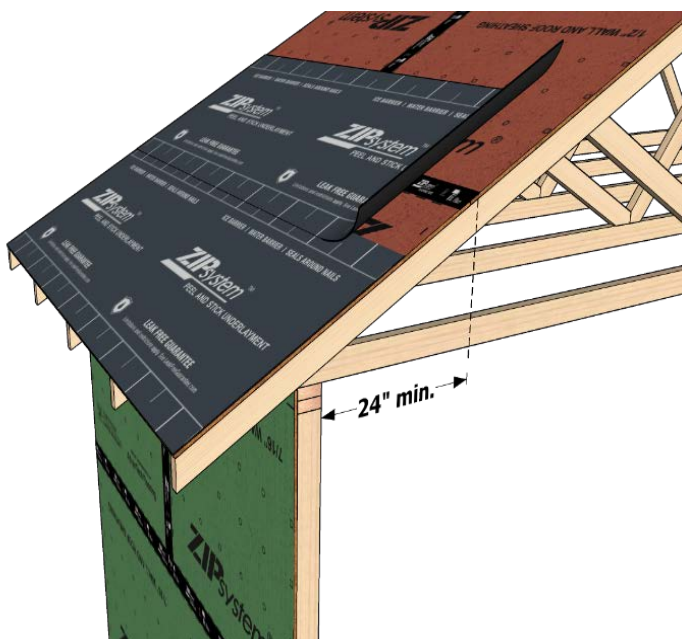
The installer is fully and solely responsible for all safety requirements and code compliance. Prepare the roof deck for ZIP System™ peel and stick underlayment product by removing any dirt, debris, and water. The roof deck must be clean and dry before and during installation. Ensure ambient temperature exceeds 40° F prior to ZIP System™ peel and stick underlayment product installation. When using over ZIP System® sheathing, seal all panel seams with ZIP System™ flashing tape or ZIP System™ liquid flash before installing ZIP System™ peel and stick underlayment products.

INSTALLATION // COVERAGE REQUIREMENTS

For use as an ice barrier at eaves, the membrane should extend from the lowest edge of the roof up the slope to a position that is a minimum of 24 inches horizontally from the inside face of the exterior wall. Coverage requirements may vary depending on location, exposure, roof slope and other factors. Reference applicable code requirements for your location along with specific requirements outlined by the designer of record and other authorities having jurisdiction.



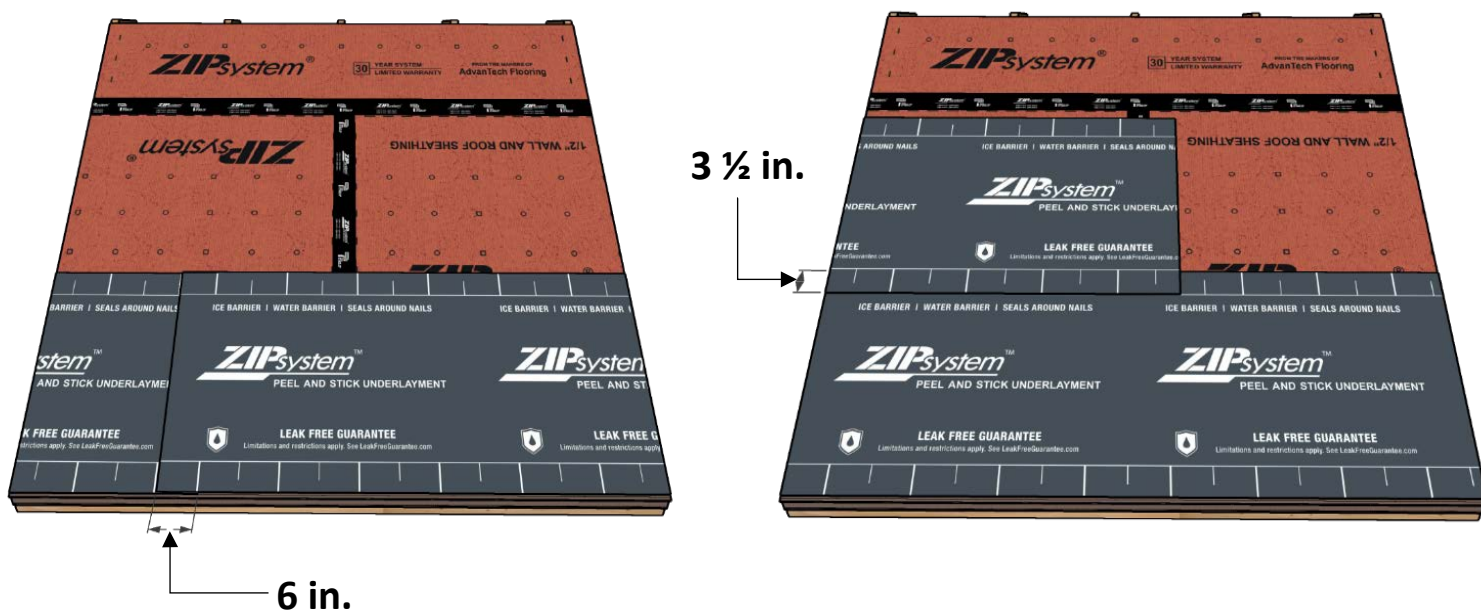
In this image, a single course of membrane fulfills the coverage requirement.



In this image, a second course of membrane is needed to fulfill the coverage requirement due to the large roof overhang.

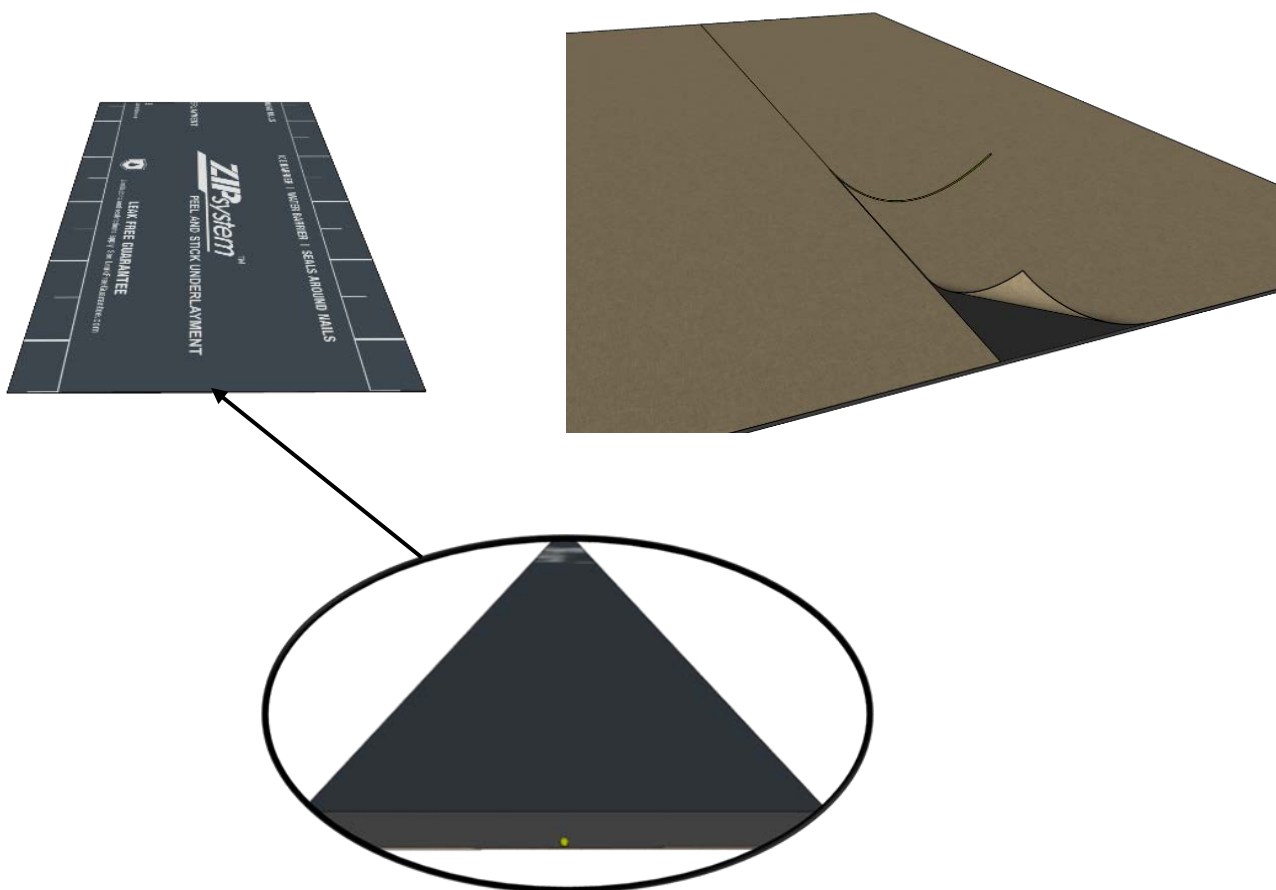
INSTALLATION // OVERLAP REQUIREMENTS

ZIP System™ peel and stick underlayment products can be installed with the long edge of the underlayment oriented horizontally or vertically. When installing multiple pieces of ZIP System™ peel and stick underlayment products, an overlap is required. Horizontal laps occur where the membrane overlaps a lower course and must overlap a minimum of 3½ inches. Vertical laps occur where the membrane overlaps a parallel course and must overlap a minimum of 6 inches. When installing multiple courses of ZIP System™ peel and stick underlayment products, begin at the low point of the slope and apply subsequent courses in a shingle fashion. Stagger vertical laps a minimum of 12 inches when installing multiple courses. When installing underlayment vertically, begin by installing one horizontal course at the roof eave.



INSTALLATION // SPLIT RELEASE LINER

For ease of installation, ZIP System™ peel and stick underlayment products feature a release liner that can be split prior to removal. To split the liner, find and pull the pull cord located in the center of the underlayment. This will split the release liner down the middle without removing the liner. Common applications that may utilize the split release liner include installation on nonplanar surfaces such as valleys and dormers as well as assisting in proper sequencing.



INSTALLATION // INSTALLATION METHODS

For visual demonstration of installation techniques, please visit Huberwood.com.

Traditional Method

- 1) Cut the ZIP System™ peel and stick underlayment product into 10 to 20 foot lengths. It is recommended to allow the membrane to relax prior to installation.
- 2) Loosely re-roll the cut length of the ZIP System™ peel and stick underlayment product. Align the product as needed and peel back 1-2 feet of the release liner. Press the exposed membrane into place using firm hand pressure.
- 3) Remove the rest of the release liner and press the ZIP System™ peel and stick underlayment product in place using firm hand pressure. Immediately dispose of the removed liner to avoid slip hazard.
- 4) Repeat with subsequent pieces of ZIP System™ peel and stick underlayment product, following overlap requirements.

Backroll Method

- 1) Starting with a full roll of ZIP System™ peel and stick underlayment product, unroll 3-6 feet of membrane and align in the desired direction.
- 2) Remove approximately 1-2 feet of release liner and adhere in place using firm hand pressure.
- 3) Remove remaining release liner so that the unrolled portion adheres to the roof deck and apply firm hand pressure to adhere.
- 4) Hold the release liner with one hand and pull the roll along the roof deck using the release liner, leaving the applied ZIP System™ peel and stick underlayment product behind. Use the other hand to guide the roll in a straight line. Ensure the necessary overlap requirements are met throughout the application.
- 5) Stop frequently to press the ZIP System™ peel and stick underlayment product into place using firm hand pressure, smoothing the membrane toward the outer edge.
- 6) When finished with the roll, immediately dispose of the removed liner to avoid slip hazard. Go back and apply firm hand pressure to any areas that may have been missed during the installation.

COMMON DETAILS

The following Common Details must be installed in accordance with the guidelines below, the installation guidelines of the flashing manufacturer (as applicable), or local code requirements. In instances where the aforementioned guidelines and requirements vary among sources, the most restrictive requirements shall be required.

COMMON DETAILS // ROOF VALLEYS

- STEP 1:** Center ZIP System™ peel and stick underlayment product over valley seam. Roll the underlayment up the valley and cut to the desired length. Split the release liner in half by locating and pulling the pull cord.
- STEP 2:** Remove the liner one side at a time and press the ZIP System™ peel and stick underlayment product into place using firm hand pressure, working from the center outward. The center of the membrane must be within 6 inches of the valley seam.
- NOTE:** Always install ZIP System™ peel and stick underlayment product in valleys before installing the underlayment on other portions of the roof.



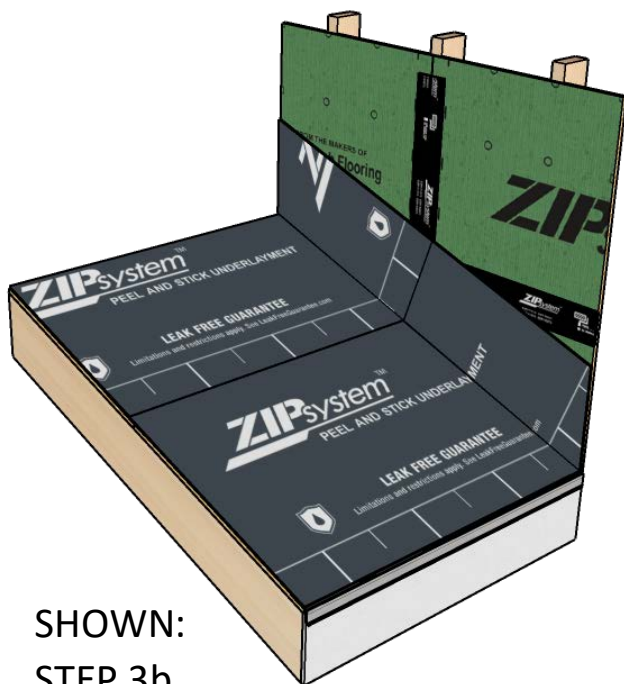
COMMON DETAILS // ROOF TO WALL TRANSITION

- STEP 1:** Roll the ZIP System™ peel and stick underlayment product along the roof and roof-wall transition and cut to the desired length. Split the release liner in half by locating and pulling the pull cord.
- STEP 2:** Remove the release liner for the portion of the ZIP System™ peel and stick underlayment product that will be applied to the roof and adhere the product to the roof sheathing using firm hand pressure, working from the center outward.
- STEP 3a:** Remove the release liner on the portion of the ZIP System™ peel and stick underlayment product that will be applied to the wall. Using firm hand pressure, working from the center outward, adhere the underlayment to the wall surface with the leading edge positioned above the highest expected level of snow and ice (as determined by the designer of record or local code requirements).
- STEP 3b:** Ensure the installed ZIP System™ peel and stick underlayment product is tight to the wall-to-roof transition as to not interfere with flashing or roof covering installation.
- STEP 4:** Tape the leading edge of the ZIP System™ peel and stick underlayment product using ZIP System™ flashing tape with a minimum 1 inch of coverage on each substrate.

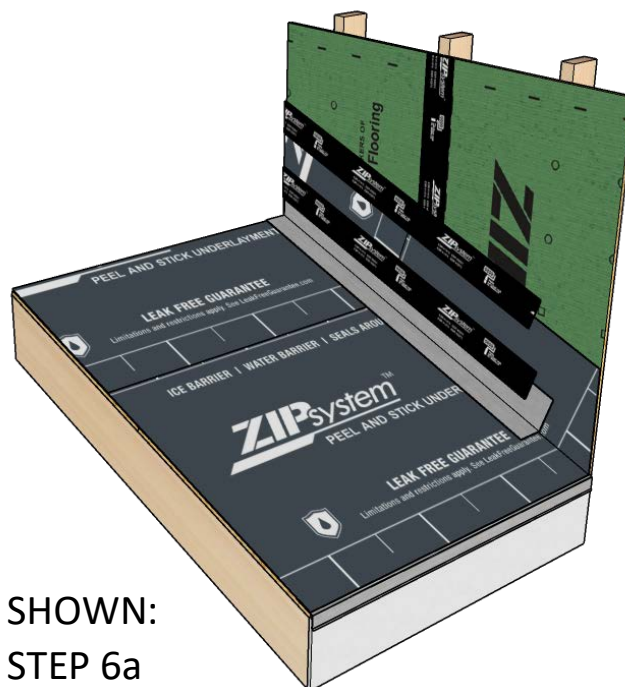
STEP 5: Install metal flashing as required by local building code, designer of record, or roof covering manufacturer.

STEP 6a: When using ZIP System® sheathing for walls, tape the top edge of the metal flashing back to the surface of the ZIP System™ peel and stick underlayment product using ZIP System™ flashing tape.

STEP 6b: When using a mechanically-fastened or adhered water resistive barrier for walls, extend the water resistive barrier over the ZIP System™ peel and stick underlayment product and metal flashing in shingle fashion.



SHOWN:
STEP 3b



SHOWN:
STEP 6a

COMMON DETAILS // PLUMBING VENTS

- STEP 1:** Install ZIP System™ peel and stick underlayment product directly over ZIP System® roof assembly after taping panel seams. Splice product as needed to fit around plumbing vent.
- STEP 2:** Install pipe boot over plumbing vent and ZIP System™ peel and stick underlayment product. Apply ZIP System™ flashing tape to sides and top of pipe boot, starting with the sides. Roll the tape.



STEP 1



STEP 2

COMMON DETAILS // DRIP EDGE

- STEP 1:** Install ZIP System™ peel and stick underlayment product at eaves as required.
- STEP 2:** Install drip edge following guidelines of designer of record, local code requirements or drip edge manufacturer recommendations.
- STEP 3:** Tape drip edge at eaves to the ZIP System™ peel and stick underlayment product using ZIP System™ flashing tape. Each substrate should receive minimum 1 inch of tape coverage.

