

# **INSTALLATION MANUAL**

ZIPSYSTEM.COM

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**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<sup>®</sup> roof and wall sheathing. 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 Huber Engineered Woods (HEW), local building code, engineer or architect of record or other authority having jurisdiction. You are fully and solely responsible for all safety requirements and code compliance. For additional information contact Huber Engineered Woods LLC.



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



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



Install ZIP System<sup>®</sup> panels and flashing tape only in dry conditions and on dry surfaces. Do not install panels or tapes in rain, snow, frost or other slippery conditions.



Wear rubber-soled or other high-traction footwear while installing ZIP System<sup>®</sup> sheathing in a roof application. Do not wear footwear with worn soles or heels.



Ensure the panel surfaces are free from oil, chemicals, sawdust, dirt, tools, electric cords, air hoses, clothing and anything else that might create a tripping hazard.



Install temporary toe boards along the ZIP System sheathing roof surface. Tape any holes created by the toe boards once they are removed.

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#### ZIP SYSTEM<sup>®</sup> SHEATHING // OVERVIEW

ZIP System<sup>®</sup> roof and wall sheathing panels are oriented strand board (OSB) wood structural panels with a built-in protective overlay that eliminates the need for building wrap or roofing underlayment. A rough dry-in is achieved once ZIP System<sup>™</sup> flashing tape, with a minimum width of 3-3/4", is properly installed and window and door openings have been flashed.

For walls, ZIP System sheathing functions as a combination wall sheathing with the overlay that functions as an air barrier and whose water resistance is equivalent to a Type II water-resistive barrier (WRB). For roofs, ZIP System sheathing functions as the structural decking with an overlay that eliminates the need for felt underlayment (see page 43 for limitations related to roof pitch). For wall or roof coverings that require multiple layers of WRB or underlayment, ZIP System sheathing and flashing tapes are intended to replace only the first layer.

ZIP System sheathing can be used with a range of exterior claddings and roof coverings. Wall coverings that can be used with ZIP System sheathing include brick, vinyl, stone, fiber cement, wood (shake, shingles and lap siding), traditional hard coat stucco and EIFS\* applications. Approved roof coverings include asphalt-fiberglass shingles, metal tiles and panels, clay/concrete tiles, slate/slate-type shingles and wood shakes/shingles. Follow all cladding and roof covering manufacturer's installation instructions.

ZIP System sheathing may be used for roofs and walls in Type V construction, in Type III construction as roof sheathing only, and other construction permitted under the International Residential Code<sup>®</sup> (IRC) and International Building Code<sup>®</sup> (IBC).

### \*Only mechanically attached exterior insulation and finish system (EIFS) claddings are covered by ZIP System warranties.

#### ZIP SYSTEM<sup>®</sup> SHEATHING // NOTES & LIMITATIONS



When used on roof slopes less than 2:12, ZIP System<sup>®</sup> sheathing panels may act as the structural decking only.



Do not use abutted against stone or masonry without providing a minimum of a 1/2" gap.



Do not install ZIP System<sup>™</sup> flashing tape or stretch tape in temperatures less than 0 degrees Fahrenheit.



ZIP System products are not recommended for manufactured housing projects built under the federal building code administered by the U.S. Department of Housing and Urban Development (HUD). HEW products are warranted solely under IRC and IBC governed projects.



Do not use ZIP System flashing tape or stretch tape to permanently seal around circular roof projections (plumbing vents, pipes, etc.)



ZIP System<sup>®</sup> sheathing should be covered with the finished roof covering or exterior wall cladding within 180 days of installation. After 180 days of exposure, a mechanically fastened WRB or underlayment must be installed over the ZIP System sheathing.



Finished roof and exterior cladding products should be installed per the manufacturer's installation instructions.

#### ZIP SYSTEM<sup>®</sup> SHEATHING // NOTES & LIMITATIONS

- When original roof coverings or wall claddings are removed, the roof or wall must be covered with an additional roofing underlayment or WRB prior to installation of the new roof covering or wall cladding.
- In cladding systems requiring multiple layers of waterresistive barriers, such as traditional hard-coat stucco, ZIP System<sup>®</sup> sheathing is intended to replace only the first layer. Therefore, at least one layer of mechanically fastened WRB must be installed over the ZIP System sheathing prior to installing hard-coat stucco or adhered stone. See pages 34-37 for more information.
- $\bigcirc$

ZIP System<sup>™</sup> flashing tape is not recognized as a replacement for rigid, metal or other through wall flashings prescribed by others. Where rigid flashings are present, ZIP System<sup>™</sup> flashing tape or liquid flash can be used as a transition from the ZIP System sheathing surface to the rigid flashing.

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**WALLS:** Do not apply a fluid-applied WRB or self-adhered WRB over the entire ZIP System wall assembly. When transitioning between dissimilar sheathing materials, transition onto the ZIP System no more than 12 inches. **ROOF:** Do not apply a fluid-applied coating over ZIP System sheathing in a roof application. Ice barriers can be installed over ZIP System sheathing in a roof application.

#### ZIP SYSTEM® SHEATHING // NOTES & LIMITATIONS

#### WET BLOWN CELLULOSE INSULATION

In addition to following manufacturer installation instructions, we recommend a maximum cellulose moisture content of the cellulose of less than 25% measured at the inside surface of the ZIP System<sup>®</sup> sheathing panel before closing the wall cavity.

#### **SECONDARY COATINGS**

Do not apply secondary coatings or treatments to ZIP System sheathing panels with the exception of the following:

Field applied water-soluble borate insecticide or fungicide treatments applied to the non-overlay side of the panel. See technical tip, "Termite Treatments on ZIP System sheathing," at huberwood.com for more information.

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Permeable laminated radiant barrier foil or paint. For a radiant barrier foil or coating to be considered permeable, it must have an applied permeance of five perms or greater as tested by the ASTM E 96 wet cup standard. For a radiant foil, the permeance evaluation would include any adhesive and/or backer used to laminate a foil. For a radiant paint/coating, the permeance evaluation should be conducted at the applied thickness of the paint/coating.

#### ZIP SYSTEM® SHEATHING // STORAGE & HANDLING



Set panel stack on three supports (stickers) to keep off the ground.





Outdoors, cover panels loosely with waterproof protective material.



Anchor covers on top of the stack, but keep away from sides and bottom to assure good air circulation.



In high moisture environments, cut banding on the panel stack to prevent edge damage.



ZIP System<sup>™</sup> flashing tape and stretch tape are pressure sensitive tapes that must be rolled with a rubber-faced roller in order to achieve maximum bond to the panel.



Exterior foam insulation (XPS, EPS etc.) can be mechanically installed with button caps, staples etc. over ZIP System<sup>®</sup> sheathing. Exterior foam cannot be adhesively attached over ZIP System sheathing.

#### ZIP SYSTEM<sup>®</sup> SHEATHING // PANEL SIZES

The green ZIP System<sup>®</sup> sheathing denotes a 7/16-inch panel while the <u>sienna</u> ZIP System sheathing denotes either a 1/2-inch or 5/8-inch panel. Both the green and the sienna can be used interchangeably for the wall or roof.

ZIP System sheathing panels are available with self-spacing edge profiles and tongue and groove edge profile (5/8 only). ZIP System<sup>®</sup> panels are Exposure 1 rated and are available in the following span ratings and performance categories.

#### 24/16, Structural 1, 7/16 PERF CAT

**NOTE:** Available lengths in 7/16 thickness:

- 4' x 8'	4' x 12'*	4' x 10' 1-1/8"*
- 4' x 9'*	4' x 8' 1-1/8''*	4' x 12' 1-1/8"*
- 4' x 10'*	4' x 9' 1-1/8''*	

# 32/16, Structural 1, 1/2 PERF CAT Available lengths in 1/2 thickness: - 4' x 8' 4' x 9'\* 4' x 10'\*

#### 40/20, Structural 1, 5/8 PERF CAT

Available lengths in 5/8 thickness:

- 4' x 8'

\* Please reach out to your local lumber yard for more information on availability and lengths offered. Select sizes may require a longer lead times than standard 4' x 8' panels.

#### ZIP SYSTEM® FLASHING TAPE // TAPE SIZES

ZIP System<sup>™</sup> flashing tape rolls are available in 3-3/4, 6, 9 and 12-inch widths.

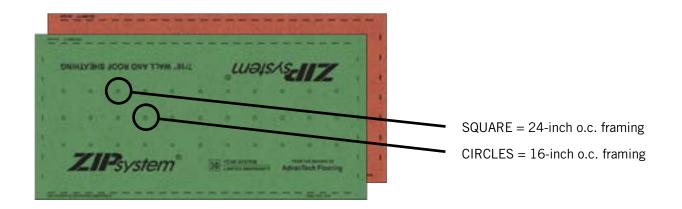


ZIP System<sup>™</sup> stretch tape rolls are available in 3, 6, and 10-inch widths.



#### ZIP SYSTEM<sup>®</sup> SHEATHING // FASTENING

ZIP System<sup>®</sup> sheathing <u>circles</u> denote 16-inch o.c. framing and <u>squares</u> denote 24-inch o.c. framing. These markings do not necessarily indicate where the fasteners must be installed, but act more like a chalk line to help find the framing behind the sheathing. Follow listed fastening schedule provided by IRC, IBC or designer of record.



#### ZIP SYSTEM<sup>®</sup> SHEATHING // GENERAL INFORMATION & COMPATIBILITY

#### FASTENERS

ZIP System<sup>®</sup> sheathing must be installed with code-approved fasteners. Fasteners used to install ZIP System sheathing panels are not required to be ring-shank, galvanized, or stainless steel unless otherwise stated by the local building code or designer of record. For more information, see Technical Tip "Fasteners FAQs regarding ZIP System Sheathing" at huberwood.com.

#### **COMPATIBLE SUBSTRATES**

ZIP System<sup>™</sup> flashing tape and ZIP System<sup>™</sup> strech tape is compatible with dimensional lumber (treated and untreated), OSB, plywood, housewraps, PVC, vinyl and metal substrates. Please note, all substrates must be dry to the touch and free of any dirt or debris at the time of flashing tape installation. Roll the tape.

#### SEALANTS

For sealant compatibility with ZIP System sheathing, ZIP System flashing tape, ZIP System<sup>™</sup> stretch tape, and ZIP System<sup>™</sup> liquid flash, please refer to the Technical Tip "Window and Door Sealant Compatibility with ZIP System Sheathing and Accessories" at huberwood.com

#### **ALLOWABLE SHEAR CAPACITIES**

ZIP System sheathing panels are DOC PS 2 compliant wood structural panels. For more information on designing shear walls with ZIP System sheathing, see Technical Tip "Shear Capacity and Wood Structural Panels" at huberwood.com

#### ZIP SYSTEM<sup>®</sup> SHEATHING // GENERAL INFORMATION & COMPATIBILITY

#### FLASHINGS - TAPES

Minimum 3-3/4" wide ZIP System<sup>™</sup> flashing tape must be used where two ZIP System<sup>®</sup> panels come together to create a panel joint at inside corners, outside corners and in the same plane; however, other code approved flashing tapes that satisfy AAMA-711 or AC-148 can be used to flash rough openings, penetrations, and fenestrations.

#### FLASHINGS – FLUID APPLIED

ZIP System<sup>™</sup> liquid flash can be used in lieu of ZIP System flashing tape where two ZIP System panels come together to create a panel joint at inside corners, outside corners and in the same plane. Other code approved liquid applied flashing membranes that satisfy AAMA-714 can be used to flash penetrations and fenestrations. When using fluid applied flashing products over 3-3/4" wide ZIP System flashing tape refer to Technical Tip "Compatibility of ZIP System Flashing Tape with ZIP System Liquid Flash"\*.

#### WRINKLES IN THE TAPE

Rolling ZIP System flashing tape will significantly reduce the possibility that the tape will wrinkle. If wrinkles occur, first try to roll the wrinkles out with a rubber headed roller. This should help eliminate wrinkles or "fish mouths" (large wrinkles that are avenues for water to get to the seam). If rolling the tape does not remove the fish mouths, remove that section of tape, replace it with a new piece, then overlap the existing tape by at least three inches. Alternatively, with the fish mouth still in place, put another piece of flashing tape over the fish mouth so that it is completed covered. ROLL THE TAPE.

\*ZIP System flashing tape should not be installed over ZIP System liquid flash

#### ZIP SYSTEM<sup>®</sup> SHEATHING // GENERAL INFORMATION & COMPATIBILITY

#### PARAPET WALL TERMINATION

ZIP System<sup>®</sup> sheathing used as parapet wall sheathing is compatible with single-ply roofing membrane terminations. It is recommended to transition from the top of the single-ply roofing membrane to the surface of ZIP System sheathing with a metal flashing. Transition the metal flashing back to the ZIP System sheathing using ZIP System<sup>™</sup> flashing tape or liquid flash. Refer to roofing membrane manufacturer's installation instructions for proper installation requirements.

Please note, a polyurethane or solvent based adhesive should be used when adhering the built-up membrane to ZIP System sheathing. All panel seams should be taped prior to installing the built-up membrane over ZIP System sheathing.

#### TOOLS

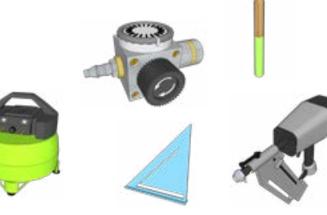
Common

- Pneumatic nail gun
- Framing hammer
- Air compressor
- Speed square
- Tape Roller
- PPE





- Air line regulators



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#### ZIP SYSTEM<sup>®</sup> WALL SHEATHING // GENERAL INSTALLATION - WALL

The following installation steps are presented as a general outline of the installation process. These are manufacturer installation recommendations – please visit huberwood.com for a library of flashing and installation details. You are fully and solely responsible for all safety requirements. Good construction and safety practices should be followed at all times.

For optimal air leakage reduction, all non-taped edges of the panels can be caulked, gasketed or sealed with weather stripping material. Take special care to remove any voids and/or trapped air under the panels.

#### ZIP SYSTEM<sup>®</sup> WALL SHEATHING // PANEL ORIENTATION AND SPACING

Install ZIP System<sup>®</sup> sheathing panels positioned with the water-resistive barrier facing outside. The panels may be installed with the long side of the panel oriented either horizontally or vertically to the framing members.

Walls that are designed to resist lateral shear forces and sheathed with wood structural panels typically require solid framing or blocking behind all panel edges. Add blocking at horizontal joints when walls are designated for bracing or as a shear wall.

# ZIP SYSTEM® WALL SHEATHING // PANEL ORIENTATION AND SPACING

- 1/8" spacing between square edges of all adjacent panels is recommended in accordance with industry standards for wood sheathing installation.

- ZIP System<sup>®</sup> sheathing's unique edge profiles are designed to accommodate incremental panel expansion and does not require manual gapping along the 8' edges.

- Maintain 1/8" space where 8' panel edges meet 4' panel edges. Unique edge profile

8' edge meets 8' edge 8' edge meets 4' edge



does not provide the full 1/8" recommended space in this situation and must be done manually.

- Maintain 1/8" space where 4' edges meet. Unique edge profile is on 8' edges only. 1/8" space must be done manually on 4' edges.
- For information on vertical panel installations, go to huberwood.com learn more.

#### ZIP SYSTEM<sup>®</sup> WALL SHEATHING // FASTENING

Fasten the panels to the framing members with code approved fasteners. Space fasteners 6" o.c. along supported edges and 12" o.c. at

intermediate supports, unless otherwise specified by local code or the designer of record. It's the responsibility of the general contractor to verify proper fastener type and spacing prior to installation. Apply fasteners a minimum 3/8" from panel edges. ZIP System sheathing does not have proprietary shear values and has the same shear values of Structural 1\* OSB or plywood of equivalent thickness.



#### ZIP SYSTEM<sup>®</sup> WALL SHEATHING // OVERDRIVEN FASTENERS

Steps must be taken to seal fastener penetrations when: 1) a fastener penetrates more than halfway through the wood portion of the panel; or 2) a panel fastener misses the framing and results in a "shiner." Fasteners that penetrate more than halfway through the wood portion of the panel must be covered with a ZIP System<sup>™</sup> tape or ZIP System<sup>™</sup> liquid flash. Shiners must be removed and resulting holes covered with a ZIP System tape or ZIP System tape or ZIP System liquid flash. Failure to seal these types of fastener penetrations as required will void the ZIP System sheathing warranty.

We recommend the head of the fastener is installed flush to the surface of the ZIP System panel. Flush fastener placement is best achieved by properly setting the nail gun air compressor to the manufacturer's recommended setting or using in-line pressure regulators. Many nail guns have depth control adjustments to ensure fasteners are driven flush. For tools that do not have a depth control adjustment feature, we recommend fitting a flush drive attachment collar on the end of the gun to help limit fastener embedment depth. Underdriven fasteners should be hand-driven flush before taping.

#### ZIP SYSTEM<sup>®</sup> WALL SHEATHING // OPTIONAL FASTENER TREATMENT

For those looking for an extra layer of protection to elevate their build above the base requirements for the ZIP System wall sheathing panels, ZIP System liquid flash can be installed on fastener heads after the ZIP System seam tape is installed. This approach can be done with all wall claddings including hard-coat stucco and adhered stone.

#### ZIP SYSTEM<sup>®</sup> WALL SHEATHING // TAPING

Apply minimum 3-3/4" ZIP System<sup>™</sup> flashing tape after all ZIP System<sup>®</sup> sheathing panels are fully fastened to wall-framing members. ZIP System flashing tape uses an acrylic adhesive that requires pressure from a rubber headed roller for an adequate seal.

#### **REMEMBER TO ALWAYS:**



Use ZIP System flashing tape with a minimum width of 3-3/4", or ZIP System liquid flash, to seal the seams of ZIP System sheathing panels, including at all inside and outside corners.



Ensure that the panel surface is dry and free of sawdust and dirt prior to taping.



Ensure that the tape is centered over the seam within +/- 1/2" to provide adequate coverage.



Wherever tape splices occur at a horizontal or vertical seam, create an overlapping splice of at least 3" (see next page).



At T-joints, tape pieces should overlap by at least 1" (see next page).



Tape over any areas of the panel that are damaged during construction.

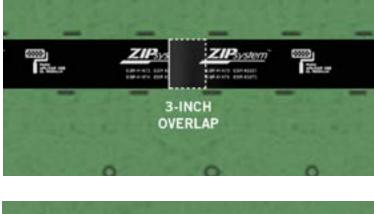


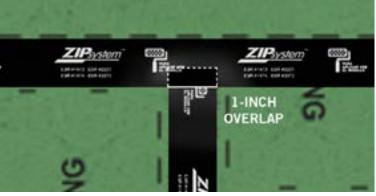
Use a rubber headed roller to apply pressure on the tape and smooth out any wrinkles.

#### ZIP SYSTEM<sup>®</sup> WALL SHEATHING // TAPING

**INSIDE CORNER:** Use ZIP System<sup>™</sup> flashing tape with a minimum width of 3-3/4" at all inside corners. It is helpful to cut a manageable length of ZIP System flashing tape and hold the ends in the middle using only your index fingers and thumbs. Slightly pulling both ends of the tape causes the tape edges to naturally curl inward. With tape in tension, place it in the center of the inside corner. Repeat as you go up the wall. Roll the tape.

**OUTSIDE CORNER:** Use ZIP System flashing tape with a minimum width of 3-3/4" for outside corners. Start by working on a single plane using a length of tape that feels manageable. To fold the tape onto the other plane, use your hands to push the tape around the corner. It is recommended to start at the top of the tape and work your way down when pushing the tape on to the other plane. Roll the tape.







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#### ZIP SYSTEM<sup>®</sup> WALL SHEATHING // FLASHING DETAIL AND CLADDING NOTES

When it comes to installing ZIP System<sup>®</sup> sheathing, Huber Engineered Woods (HEW) requires the use ZIP System<sup>™</sup> flashing tape with a minimum width of 3-3/4", or ZIP System<sup>™</sup> liquid flash, to seal the seams of ZIP System sheathing panels, including at all inside and outside corners. When using ZIP System flashing tape, the tape must be rolled with a rubber headed roller such as the ZIP System<sup>™</sup> roller or ZIP System<sup>™</sup> tape gun.

The construction details on pages 22-39 and pages 50-54 are provided to assist in the installation of ZIP System product(s) and may not apply to every situation. The following details are recommendations made by HEW but are not required for 30-year limited warranty. It is the sole responsibility of the designer of record to provide and approve details to be used on specific products.

Cladding fasteners and fastening schedule are to be determined by cladding manufacturer. Please check with the cladding manufacturer's written instructions to verify if fasteners are required to be installed into the framing or if they are allowed to be solely fastened into ZIP System sheathing.

More construction details including alternate windows & doors, penetrations, cladding transitions and foundation details are available at huberwood.com.

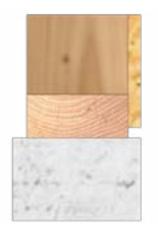




#### **TRANSITIONS // FOUNDATION TRANSITION**

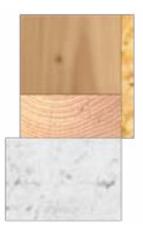
## SHEATHING IN PLANE WITH FOUNDATION WALL:

Hold the bottom edge of ZIP System<sup>®</sup> sheathing a minimum of  $\frac{1}{2}$  inch from the foundation wall.



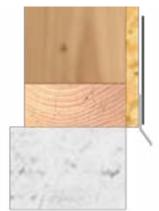
# SHEATHING OUT OF PLANE WITH FOUNDATION WALL:

Install ZIP System sheathing in line with the bottom of the sill plate.



#### **BASE FLASHING**

Install base flashing along the bottom edge, tape top edge of flashing back to sheathing.



#### BASE FLASHING - FLUID-APPLIED:

Install ZIP System<sup>™</sup> liquid flash along bottom edge of panel onto foundation a minimum of 1" on each surface.

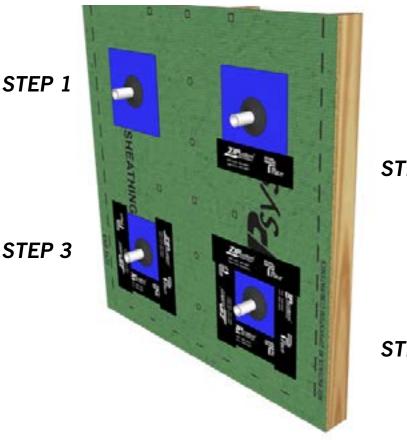


Note: Install a capillary break as required by code between the foundation and the sill plate.

#### PIPES // ZIP SYSTEM<sup>™</sup> FLASHING TAPE & BOOT FLASHING



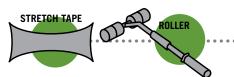
- **STEP 1:** Insert the boot over the penetration.
- **STEP 2:** (Optional) Install ZIP System<sup>™</sup> flashing tape on the bottom of the boot to help minimize air leakage.
- **STEP 3:** Place a piece of ZIP System flashing tape on each of the boot jambs.
- **STEP 4:** Place a piece of tape on the head of the boot flashing. Ensure the head flashing tape extends beyond the jamb flashing tape at least 1 inch. Roll all pieces of tape.



STEP 2

STEP 4

#### PIPES // ZIP SYSTEM<sup>™</sup> STRETCH TAPE



- **STEP 1:** Starting from the top of the pipe, center a piece of ZIP System<sup>™</sup> stretch tape so that the tape can be pulled down on either side of the pipe.
- **STEP 2:** Pull the tape together until it overlaps in the middle of the pipe at the bottom. The overlap should take place at the bottom of the pipe. Roll the tape.

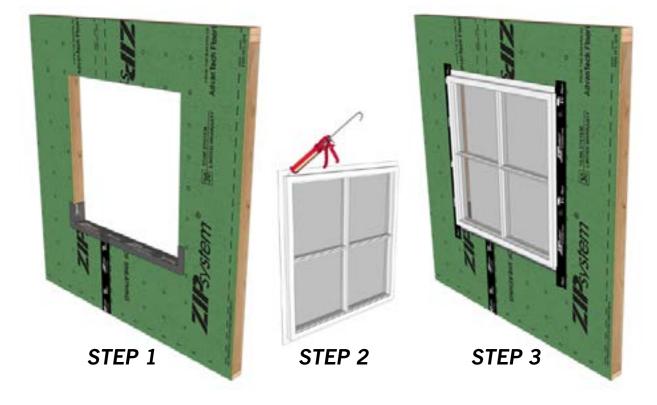


STEP 1

#### WINDOW // FLANGED WINDOW



- **STEP 1:** Install a piece of ZIP System<sup>™</sup> stretch tape as the sill pan. Install up the jambs a minimum of 6-inch and roll the tape. Install shims window per manufacturer's installation guidelines.
- **STEP 2:** Apply sealant on the back side of the window flange and set into rough opening. For more on sealant compatibility, see page 14.
- **STEP 3:** Install ZIP System<sup>™</sup> flashing tape on each of the window flanges at the jambs. Roll the tape.



#### WINDOW // FLANGED WINDOW

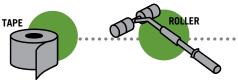


- STEP 4: Install ZIP System<sup>™</sup> flashing tape at the head of the window. Note: If using 3-3/4" ZIP System flashing tape for the flanges when a "T" joint occurs at the window head ensure, the vertical joint tape above the window head overlaps the head flashing tape of the window. For alternative details please see page 26.
- **STEP 5:** Install head flashing above window as required by window or siding manufacturer. Tape the top of the flashing and roll the tape. From the interior, install low-expanding foam between the window and door as required by window manufacturer.





#### WINDOW // T-JOINT ALTERNATIVE 3-3/4-INCH ZIP SYSTEM<sup>TM</sup> FLASHING TAPE



In the event the vertical panel seam has been taped prior to the window being installed, tape the head flange of the window with 3-3/4-inch ZIP System<sup>™</sup> flashing tape. Where the vertical panel seam intersects the head flashing, install an additional "hat" piece of 3-3/4-inch ZIP System flashing tape extending 1-inch on either side of the vertical seam tape. Roll the tape.



#### **6-INCH OR WIDER ZIP SYSTEM FLASHING TAPE**

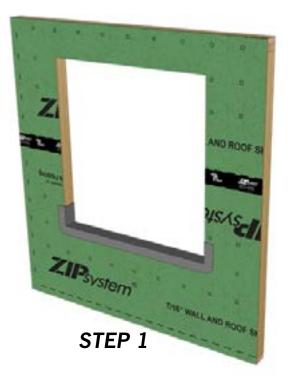
In the event the vertical panel seam has been taped prior to the window being installed, tape the head flange of the window with one piece of 6-inch or wider ZIP System flashing tape. Roll the tape.



#### WINDOW // STORE FRONT WINDOW



- STEP 1: Install a piece of ZIP System<sup>™</sup> stretch tape in the window sill a minimum of 6-inch up the window jamb and then install ZIP System<sup>™</sup> flashing tape in the jambs of the rough opening.
- **STEP 2:** Install a piece of ZIP System stretch tape in the head of the rough opening overlapping the jamb flashing a minimum of 2-inches.





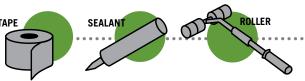
#### WINDOW // STORE FRONT WINDOW

- **STEP 3:** Secure window in accordance with manufacturer's written instructions and insert a backer rod in between the gap of the rough opening and the window. See page 13 more information on sealants.
- **STEP 4:** Flash or seal the window frame to ZIP System<sup>®</sup> sheathing using methods approved by the window manufacturer. ZIP System<sup>™</sup> liquid flash may be an option. From the interior, install low-expanding window and door foam as required by window manufacturer.

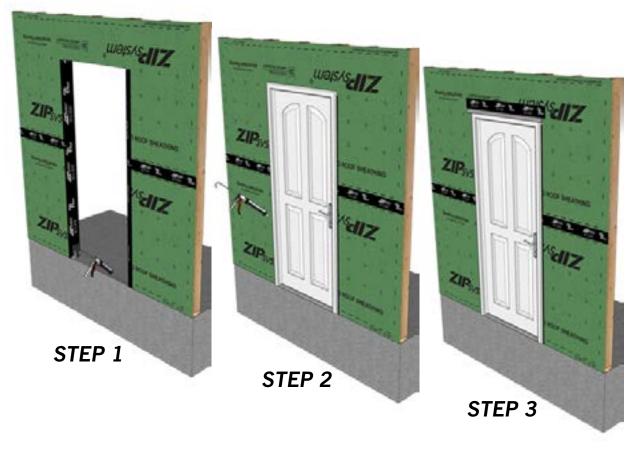




#### DOOR // TYPICAL BRICK MOULD DOOR



- **STEP 1:** Install ZIP System<sup>™</sup> flashing tape in the jambs of the rough opening. Install sealant as three separate beads in the threshold and minimum of 6 inches up the jambs. For more on sealant compatibility see page 14.
- **STEP 2:** Once the door has been installed into the rough opening in accordance with the manufacturer's installation guidance, apply a bead of sealant at molding/ZIP System<sup>®</sup> sheathing intersection.
- **STEP 3:** Install head flashing above door and then tape top of head flashing.



#### **STRAPPING**



**STEP 1:** Tape all ZIP System<sup>®</sup> sheathing panel edges and roll the tape. Install the strapping.

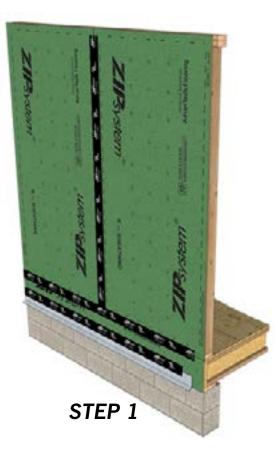


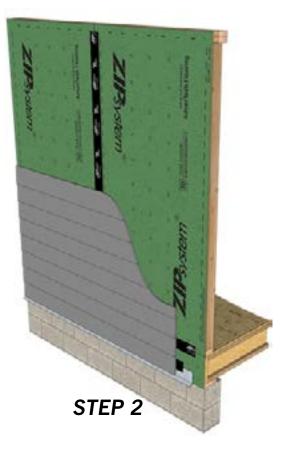
**PRO TIP:** If the panel seams are taped after the strapping has been installed, install the panel seam flashing tape up to the strapping and then encase the strapping with ZIP System<sup>™</sup> flashing tape. Ensure at least 1 inch of ZIP System flashing tape makes contact with the ZIP System sheathing surface on all applicable sides. Roll the tape.

#### CLADDING // LAP SIDING



- **STEP 1:** After all ZIP System<sup>®</sup> sheathing panel seams have been taped, tape the top edge of any flashing back to the surface of ZIP System sheathing.
- **STEP 2:** Install lapped siding in accordance with siding manufacturer's written instructions. Fastening to be determined by the cladding manufacturer.

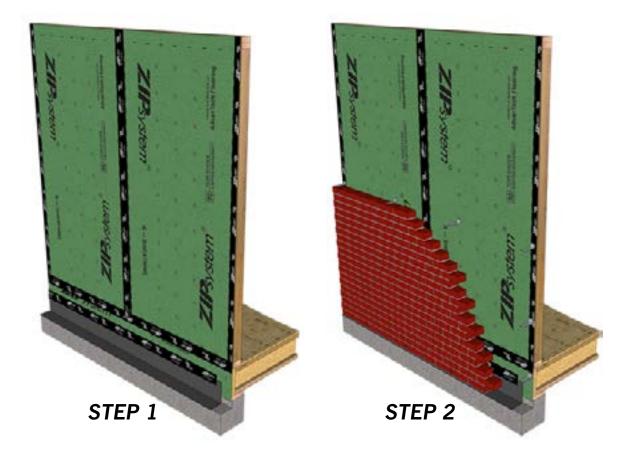




#### CLADDING // BRICK

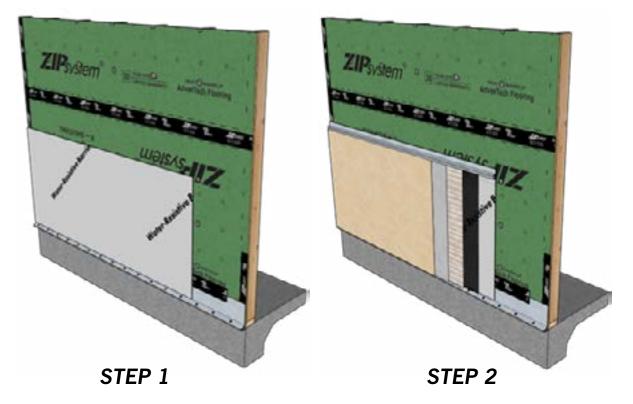


- **STEP 1:** After all ZIP System<sup>®</sup> sheathing panel seams have been taped, tape the top edge of the masonry flashing back to the ZIP System sheathing. Install brick ties in accordance with local building code and brick tie manufacturer's written instructions.
- **STEP 2:** Install brick veneer with a minimum 1-inch air space per the local building code.



#### CLADDING // STUCCO

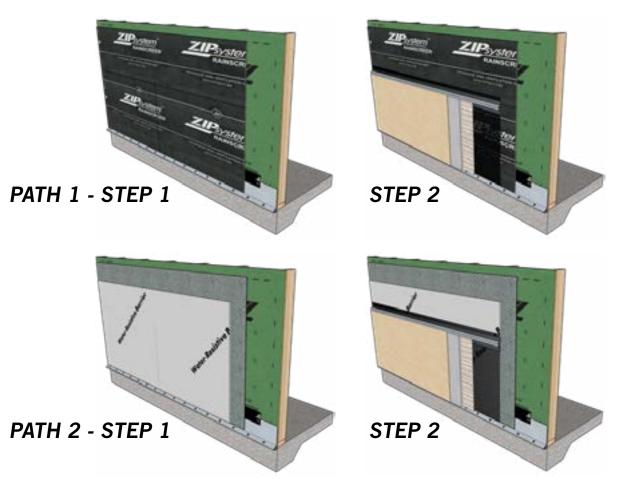
- **STEP 1:** After all ZIP System<sup>®</sup> sheathing panel seams have been taped, tape the top edge of the weep screed flashing back to the ZIP System sheathing, then install a code-recognized, mechanically-fastened water-resistive barrier.
- **STEP 2:** Install metal lath, scratch coat, brown coat and finish in accordance with stucco manufacturer's written instructions. Install expansion/control joints as needed.



**OPTIONAL:** For those looking for an extra layer of protection to elevate their build above the base requirements for the ZIP System sheathing panels, ZIP System<sup>™</sup> liquid flash can be installed on fastener heads after the ZIP System<sup>™</sup> flashing tape is installed.

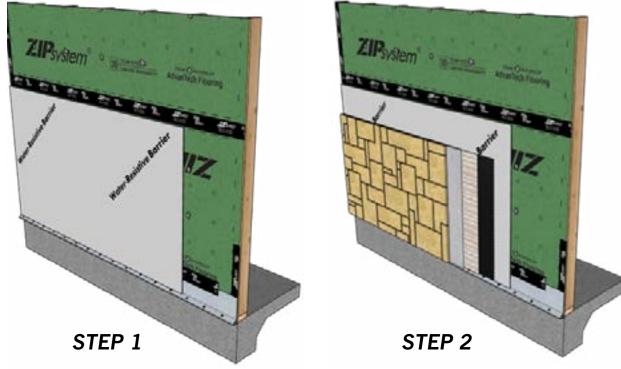
#### CLADDING // OPTIONAL STUCCO DETAILS

- STEP 1: Tape all ZIP System<sup>®</sup> sheathing panel seams, tape the top edge of the weep screed flashing back to the ZIP System sheathing and roll tape. Install Path 1: ZIP System<sup>™</sup> rainscreen or Path 2: a physical-space/drainage-material and then install a code-recognized, mechanically-fastened water-resistive barrier.
- **STEP 2:** Install metal lath, scratch coat, brown coat and finish in accordance with stucco manufacturer's written instructions. Install expansion/control joints as needed.



#### CLADDING // ADHERED STONE

- **STEP 1:** After all ZIP System<sup>®</sup> sheathing panel seams have been taped, tape the top edge of the drip edge/weep screed flashing back to the ZIP System<sup>®</sup> sheathing, and then install a code-recognized, mechanically-fastened water-resistive barrier.
- **STEP 2:** Install metal lath, mortar, and stone in accordance with stone manufacturer, building code or third-party guidance's written instructions.



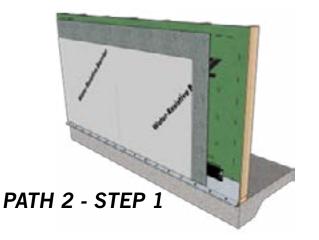
**OPTIONAL:** For those looking for an extra layer of protection to elevate their build above the base requirements for the ZIP System sheathing panels, ZIP System<sup>™</sup> liquid flash can be installed on fastener heads after the ZIP System<sup>™</sup> flashing tape is installed.

#### CLADDING // OPTIONAL ADHERED STONE DETAILS

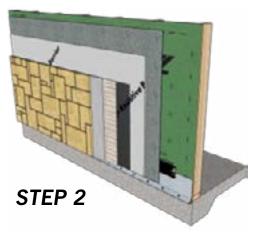
- **STEP 1:** Tape all ZIP System<sup>®</sup> sheathing panel seams, tape the top edge of the weep screed flashing back to the ZIP System sheathing and roll tape. Install **Path 1:** ZIP System<sup>™</sup> rainscreen or Path 2: a physical-space/drainage-material and then install a code-recognized, mechanically-fastened water-resistive barrier.
- **STEP 2:** Install metal lath, mortar, and stone in accordance with stone manufacturer, building code or third-party guidance's written instructions.



PATH 1 - STEP 1



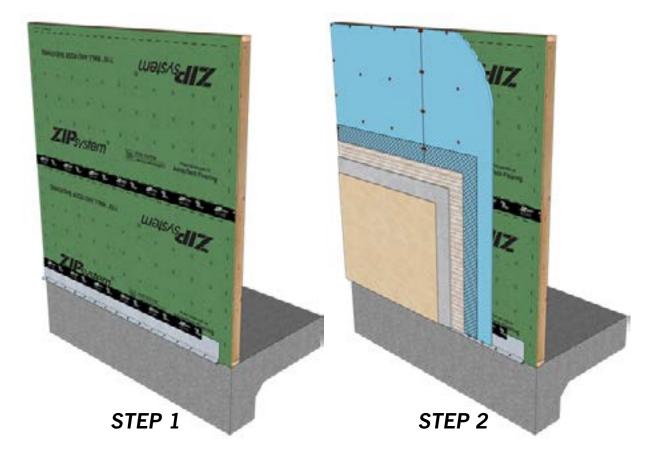




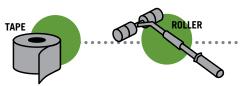
#### CLADDING // EIFS



- **STEP 1:** After all ZIP System<sup>®</sup> sheathing panel seams have been taped, tape the top edge of any foundation flashings back to the surface of ZIP System sheathing. Install foam layer using mechanical fasteners per EIFS manufacturer written instructions.
- **STEP 2:** Install EIFS materials in accordance with EIFS written instructions. Install expansion/control joints as needed.



#### **DECKS & PORCHES**



- **STEP 1:** After all ZIP System<sup>®</sup> sheathing panel seams have been taped, install ledger board in accordance with designer of record. Install membrane between deck ledger and ZIP System<sup>®</sup> sheathing if required by designer of record (not HEW requirement).
- **STEP 2:** Tape the top edge of the deck ledger flashing back to the surface of ZIP System sheathing.



#### TRANSITION // CONCRETE/MASONRY

Provide a 1/2" gap at vertical joints between ZIP System<sup>®</sup> sheathing and concrete/masonry walls. Fill the gap with an appropriate size backer rod, and use ZIP System<sup>™</sup> liquid flash to bridge the joint achieving a minimum of 1" coverage on either side of the joint.



# ZIP SYSTEM® ROOF SHEATHING // ROOF COVERINGS

#### **ROOF COVERINGS**

ZIP System sheathing is code-recognized sheathing and underlayment and is approved for use with following roof coverings: Asphalt-fiberglass Shingles, Slate and Slate-type Shingle, Wood Shingles and Wood Shakes, Metal Roofs (shingles and panels), and Clay/Concrete Tiles.

When installing roof coverings, follow applicable building codes, manufacturer's suggested instructions and applicable third-party guidance. Some roof coverings require a slip-sheet or interlayment in addition to conventional roofing underlayment. All ZIP System panel seams should be taped prior to installing slip sheets or interlayment when required.

# 41

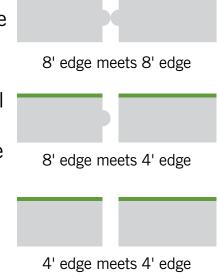
# ZIP SYSTEM<sup>®</sup> ROOF SHEATHING // GENERAL INSTALLATION - ROOF

The following installation steps are presented as a general outline of the installation process. These are manufacturer installation recommendations – please visit huberwood.com for a library of flashing and installation details. You are fully and solely responsible for all safety requirements. Good construction and safety practices should be followed at all times. After establishing compliance with all OSHA and local code safety guidelines, ensure that the panel surface is dry and clean of any nails, sawdust, or other debris or protrusions prior to installing or walking on the panels.

### ZIP SYSTEM<sup>®</sup> ROOF SHEATHING // PANEL ORIENTATION AND SPACING

### PANEL SPACING

Install ZIP System<sup>®</sup> sheathing panels with the overlay facing outside towards the sky. Per industry standards for wood sheathing, a 1/8 inch spacing between panel edges of adjacent panels is recommended. ZIP System<sup>®</sup> sheathing panels have a unique edge profile designed to self-space 1/8 inch on the 8-foot edges. The 4-foot ends of the panels have a square edge profile which will require the 1/8 inch spacing to be manually applied.

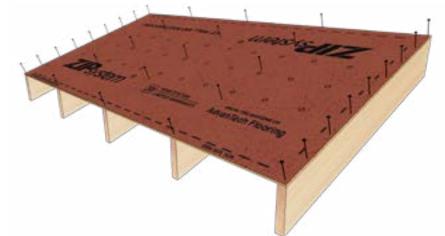


#### PANEL ORIENTATION

Ensure that ZIP System<sup>®</sup> panels span at least three framing members. The 4' edge of the panel must be support by a framing member. The long edge (8') should be oriented perpendicular to the framing members, and panels should be installed with the 4' edge seams staggered a minimum of 24"

#### FASTENERS

Using code approved fasteners, attach the ZIP System sheathing panel to framing members following the fastener pattern specified by the designer of record or local building code. Apply the fasteners a minimum 3/8" from the panel edges. It's the responsibility of the general contractor to verify proper fastener type and spacing prior to installation.



We recommend the head of the fastener is installed flush to the surface of the ZIP System panel. Flush fastener placement is best achieved by properly setting the nail gun air compressor to the manufacturer's recommended setting or using in-line pressure regulators. Many nail guns have depth control adjustments to ensure fasteners are driven flush. For tools that do not have a depth control adjustment feature, we recommend fitting a flush drive attachment collar on the end of the gun to help limit fastener embedment depth. Underdriven fasteners should be hand-driven flush before taping.

# ZIP SYSTEM<sup>®</sup> ROOF SHEATHING // ROOF PITCH

#### **ROOF PITCH**

ZIP System<sup>®</sup> sheathing is intended to replace the structural decking and single layer of underlayment as required by the IRC and IBC when a roof pitch is 4:12 or greater.

When the roof pitch is at or between 2:12-4:12, the IRC and IBC require two layers of underlayment. ZIP System sheathing only replaces one of the two required layers of underlayment; therefore, one additional layer of underlayment is needed to satisfy the building code.

When the roof pitch is less than 2:12, ZIP System sheathing panels can be used, but can only act as the structural decking. When roof pitch is less than 2:12, a low-slope roofing membrane is to be installed.

# ZIP SYSTEM<sup>®</sup> ROOF SHEATHING // TAPING

#### TAPING

Ensure that the panel surfaces are dry and free of any nails, sawdust, debris, or protrusions. Apply minimum 3-3/4" ZIP System<sup>™</sup> flashing tape after all ZIP System<sup>®</sup> sheathing panels are fully fastened to roof-framing members. Only ZIP System flashing tape should be used to seal the seams of ZIP System panels. Avoid stepping on tape in high temperature environments. Roll the ZIP System flashing tape with a rubber headed roller.

**NOTE:** For optimal air leakage reduction, all untaped edges of the panels can be caulked, gasketed or sealed with a weather stripping material.



#### **ICE BARRIERS**

Self-adhered ice barriers, such as ZIP System<sup>™</sup> peel and stick underlayment, may be required by local building code, the authority having jurisdiction or the designer of record. ZIP System<sup>®</sup> sheathing and flashing tape are not considered a replacement for self-adhering ice barriers. Therefore, when self-adhering ice barriers are required, they should be installed in addition to ZIP System sheathing and flashing tape.

**OPTIONAL:** install a piece of ZIP System<sup>™</sup> flashing tape over the top edge of the ice barrier.

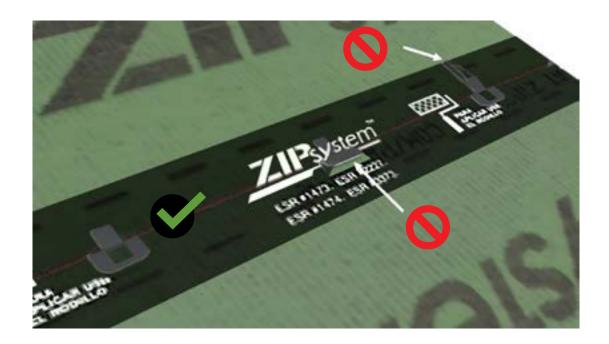


#### **FLASHINGS - ROOF**

When flashing details such as drip edge, step flashing or crickets, use ZIP System flashing tape, flashing tapes satisfying AAMA 711 or AC148, fluid applied flashing satisfying AAMA 714 or cold applied asphalt roof cement that satisfies ASTM D4586 Type I or II.

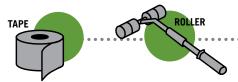
Huber Engineered Woods requires panel edge support for 7/16" ZIP System<sup>®</sup> sheathing installed on roof supports spaced more than 16" on center. Panel edge support might be blocking, tongue-and-groove\* edges or panel edge clips (H-clips).

When taping over H-clips, it is important to make sure that the tape is centered and adequate pressure is applied on all sides of the clip to ensure a proper seal. It should be noted that the use of edge support (H-clips, blocking, tongue-and-groove\* edges, etc.) does not increase the maximum allowable load on a roof for a given truss or rafter spacing.



\*Tongue-and-groove edge profile only offered on 5/8" ZIP System sheathing.

#### ALTERNATIVE DETAILS // TOE BOARD



- **STEP 1:** Often, toe boards are used to assist the installer during the installation of the panels or other roofing materials.
- **STEP 2:** For fastener holes from toe boards or other temporary nailing, install ZIP System<sup>™</sup> flashing tape or ZIP System<sup>™</sup> liquid flash a minimum of 1" around the fastener hole.

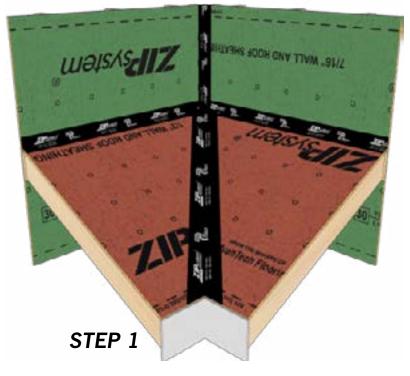


#### ALTERNATIVE DETAILS // TAPING ROOF VALLEYS

Valleys can be flashed using the 3-3/4-inch

ZIP System flashing tape as shown on page 48, but we recommend using 6-inch wide or wider ZIP System<sup>™</sup> flashing tape for increased coverage and protection in valley areas.

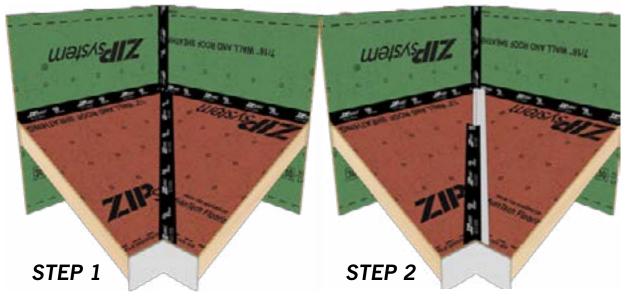
**STEP 1:** Starting from the bottom and working your way up, apply one continuous piece of 6" tape so that the center of the tape is over the valley seam. Roll the tape to ensure proper contact with the panel and to eliminate any wrinkles that may have occurred in the tape. Take special care to seat tape completely into the valley. It is important to pay extra attention to valley taping; water is directed toward the valleys during rain events.



# ALTERNATIVE DETAILS // TAPING ROOF VALLEYS

If 6" ZIP System<sup>™</sup> flashing tape is not available, use two continuous pieces of 3-3/4" ZIP System flashing tape over the entire length of the valley seam, overlapping the pieces on the valley seam by at least 1".

- **STEP 1:** Starting from the bottom, install the first piece of ZIP System flashing tape, overlapping the valley seam by at least 1". Roll the tape to apply pressure to the tape to ensure proper contact with the panel and to eliminate any wrinkles that might have occurred in the tape.
- **STEP 2:** Apply the second piece of ZIP System flashing tape, overlapping the first piece in the valley seam by 1". Roll the tape to apply pressure and ensure the tape is adequately adhered and tightly pressed into the valley seam. It is important to pay extra attention to valley taping; water is directed toward the valleys during rain events.



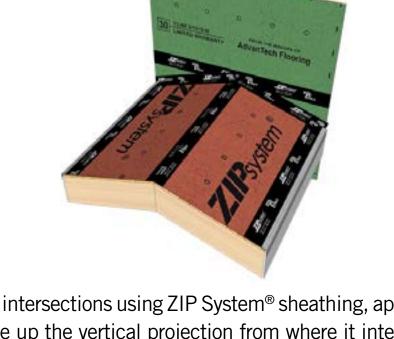
TAPE

# ZIP SYSTEM® ROOF SHEATHING // COMMON DETAIL

### ALTERNATIVE DETAILS // RIDGE

Install ZIP System<sup>™</sup> flashing tape over hips and ridges

by centering the tape over the peak. Apply tape in sufficient length to completely extend the length of the hip or ridge. Starting from the lowest point of the hip and working up, press tape into place, keeping tape centered over the hip or ridge. Apply pressure onto the surface of the tape to ensure a secure bond between the panel and the tape. Roll the tape. Cut ridge tape if required for ventilation prior to installing ridge vent.



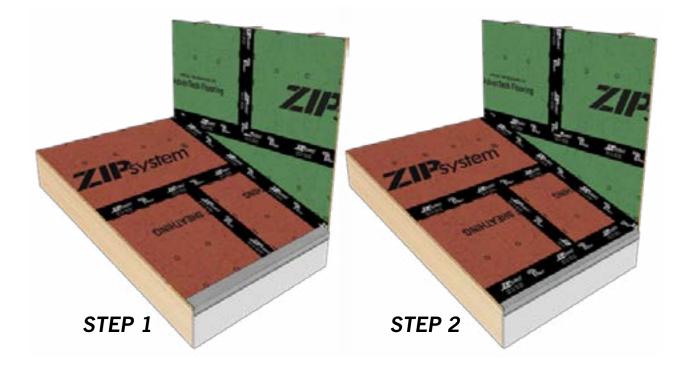
At roof/wall intersections using ZIP System<sup>®</sup> sheathing, apply ZIP System flashing tape up the vertical projection from where it intersects with the roof. The remaining tape width can be adhered to the ZIP System<sup>®</sup> roof panels. Roll the tape to apply pressure to the tape and smooth out any wrinkles.

The construction details on pages 50-54 are provided to assist in the installation of ZIP System product(s) and may not apply to every situation. The following details are recommendations made by HEW but are not required for 30-year limited warranty. It is solely up to the designer of record to provide and approve details to be used on a specific product.

#### ALTERNATIVE DETAILS // DRIP EDGE



- **STEP 1:** After taping and rolling all ZIP System<sup>®</sup> panel seams (including roof to wall), install the drip edge per manufacturer recommendations.
- **STEP 2:** Tape the top edge of the drip edge back to the surface of ZIP System<sup>®</sup> sheathing with ZIP System<sup>™</sup> flashing tape.



TAPE

ROLLER

# ZIP SYSTEM® ROOF SHEATHING // COMMON DETAIL

#### ALTERNATIVE DETAILS // PIPE BOOTS

- **STEP 1:** Starting from each of the side edge, apply ZIP System<sup>™</sup> flashing tape.
- **STEP 2:** Apply a piece of ZIP System flashing tape along the top of the plumbing vent, extending 1 inch beyond the side edge flashing tape, and roll the tape.



TAPE

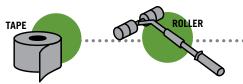
### ZIP SYSTEM® ROOF SHEATHING // COMMON DETAIL

#### **ROOF COVERINGS // ASPHALT, CEDAR OR SLATE SHINGLES**

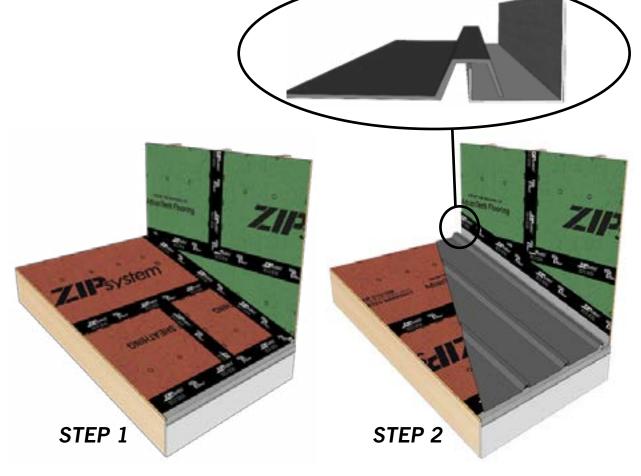
- **STEP 1:** After taping and rolling all ZIP System<sup>®</sup> panel seams (including roof to wall), install drip edge along the eaves and rakes. Tape the drip edge to ZIP System sheathing. Install ice barrier as required per local building codes or the designer of record (not shown). Integrate roof to wall step/continuous flashing for asphalt, cedar or slate shingle as required by manufacturer or third-party guidelines. Tape flashing to ZIP System sheathing.
- **STEP 2:** Install asphalt, cedar or slate shingles per manufacturer or third-party guidelines.

**PRO TIP:** When written manufacturer specifications are not available, follow third-party guidance such as the "Cedar Shake and Shingle Bureau".

#### **ROOF COVERINGS // METAL ROOFS**



- **STEP 1:** After taping and rolling all ZIP System<sup>®</sup> panel seams (including roof to wall), install drip edge along the eaves and rakes. Tape the drip edge to ZIP System sheathing. Install ice barrier as required per local building codes or the designer of record (not shown). Integrate roof to wall step/continuous flashing per metal roofing manufacturer.
- **STEP 2:** Install metal roofing per manufacturer or third-party guidelines.



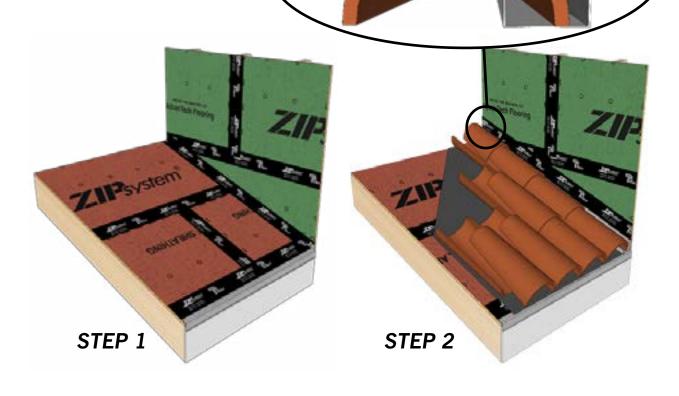
TAPE

ROLLER

# ZIP SYSTEM® ROOF SHEATHING // COMMON DETAIL

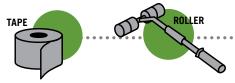
#### ROOF COVERINGS // CLAY, CONCRETE TILE

- **STEP 1:** After taping and rolling all ZIP System<sup>®</sup> panel seams (including roof to wall), install drip edge along the eaves and rakes. Tape the drip edge to ZIP System sheathing. Install ice barrier as required per local building codes or the designer of record (not shown). Integrate roof to wall step/continuous flashing per clay/concrete tile manufacturer.
- **STEP 2:** Install clay/concrete tile per manufacturer or third-party guidelines.



Pages 54-61 highlight common repairs that arise in the field. These details and repair processes apply to ZIP System sheathing panels used in roof and wall applications.

#### **SMALL HOLES**

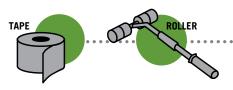


- **STEP 1:** A small hole is an opening that is less than 2 inches in diameter.
- **STEP 2:** Install 1 to 2 layers of ZIP System<sup>™</sup> flashing tape over the hole. The tape should have a minimum of 1-inch overlap on all sides of the hole.

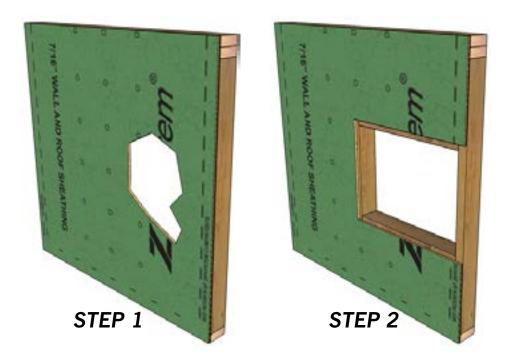




### LARGE HOLES



- **STEP 1:** Large holes in ZIP System<sup>®</sup> sheathing can affect the water-resistive and air barrier properties of the panel, as well as, the structural component.
- **STEP 2:** Cut out the section of panel around the large hole by cutting from vertical stud to vertical stud. In shear wall applications horizontal blocking must be installed in between the vertical studs to provide lateral support to satisfy structural requirements.



TAPE

ROLLER

#### ZIP SYSTEM<sup>®</sup> SHEATHING AND TAPE // COMMON FIXES

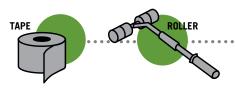
### LARGE HOLES

- **STEP 3:** Cut a new piece of ZIP System<sup>®</sup> sheathing to fit in the hole.
- **STEP 4:** Tape all newly created panel seams with ZIP System<sup>™</sup> flashing tape. Roll the tape.

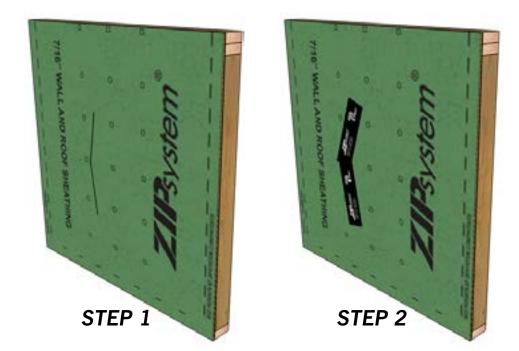




### SAW KERFS

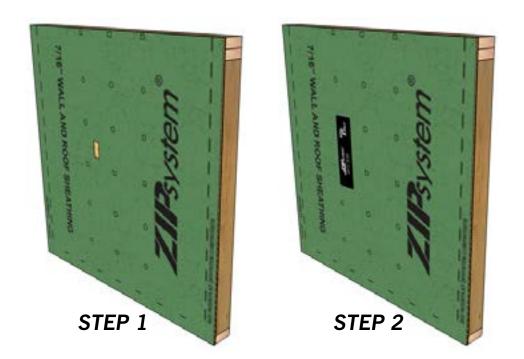


- **STEP 1:** A saw kerf is damage to the overlay created by a circular saw, but should not penetrate into the wood portion of the panel; this may affect the structural integrity of wood structural panels.
- **STEP 2:** A saw kerf can be remedied by placing a piece of ZIP System<sup>™</sup> flashing tape over the saw kerf and rolling the tape into place.

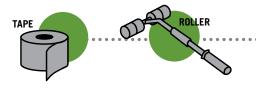


### **CHIPS IN THE OVERLAY**

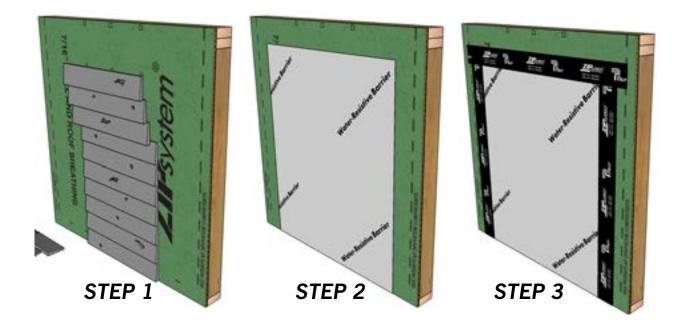
- TAPE ROLLER
- **STEP 1:** Chips in the overlay can be created numerous ways, but the most common is by impacts from hard-edge objects.
- STEP 2: A chip in the overlay can be remedied by placing a piece of ZIP System<sup>™</sup> flashing tape over the chip and rolling the tape into place.



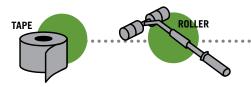
### SIDING REMOVAL



- **STEP 1:** Siding can be damaged during the construction phase or throughout the life of the structure, requiring the siding to be removed.
- **STEP 2:** When siding is removed from ZIP System<sup>®</sup> sheathing, a new code-recognized water-resistive barrier should be installed over the areas where the siding was removed.
- STEP 3: When the water-resistive barrier is a loose-laid wrap that is terminated in the middle of the wall plane, install ZIP System<sup>™</sup> flashing tape along the edges. Roll the tape.

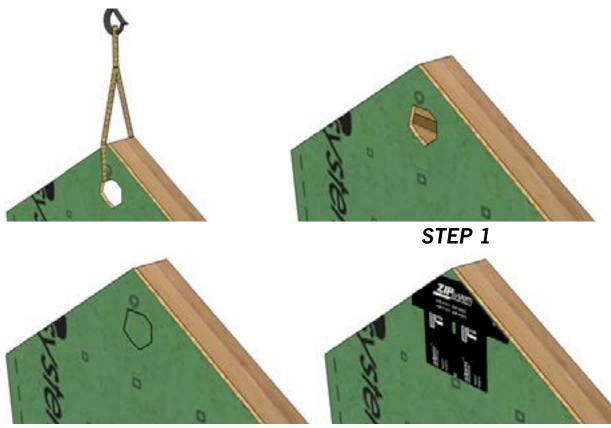


### **CRANE HOLES**



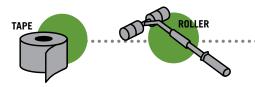
Crane holes are often created in prefabricated wall sections in order to lift the sections into place. Crane holes in ZIP System<sup>®</sup> sheathing can affect the water-resistive barrier, air barrier and structural properties of the panels.

- **STEP 1:** Add horizontal blocking between the vertical studs.
- **STEP 2:** Install ZIP System sheathing to blocking. Size to fit hole.
- **STEP 3:** Tape all newly created panel seams with ZIP System<sup>™</sup> flashing tape and roll the tape.



STEP 2

### **DIRTY PANELS**



It is important that panels are free of any dirt or debris prior to installing ZIP System<sup>™</sup> flashing tape to the panels. When the panels are dirty before the flashing tape is applied, follow the steps below.

- **STEP 1:** Remove the dirt with water and a towel.
- **STEP 2:** Before installing ZIP System flashing tape, ensure the panels are dry to the touch.



