HUB 3021 REV 02/12/2025

ZIPsystem™
R-SHEATHING

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® R-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.

HUBER ENGINEERED WOODS

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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® R-sheathing and ZIP System™ flashing tape only in dry conditions and on dry surfaces. Do not install panels or tapes in rain, snow, frost or other slippery conditions.
- 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.
- Do not apply flame directly to the foam layer. Foam will burn and smoke if exposed to an ignition source of sufficient heat and intensity, such as a welder's torch.

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ZIP SYSTEM® R-SHEATHING // OVERVIEW

ZIP System R-sheathing panels consist of a 7/16-inch oriented strand board panel laminated with a water-resistive facer on the exterior and a rigid foam insulation panel bonded on the opposite (interior) face. The factory-bonded overlay on the exterior side of the panel complies as an alternative to the water-resistive barrier prescribed in the International Residential Code (IRC) and International Building Code (IBC). When panels are properly installed and taped with minimum 3-3/4" ZIP System™ flashing tape, ZIP System R-sheathing provides a water-resistive barrier, air barrier, and exterior insulation in one product. Roll the tape. R-sheathing panels may be used in the construction of braced wall panels or shear walls under the IRC and IBC. See ESR-3373 and ER-0482 for more information.

ZIP System R-sheathing panels can be used with a range of exterior claddings*. Wall coverings that can be used with ZIP System R-sheathing include brick, vinyl, adhered stone, fiber cement, wood (shake, shingles and lap siding), and traditional hard coat stucco.

HEW warrants the adhesion of the ZIP System flashing tape, ZIP System™ stretch tape, and ZIP System™ liquid flash wherever they make direct contact with ZIP System R-sheathing panels. HEW does not warrant the adhesion of ZIP System flashing tape, ZIP System stretch tape, and ZIP System liquid flash to other substrates. HEW does not warrant the adhesion of other flashing tapes, sealants, or fluid-applied flashing products to the ZIP System R-sheathing.

***EIFS should NOT be installed over ZIP System R-sheathing. Doing so will void the 30-year limited ZIP System warranty.**

ZIP SYSTEM® R-SHEATHING // NOTES & LIMITATIONS

- ZIP System® R-sheathing panels are not warranted or recommended for use in roof applications.
- Do not use abutted against stone or masonry without providing a minimum of a 1/2-inch gap from the edge of the OSB.
- Do not install ZIP System™ flashing tape or stretch tape in temperatures less than 0 degrees Fahrenheit.
- ZIP System R-sheathing panels 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.
- ZIP System R-sheathing panels are not intended to replace traditional wood structural panels where the wall sheathing is designed to resist combined wind uplift and shear.
- ZIP System R-sheathing should be covered with the exterior wall cladding within 180 days of installation. After 180 days of exposure, a mechanically fastened WRB must be installed over the ZIP System R-sheathing.
- Do not apply a fluid-applied WRB or self-adhered WRB over the entire ZIP System assembly in a wall application. Exception: when transitioning between dissimilar sheathing materials.

ZIP SYSTEM® R-SHEATHING // NOTES & LIMITATIONS

When original wall claddings are removed, the wall must be covered with an additional water-resistive barrier (WRB) prior to installation of the new wall cladding.

ZIP System™ 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™ flashing tape or liquid flash can be used as a transition from the ZIP System R-sheathing surface to the rigid flashing.

When an ignition barrier is required in attic spaces, follow the requirements listed in ESR-1375.

Minimum 1/2-inch gypsum wall board must be installed on the interior side of wood framed walls as a thermal barrier per IRC and IBC requirements. Refer to ESR-1375 for attic and crawl space exceptions.

In cladding systems requiring multiple layers of water-resistive barriers, such as traditional hard-coat stucco, ZIP System® R-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 R-sheathing prior to installing hard-coat stucco or adhered stone. See pages 36-39 for more information.

ZIP SYSTEM® R-SHEATHING // NOTES & LIMITATIONS

ZIP System™ 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.

WET BLOWN CELLULOSE INSULATION

In addition to following manufacturer installation instructions, we recommend a maximum moisture content of the cellulose to be less than 25% measured at the inside surface of the ZIP System® R-sheathing panels before closing the wall cavity.

SPRAY FOAM

Open and closed cell spray foam can be used with ZIP System R-sheathing. See technical tip, “Spray Foam Insulation with ZIP System Sheathing,” at huberwood.com for more information.

SECONDARY COATINGS

Do not apply secondary coatings or treatments to ZIP System R-sheathing panels. Exception, 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.

ZIP SYSTEM® R-SHEATHING // STORAGE & HANDLING

- Set panel stack on three supports (stickers) to keep off the ground.
- Outdoors and jobsites: cover panels loosely with a waterproof protective material such as a tarpaulin. 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.
- Factory applied packaging is intended only for protection during transit. Packaged units must be stored indoors or within a covered structure.
- The temporary factory-applied packaging should be slit or removed to prevent accumulation of condensation.
- Do not stack more than three units high.

ZIP SYSTEM® R-SHEATHING // PANEL SIZES

ZIP System® R-sheathing panels are available in nominal 4’ x 8’ sheets with self-spacing edge profiles. The self-spacing profiles are created by the foam overhanging one 4’ edge and one 8’ edge. 4’x9’ and 4’x10’ panels are available with extended lead times. ZIP System R-sheathing panels are Exposure 1 rated and are available in the following offerings.

R-3, 4’ x 8’ | Total Thickness - 15/16”
- 7/16” ZIP System panel with 1/2” foam.

R-6, 4’ x 8’ | Total Thickness - 1-7/16”
- 7/16” ZIP System panel with 1” foam.

R-9, 4’ x 8’ | Total Thickness - 1-15/16”
- 7/16” ZIP System panel with 1-1/2” foam.

R-12, 4’ x 8’ | Total Thickness - 2-7/16”
- 7/16” ZIP System panel with 2” foam.

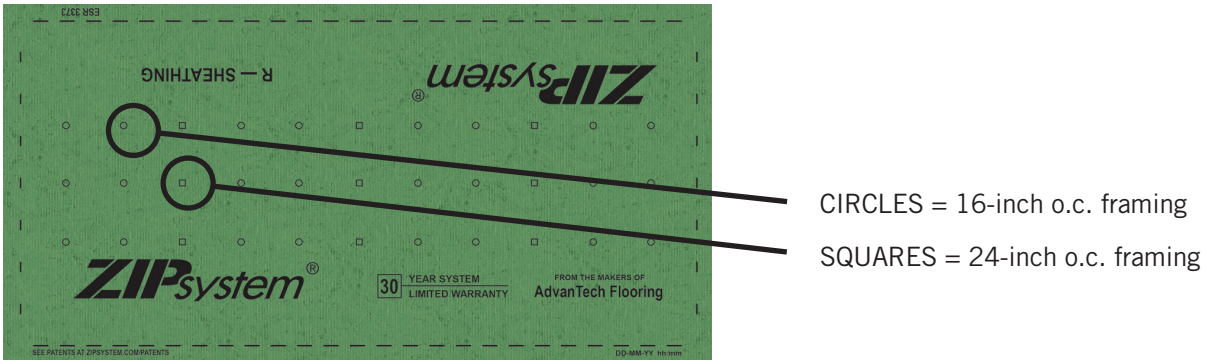
ZIP SYSTEM® FLASHING TAPE // TAPE SIZES

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

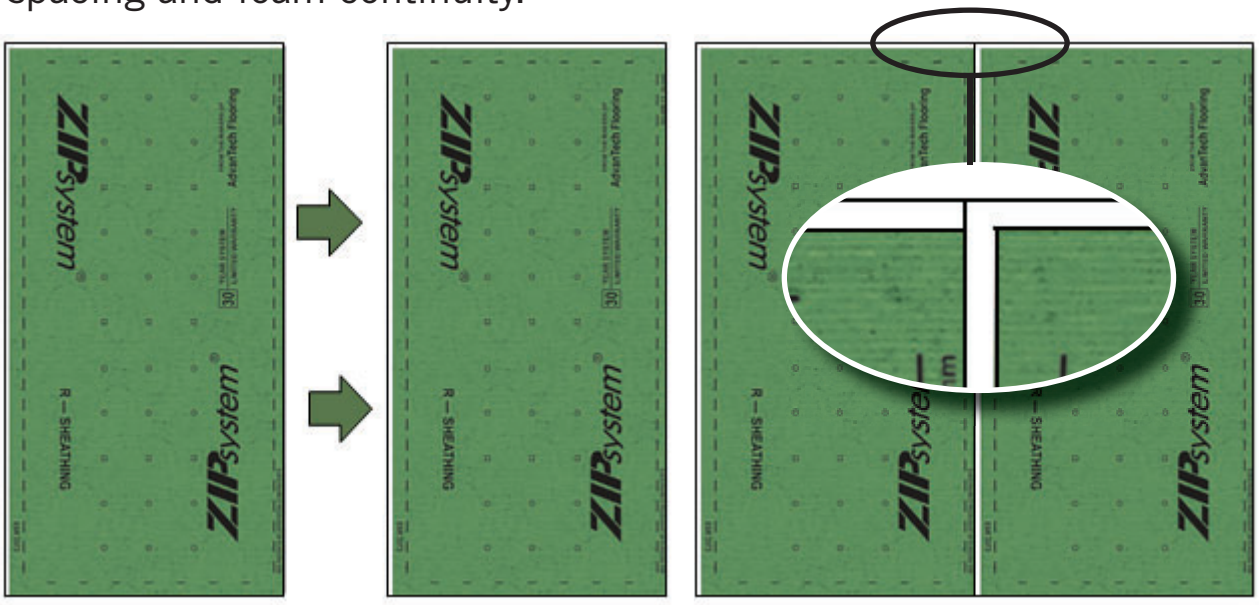
ZIP System™ stretch tape rolls are available in 3, 6, and 10-inch widths.

ZIP SYSTEM® R-SHEATHING // FASTENING

The circles on ZIP System® R-sheathing denote 16-inch o.c. framing and squares 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 in this installation manual, ESR-3373, or ER-0482.



Install consecutive panels of ZIP System R-sheathing with oversized foam edges of the panels in the same orientation to maintain proper spacing and foam continuity.



Disclaimer: foam enlarged for illustration purposes

ZIP SYSTEM® R-SHEATHING // GENERAL INFORMATION & COMPATIBILITY

FASTENERS

ZIP System® R-sheathing must be installed per Table 1 or Table 2 found within the following sections, ESR-3373, or ER-0482. Please note, fasteners used to install ZIP System R-sheathing are not required to be ring-shank, galvanized or stainless steel unless otherwise stated by the local building code, designer of record or the engineer of record. For non-structural applications, see page 17.

SEALANTS

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

COMPATIBLE SUBSTRATES: TAPE

ZIP System™ flashing tape is compatible with dimensional lumber (treated and untreated), OSB, plywood, house-wraps, PVC, vinyl and metal substrates in accordance with ESR-2227. 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.

COMPATIBLE SUBSTRATES: PANELS

ZIP System R-sheathing can be installed over dimensional wood framing[1], light gauge metal framing[2], CMU/concrete walls[3,] and new or existing OSB and plywood sheathing[4].

1: Follow installation requirements in ESR-3373 and the remainder of this report. 2: Refer to HEW's Tech Tip, Light-Gauge Metal Framing with ZIP System R-sheathing 3: Refer to HEW's Tech Tip, Installation of ZIP System R-sheathing over Concrete 4: Refer to HEW's Tech Tip, Covering Existing Sheathing with ZIP System R-sheathing

ZIP SYSTEM® R-SHEATHING
// GENERAL INFORMATION & COMPATIBILITY

FLASHINGS - TAPES

ZIP System™ flashing tape must be used where two ZIP System® 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 penetrations and fenestrations.

FLASHINGS – FLUID APPLIED

ZIP System™ 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" ZIP System flashing tape refer to Technical Tip "Compatibility of ZIP System Flashing Tape with ZIP System Liquid Flash"*.

WRINKLES IN THE TAPE

Rolling the ZIP System flashing tape will significantly reduce the chance of wrinkling. If wrinkles occurs, first try to roll the wrinkles out with a rubber headed roller. This should help eliminate any wrinkles or fish mouths (avenues for water to get to the seam). If rolling the tape does not remove the fish mouths, remove that section and replace with a new piece of tape. Overlap the existing tape by three inches, or place another piece of tape over the fish mouth. Roll the tape.

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

ZIP SYSTEM® R-SHEATHING
// GENERAL INFORMATION & COMPATIBILITY

PARAPET WALL TERMINATION

ZIP System® R-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 R-sheathing with a metal flashing. Transition the metal flashing back to the ZIP System R-sheathing using ZIP System™ flashing tape or liquid flash. Refer to roofing membrane manufacturer's installation instructions for proper installation requirements.

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

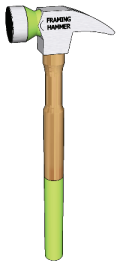
TOOLS

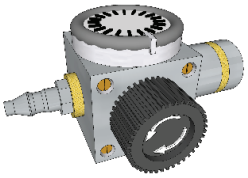
Common

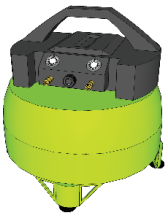
- Pneumatic nail gun
- Framing hammer
- Air compressor
- Speed square
- Tape Roller
- PPE

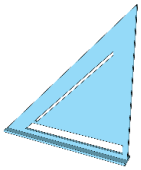
Recommended

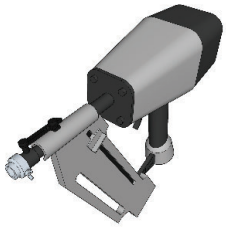
- Flush nail collars
- Air line regulators











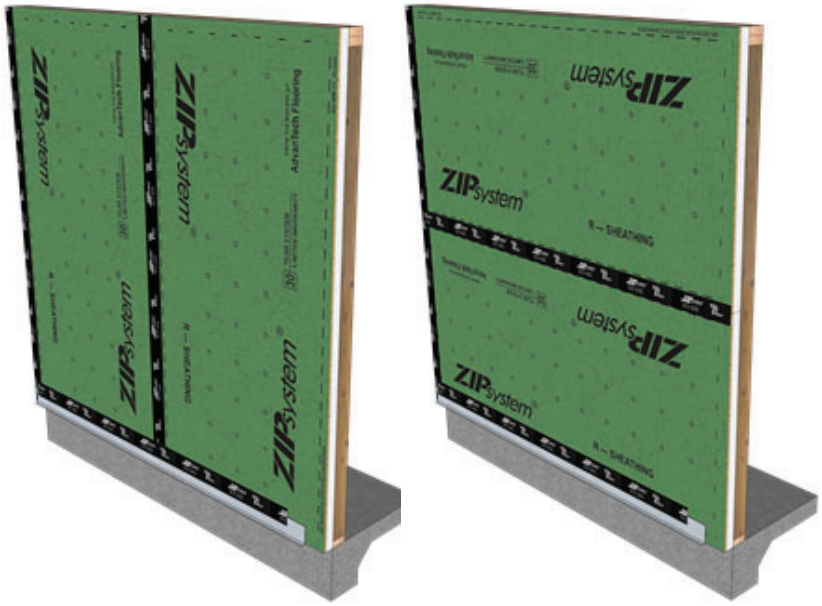
ZIP SYSTEM® R-SHEATHING // GENERAL INSTALLATION

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® R-SHEATHING // PANEL ORIENTATION

Install ZIP System® R-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. Blocking may be required on horizontal panel edges, see pages 17-19 for more information.



ZIP SYSTEM® R-SHEATHING // FIRE RATED ASSEMBLIES

ZIP System® R-sheathing can be used as a part of fire rated assemblies. The ZIP System R-sheathing is a proprietary panel and is limited to the following assemblies:

1-Hour Interior Fire Rated Assemblies
UL V302, UL V303, and UL V318
1-Hour Exterior & Interior Fire Rated Assemblies
UL U364

ZIP SYSTEM® R-SHEATHING // BUILDING LAYOUT

ZIP System R-sheathing thickness may influence building interior and exterior dimensions, framing layout or foundation design for anchored veneers. For example: Foundation brick ledges may need to be wider when using ZIP System R-sheathing or wall stud placement may need to be adjusted from building corners to allow for sheathing thickness to account for the minimum 1-inch air space required by IRC and IBC building codes. Designer and general contractor should make any necessary adjustments to the design.

ZIP SYSTEM® R-SHEATHING // NON-STRUCTURAL

ZIP System R-sheathing panels that are not intended to resist wind or seismic loads may be attached to framing using 0.131-inch diameter (8d common) shank nails following a 6-inch/12-inch (edge/field) fastening pattern. Nails must penetrate the studs at least 1 inch. When ZIP System R-sheathing panels are not being used to resist lateral loads, blocking is not required.

ZIP SYSTEM® R-SHEATHING // SHEAR WALLS - PRESCRIPTIVE

Wood-framed walls may be designed to resist lateral shear forces by prescriptive methods with ZIP System® R-sheathing in accordance with the IRC and IBC when installed per Table 1. When ZIP System R-sheathing panels are being used to resist lateral loads, the panel edges must be backed by solid wood framing. Minimum 1/2-inch thick gypsum wallboard must be installed as a thermal barrier in accordance with Chapter 26 of the IBC or Chapter 3 of the IRC. Refer to ESR-3373 for more information regarding prescriptive design.

TABLE 1: PRESCRIPTIVE METHOD: FASTENING REQUIREMENTS FOR ZIP SYSTEM® R-SHEATHING FOR WIND OR SEISMIC LOADING UNDER THE IRC (WSP METHOD)

R-SHEATHING TYPE[3]	FRAMING[4]		FASTENERS		
	Nominal Stud Size (min.)	Maximum Stud Space (inches)	Fastener Specification[2]	Edge/Field Spacing (inches)	Min. Penetration into Framing (inches)
R-3	2 x 4	24	0.131-inch shank nail	4/12	1.5
R-3	2 x 4	16	16-ga staple, 7/16" crown, 2" length	3/6	1.0
R-6	2 x 4	24	0.131-inch shank nail	4/12	1.5
R-6	2 x 4	24	15-ga staple, 7/16" crown, 2.5" length	3/6	1.0
R-9	2 x 4	24	0.131-inch shank nail	3/12	1.5
R-12	2 x 4	24	0.131-inch shank nail	3/12	1.5

For SI: 1 inch = 25.4mm; 1 pound per foot (ppf) = 14.59 N/m

1. All fasteners must be located a minimum of 3/8 inch from panel edges. 2. Fasteners must be common nails or equivalent, or staples, of a type generally used to attach wood sheathing. 3. R-12 R-Sheathing panels have a foam plastic insulation thickness of 2.0 inch. R-9 R-Sheathing panels have a foam plastic insulation thickness of 1.5 inch. R-6 R-Sheathing panels have a foam plastic insulation thickness of 1.0 inch. R-3 R-Sheathing panels have a foam plastic insulation thickness of 0.5 inch. 4. All panel edges must be backed by framing.

ZIP SYSTEM® R-SHEATHING // SHEAR WALLS - ENGINEERED

Wood-framed walls may be designed to resist lateral shear forces using ZIP System® R-sheathing. The excerpt below (Table 2) from ESR-3373 shows the allowable design values for ZIP System R-sheathing. For wind controlled regions refer to ESR-3373 and for seismic controlled regions refer to ESR-3373/ER-0482. Only the intermittent bracing method can be used with ZIP System R-sheathing. For shear walls, all panel edges must be backed by solid wood framing. A minimum 1/2-inch gypsum wallboard must be installed as a thermal barrier in accordance with Chapter 26 of the IBC or Chapter 3 of the IRC.

TABLE 2: ENGINEERED METHOD: ALLOWABLE SHEAR CAPACITY FOR ZIP SYSTEM® R-SHEATHING UNDER SEISMIC LOADING[1,2].

R-SHEATHING TYPE[4]	FRAMING		FASTENERS			ALLOWABLE SHEAR CAPACITY [5,6,7] (plf)
	Nominal Stud Size (min.)	Maximum Stud Space (inches)	Fastener Specification[3]	Edge/Field Spacing (inches)	Min. Penetration into Framing (inches)	
R-3	2 x 4	24	0.131-inch shank nail	4/12	1.5	245
R-3	2 x 4	24	0.131-inch shank nail	3/12	1.5	280
R-3	2 x 4	16	16-ga staple, 7/16" crown, 2" length	3/6	1.0	210
R-6	2 x 4	24	0.131-inch shank nail	4/12	1.5	230
R-6	2 x 4	24	0.131-inch shank nail	3/12	1.5	255
R-9	2 x 4	24	0.131-inch shank nail	3/12	1.5	240
R-12	2 x 4	24	0.131-inch shank nail	3/12	1.5	215

for SI: 1 inch = 25.4mm; 1 pound per foot (ppf) = 14.59 N/m

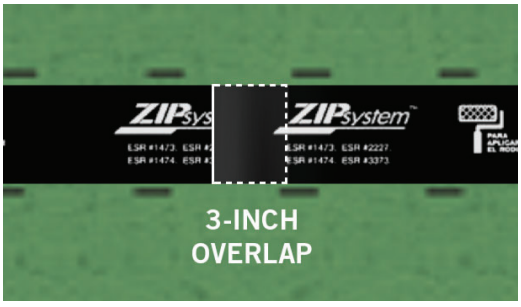
1. All fasteners must be located a minimum of 3/8 inch from panel edges. 2. For framing species other than douglas fir-larch, the shear value above must be multiplied by the Specific Gravity Adjustment Factor = [1- (0.50 – SG)], where SG = Specific Gravity of the framing lumber in accordance with the AF&PA NDS. This adjustment factor must not be greater than 1. 3. Fasteners must be common nails or equivalent, or staples, of a type generally used to attach wood sheathing to wood framing. 4. R-12 R-Sheathing panels have a foam plastic insulation thickness of 2.0 inch. R-9 R-Sheathing panels have a foam plastic insulation thickness of 1.5 inch. R-6 R-Sheathing panels have a foam plastic insulation thickness of 1.0 inch. R-3 R-Sheathing panels have a foam plastic insulation thickness of 0.5 inch. 5. The maximum height-to-width aspect ratio of 2:1. 6. The **allowable shear capacity may be increased by 40% for wind** in Allowable Stress Design in accordance with Section 2306.3 of the 2021, 2018 and 2015 IBC. 7. All panel edges must be backed by framing.

ZIP SYSTEM® R-SHEATHING // TAPING

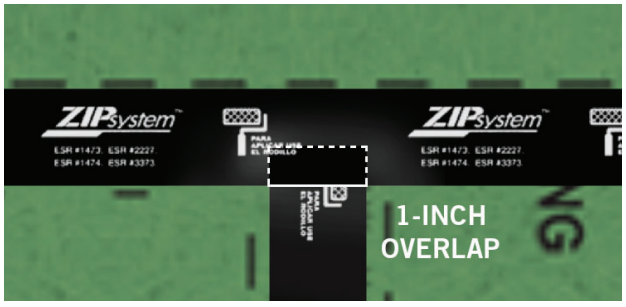
Apply ZIP System™ flashing tape after all ZIP System® R-sheathing panels are fully fastened to wall-framing members. ZIP System flashing tape uses an acrylic adhesive that requires pressure from a rubber headed roller for an adequate seal. Rolling helps to smooth out any wrinkles.

REMEMBER TO ALWAYS:

- Use only minimum 3-3/4 inch ZIP System flashing tape or liquid flash to seal the seams of ZIP System® R-sheathing panels, including inside and outside corners.
- Ensure that the panel surface is dry and free of sawdust, dirt, and other contaminates 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 below).
- At T-joints, tape pieces should overlap by at least 1" (see below).



Horizontal Overlap

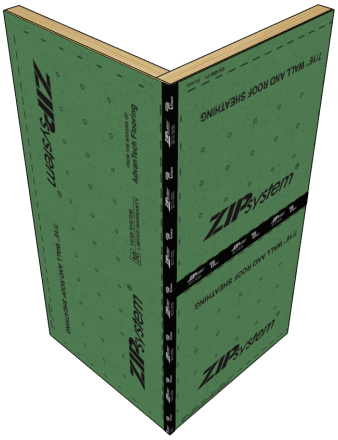


T-Joint Overlap

ZIP SYSTEM® R-SHEATHING // TAPING

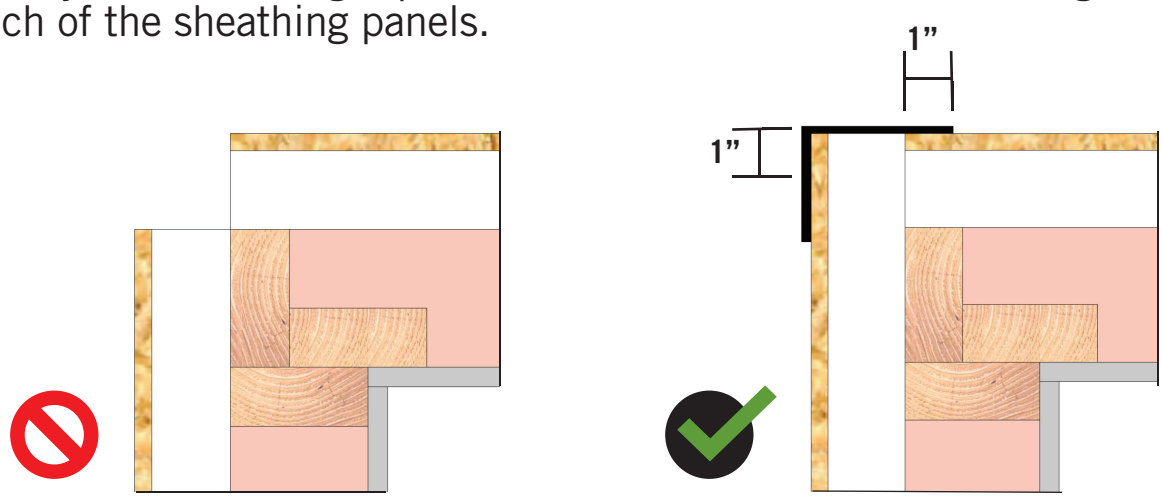
INSIDE CORNER: When taping inside corner seams, it is helpful to cut a manageable length of minimum 3-3/4 inch ZIP System™ flashing tape and hold the ends in the middle using only your index fingers and thumbs. Slightly pulling both ends of the tape causes the tape edges to naturally curl inward. With tape in tension, place it in the center of the inside corner. Repeat as you go up the wall. Roll the tape.

Inside Corner



Outside Corner

OUTSIDE CORNER: When taping outside corner seams, start by working a minimum 3-3/4 inch ZIP System tape 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. Roll the tape. For outside corners, ensure the panels overlap to prevent “cold-corners”, but also provide continuity of the continuous insulation. Ensure the ZIP System™ flashing tape achieves a minimum of 1” coverage onto each of the sheathing panels.



ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

When using ZIP System® R-sheathing, any strapping is to be installed directly to the framing.

Note: Straps, ties and connectors installed on the exterior face of stud will not be visible after ZIP System R-Sheathing panels are installed. Schedule any necessary anchor or nailing inspections accordingly.

Note: Force Transfer Around Openings (FTAO) is outside the scope of the evaluation reports for ZIP System R-sheathing and therefore should not be installed through the ZIP System R-sheathing.

ZIP SYSTEM® R-SHEATHING // GENERAL DETAIL NOTES

When it comes to installing ZIP System® R-sheathing and tape, only the panel joints (inside corners, outside corners, in-plane etc.) are required by Huber Engineered Woods (HEW) to be flashed with ZIP System™ flashing tape or ZIP System™ liquid flash. When using ZIP System flashing tape, the tape must be rolled with a rubber headed roller such as the ZIP System™ roller or ZIP System™ tape gun.

The construction details on pages 24-40 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. HEW does not have the right to supersede the designer of record.

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 the wood structural panel portion of ZIP System R-sheathing.

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

ZIPsystem™
SHEATHING & TAPE

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

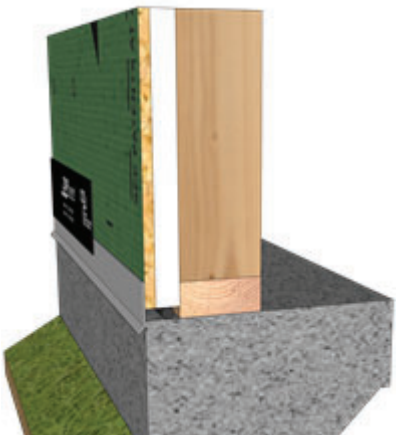
FOUNDATION // FOUNDATION SPACING OPTIONS

BACK OF FOAM IN-PLANE WITH FOUNDATION:

The back of the foam is flush with the foundation.

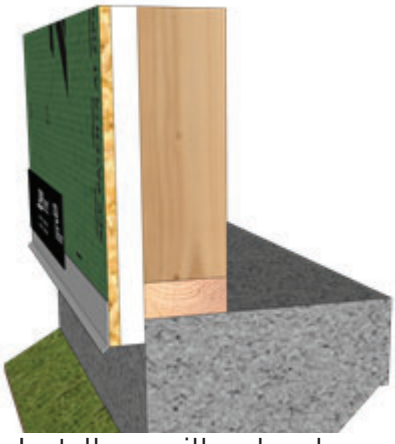
FRONT OF SHEATHING IN-PLANE WITH FOUNDATION:

Ensure a minimum of 1/2”gap between R-sheathing and foundation.



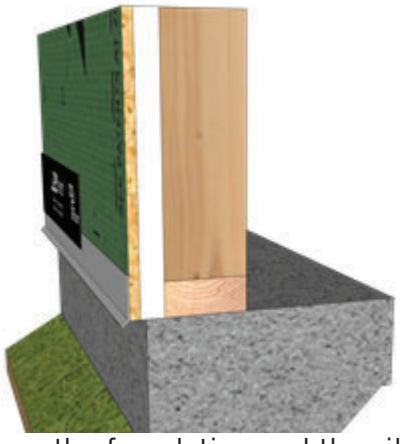
FOAM OVERHANG

The foam overhangs the foundation. Follow distance to grade requirements listed in the IRC or IBC.



FRONT OF FOAM IN-PLANE WITH FOUNDATION:

The front of the foam is flush with the foundation



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

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

FOUNDATION // FOUNDATION FLASHING

FLASHING - BASE FLASHING

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

FLASHING - METAL BASE CAP

Install metal base cap along bottom edge, tape top edge of metal back to sheathing.

FLASHING - WOOD BASE CAP

Install pressure-treated wood along the bottom edge, tape top edge of wood back to sheathing.

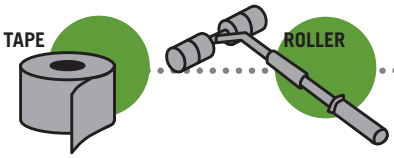
FLASHING - FLUID-APPLIED:

Install ZIP System™ liquid flash along bottom edge of panel onto foundation a min. of 1” on each surface.

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

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

PIPES // ZIP SYSTEM™ FLASHING TAPE & BOOT FLASHING



STEP 1: Insert the boot over the penetration.

STEP 2: (Optional) Install ZIP System™ 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 vertical edge flashing tape at least 1 inch. Roll all pieces of tape.

STEP 1

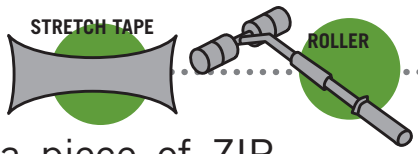
STEP 2

STEP 3

STEP 4

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

PIPES // ZIP SYSTEM™ STRETCH TAPE



STEP 1: Starting from the top of the pipe, center a piece of ZIP System™ 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

STEP 2

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

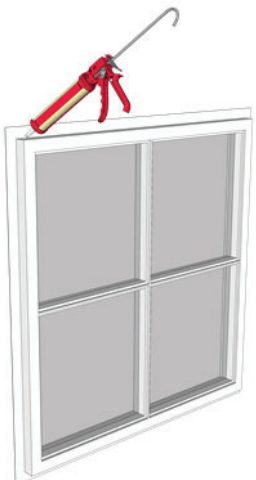
WINDOW // FLANGED WINDOW

STEP 1: Install a piece of ZIP System™ stretch tape as the sill pan. Install up the jambs a minimum of 6-inch and roll the tape. Install shims window per window 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 13.

STEP 3: Install ZIP System™ flashing tape on each of the window flanges at the jambs. Roll the tape.

STEP 1

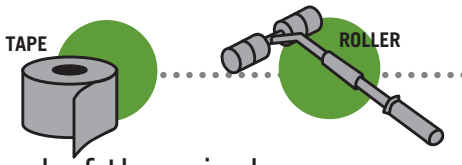


STEP 2

STEP 3

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

WINDOW // FLANGED WINDOW



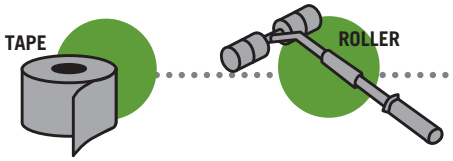
STEP 4: Install ZIP System™ flashing tape at the head of the window. **Note:** If using 3-3/4" ZIP System flashing tape for the flanges, when a "T" joint occurs at the window head ensure the vertical joint tape above the window head overlaps the head flashing tape of the window. For alternative details please see page 30.

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.

STEP 4

STEP 5

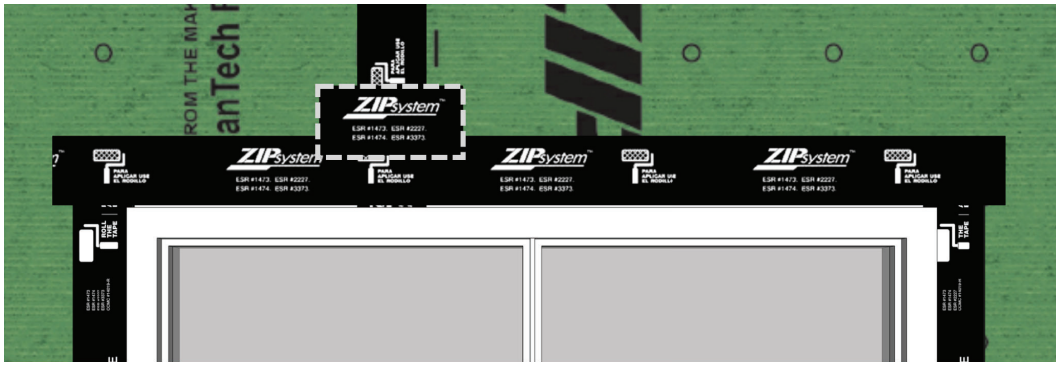
ZIP SYSTEM® R-SHEATHING // COMMON DETAIL



WINDOW // T-JOINT ALTERNATIVE

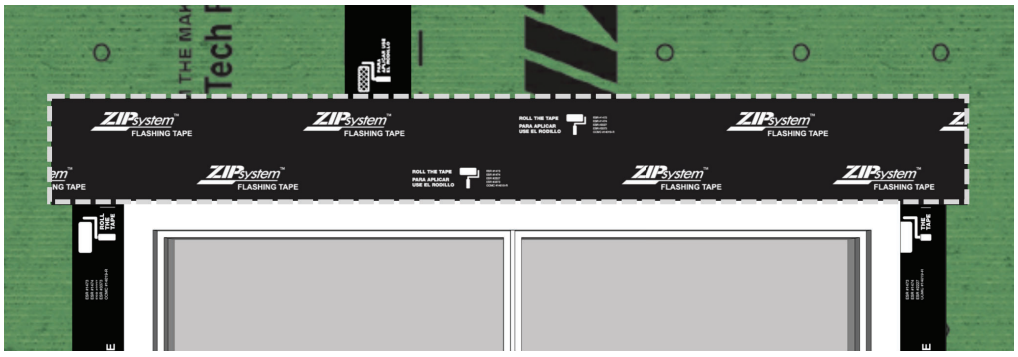
3-3/4-INCH ZIP SYSTEM™ FLASHING TAPE

In the event the vertical panel seam has been taped prior to the window being installed, tape the head flange of the window with 3-3/4-inch ZIP System™ 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.

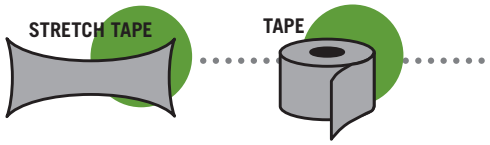


6-INCH OR WIDER ZIP SYSTEM FLASHING TAPE

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.



ZIP SYSTEM® R-SHEATHING // COMMON DETAIL



WINDOW // STORE FRONT WINDOW

STEP 1: Install a piece of ZIP System™ stretch tape in the window sill a minimum of 6-inch up the window jamb and then install ZIP System™ 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.

STEP 1

STEP 2

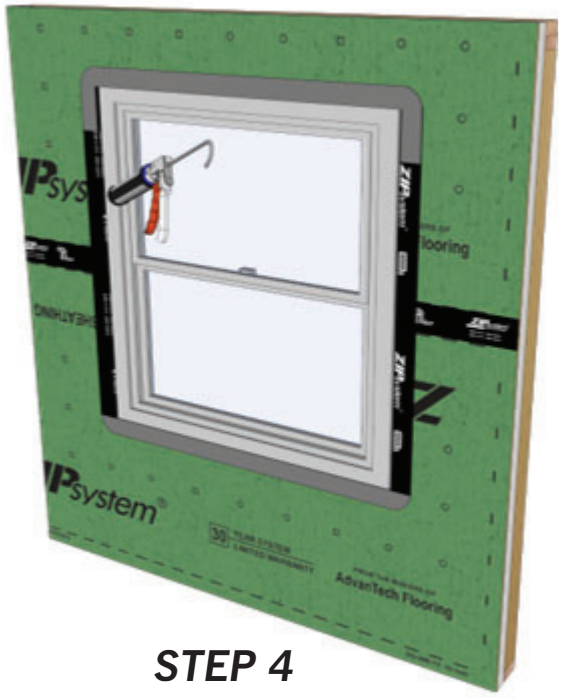
ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

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.

STEP 4: Flash or seal the window frame to ZIP System® R-sheathing using methods approved by the window manufacturer. ZIP System™ liquid flash may be an option. From the interior, install low-expanding window and door foam as required by window manufacturer.

STEP 3



STEP 4

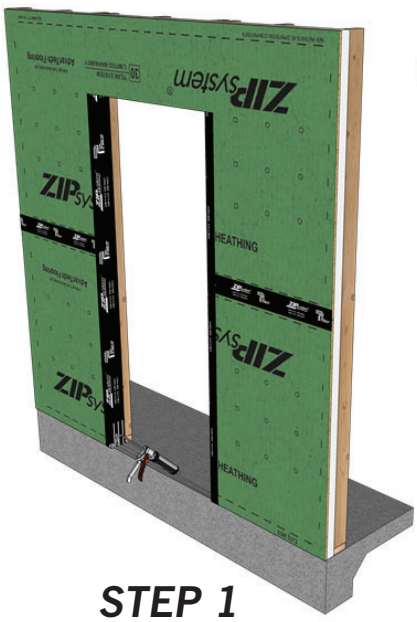
ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

DOOR // TYPICAL BRICK MOULD DOOR

STEP 1: Install ZIP System™ 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 13.

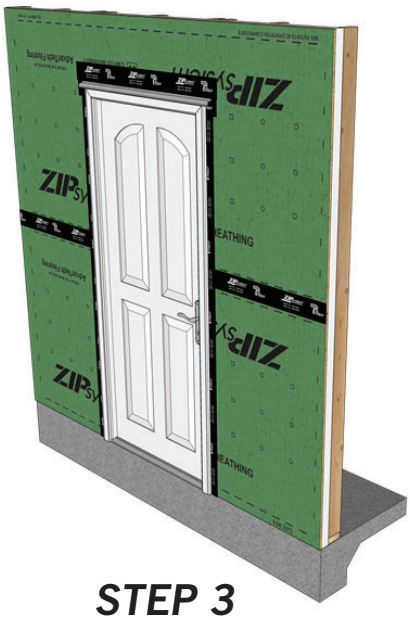
STEP 2: Once the door has been installed into the rough opening in accordance with the manufacturer's installation guidance, apply a bead of sealant at the backside of the trim.

STEP 3: Install head flashing above door and then tape top of head flashing.



STEP 1

STEP 2



STEP 3

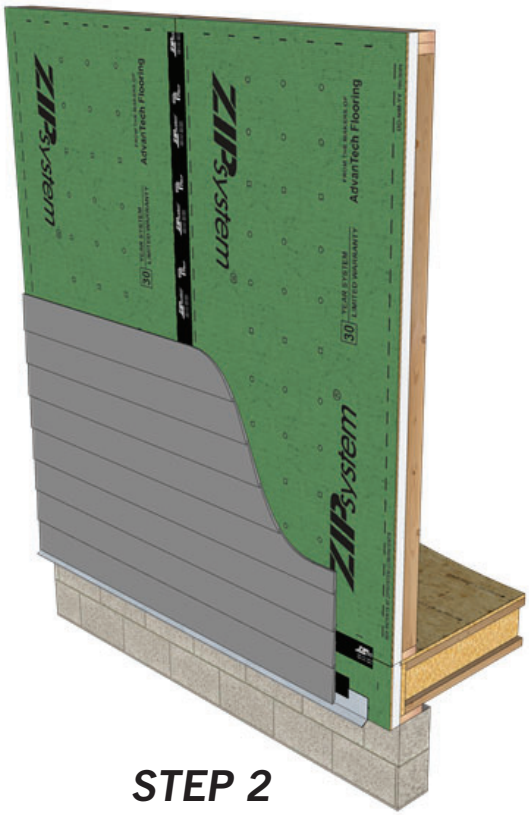
ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

CLADDING // LAP SIDING

STEP 1: After all ZIP System® R-sheathing panel seams have been taped, tape the top edge of any flashing back to the surface of ZIP System R-sheathing.

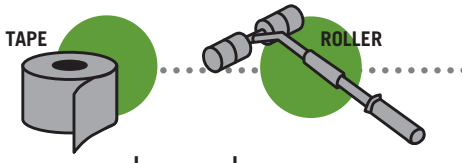
STEP 2: Install lapped siding in accordance with siding manufacturer's written instructions. Fastening to be determined by the cladding manufacturer.

STEP 1



STEP 2

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL



CLADDING // BRICK

STEP 1: After all ZIP System® R-sheathing panel seams have been taped, tape the top edge of the masonry flashing back to the ZIP System R-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 for IRC projects and a minimum 2-inch per IBC per the local building code.

STEP 1

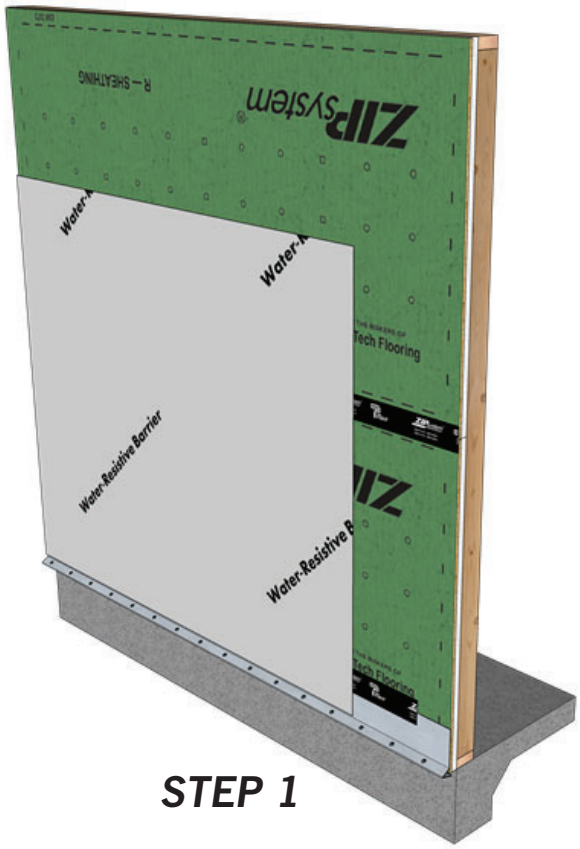
STEP 2

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

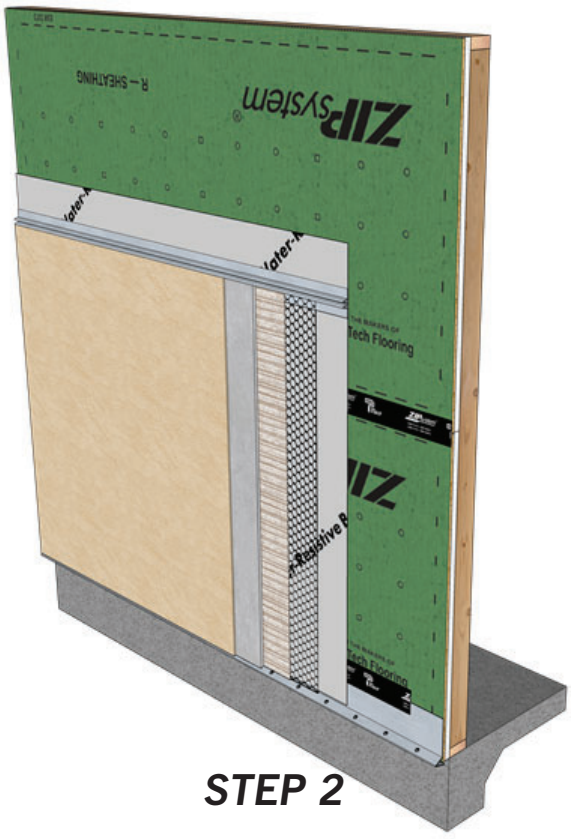
CLADDING // STUCCO REQUIREMENTS FOR 2015 IBC AND 2018 IRC(AND PREVIOUS CODE CYCLES) & 2021IRC/IBC STUCCO REQUIREMENTS IN DRY CLIMATES

STEP 1: After all ZIP System® R-sheathing panel seams have been taped, tape the top edge of the weep screed flashing back to the ZIP System R-sheathing, then install a mechanically fastened water-resistive barrier compliant with ASTM E2556.

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.



STEP 1



STEP 2

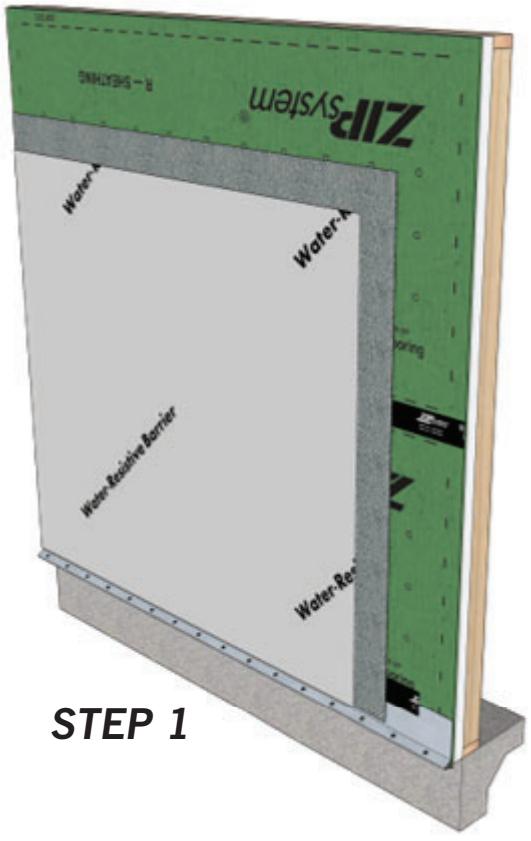
PRO TIP: The building science industry promotes the use of a drainage gap behind reservoir wall claddings such as stucco and adhered stone.

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

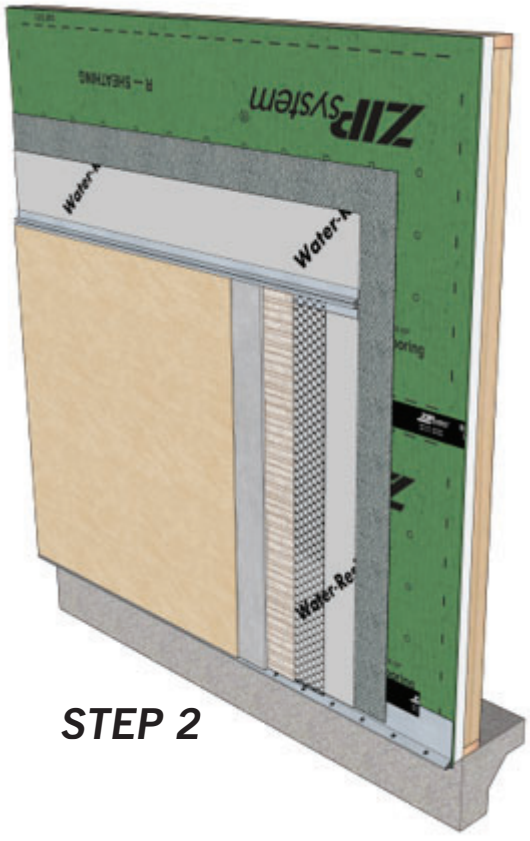
CLADDING // STUCCO REQUIREMENTS FOR 2018 IBC CLIMATE ZONES 1A, 2A, OR 3A AND 2021 IRC/IBC MOIST OR MARINE-CLIMATES

STEP 1: After all ZIP System® R-sheathing panel seams have been taped, tape the top edge of the weep screed flashing back to the ZIP System R-sheathing. Install a minimum 3/16-inch space or drainage material and then install a mechanically fastened water-resistive barrier compliant with ASTM E2556.

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.



STEP 1



STEP 2

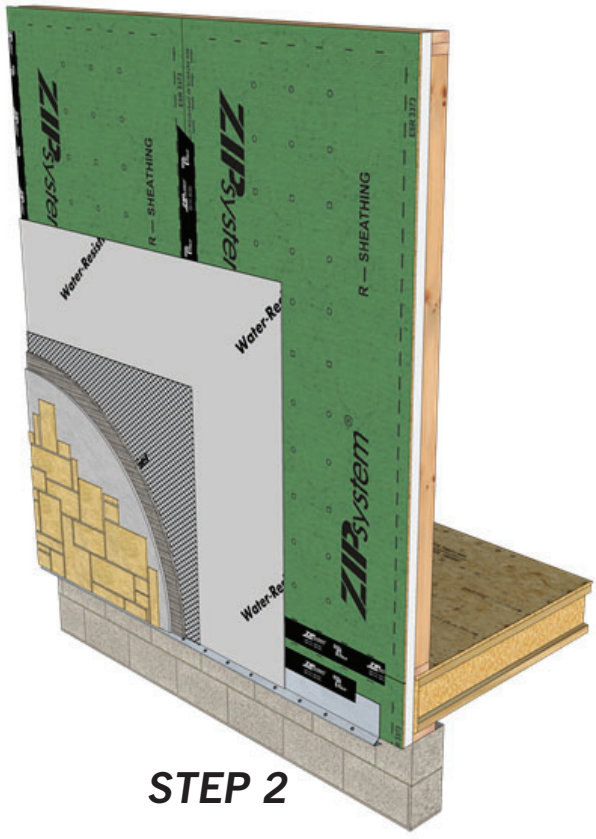
ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

CLADDING // ADHERED STONE REQUIREMENTS FOR 2015 IBC AND 2018 IRC(AND PREVIOUS CODE CYCLES) & 2021IRC/IBC STUCCO REQUIREMENTS IN DRY CLIMATES

STEP 1: After all ZIP System® R-sheathing panel seams have been taped, tape the top edge of the drip edge/weep screed flashing back to the ZIP System® R-sheathing. Install a mechanically fastened water-resistive barrier compliant with ASTM E2556.

STEP 2: Install metal lath, mortar, and stone in accordance with stone manufacturer, building code or third-party guidance's written instructions.

STEP 1



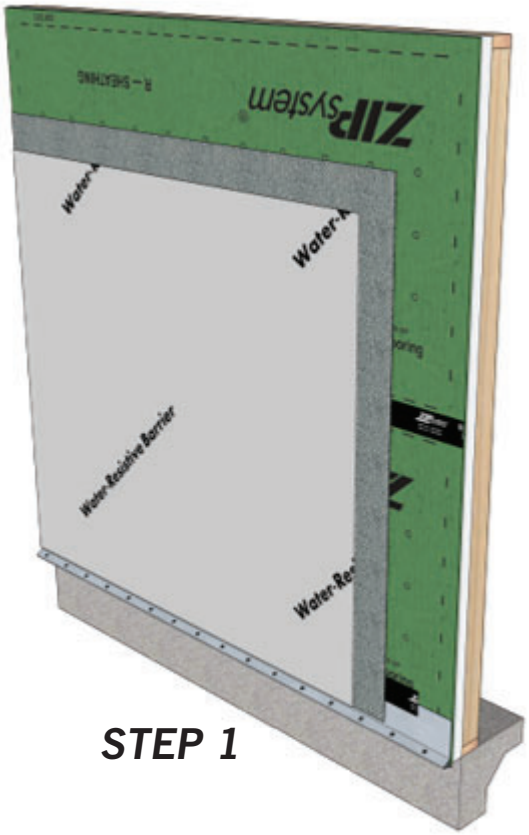
STEP 2

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

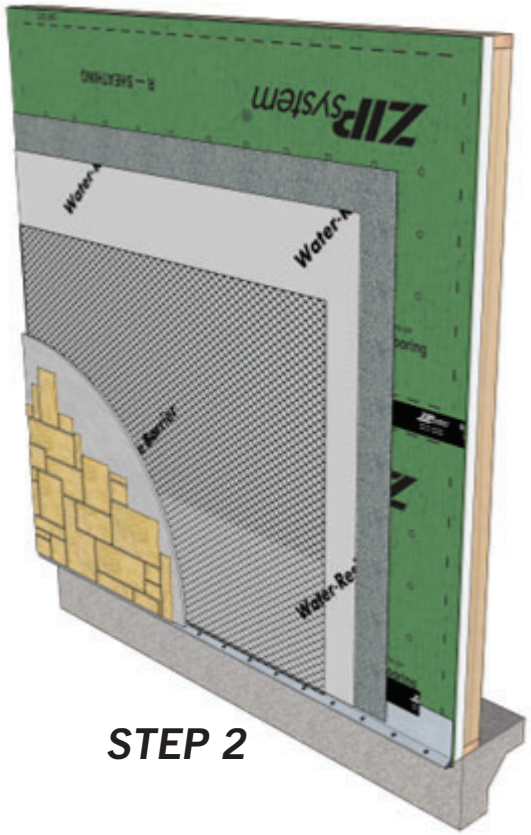
CLADDING // ADHERED STONE REQUIREMENTS FOR 2018 IBC CLIMATE ZONES 1A, 2A, OR 3A AND 2021 IRC/IBC MOIST OR MARINE-CLIMATES

STEP 1: After all ZIP System® R-sheathing panel seams have been taped, tape the top edge of the drip edge/weep screed flashing back to the ZIP System® R-sheathing. Install a mechanically fastened water-resistive barrier compliant with ASTM E2556.

STEP 2: Install metal lath, mortar, and stone in accordance with stone manufacturer, building code or third-party guidance's written instructions.



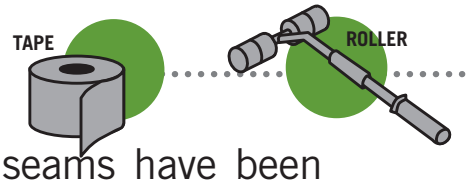
STEP 1



STEP 2

ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

DECKS & PORCHES



STEP 1: After all ZIP System R-sheathing panel seams have been taped, installed an adhered, flexible flashing membrane over the deck ledger in order to create continuity of the water-resistive barrier. The membrane should overlap the ZIP System R-sheathing panels above and below by a minimum of 1 inch

STEP 2: Install the deck ledger flashing per the designer of record and tape the top edge of the deck ledger flashing back to the surface of ZIP System R-sheathing.

STEP 1

STEP 2

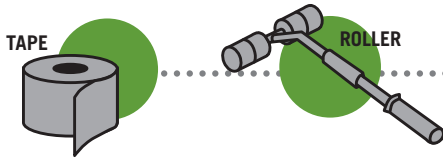
ZIP SYSTEM® R-SHEATHING // COMMON DETAIL

TRANSITION // CONCRETE/MASONRY

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

ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES

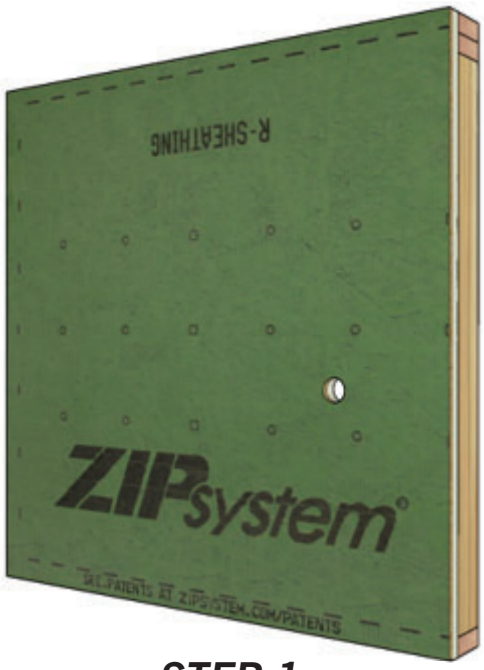
Pages 42-50 highlight common repairs that arise in the field. These details and repair processes apply to ZIP System R-sheathing panels used in wall applications.



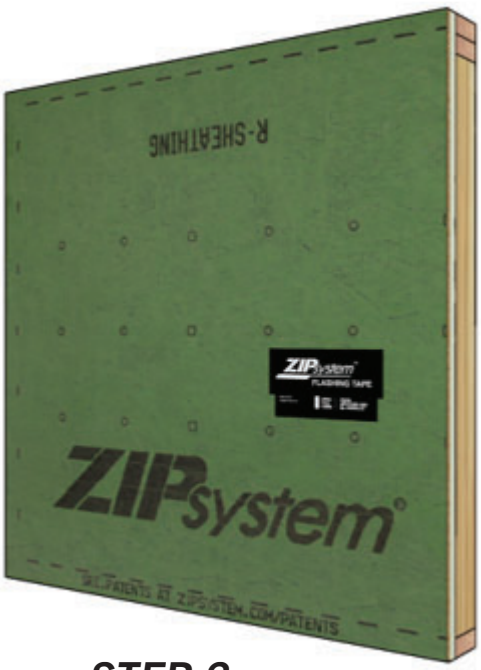
SMALL HOLES

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™ flashing tape over the hole. The tape should have a minimum of 1-inch overlap on all sides of the hole.

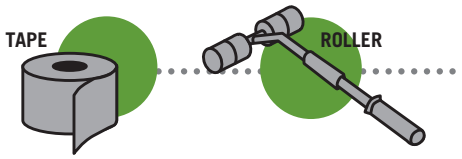


STEP 1



STEP 2

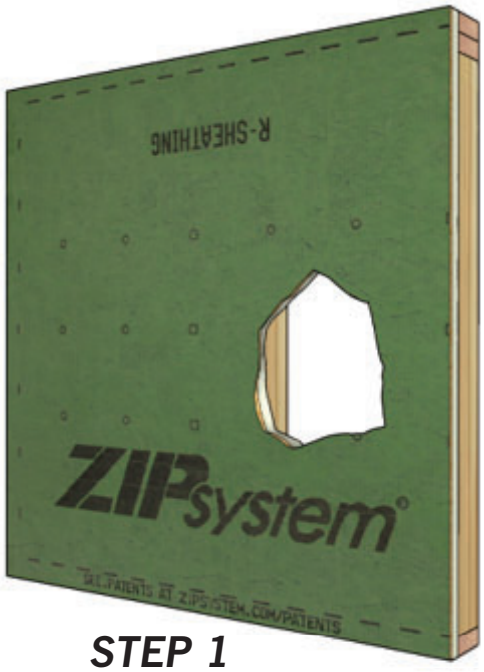
ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES



LARGE HOLES

STEP 1: Large holes in ZIP System® R-sheathing can affect the water-resistive and air barrier properties of the panel, as well as, the structural component.

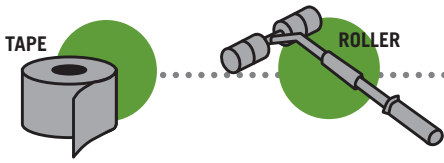
STEP 2: Cut out the section of panel around the large hole by cutting from vertical stud to vertical stud. In shear wall applications, horizontal blocking must be installed in between the vertical studs to provide lateral support to satisfy structural requirements.



STEP 1

STEP 2

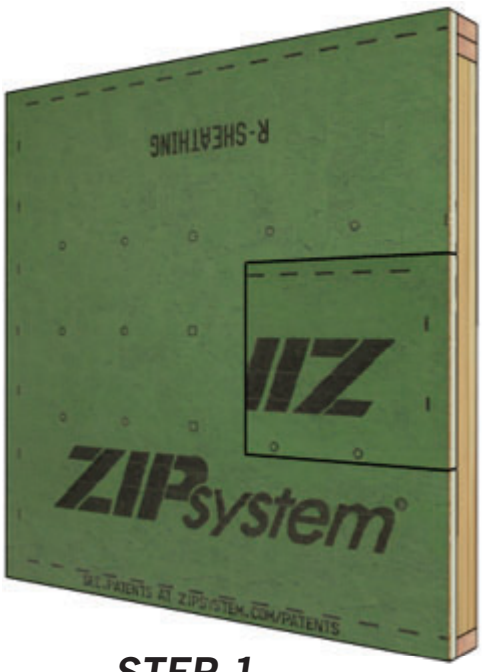
ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES



LARGE HOLES

STEP 3: Cut a new piece of ZIP System® R-sheathing to fit in the hole.

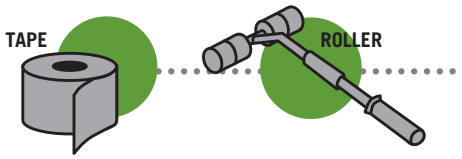
STEP 4: Tape all newly created panel seams with ZIP System™ flashing tape. Roll the tape.



STEP 1

STEP 2

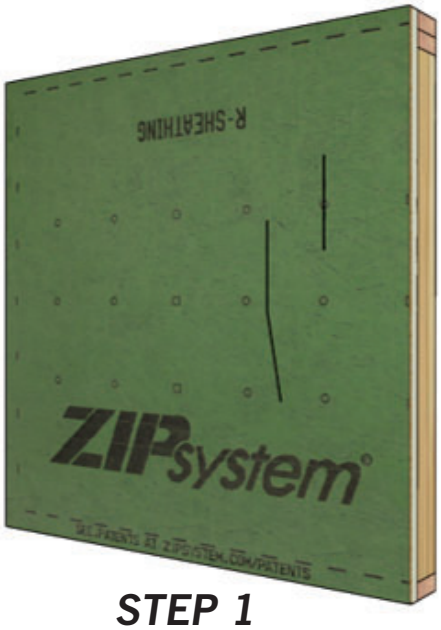
ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES



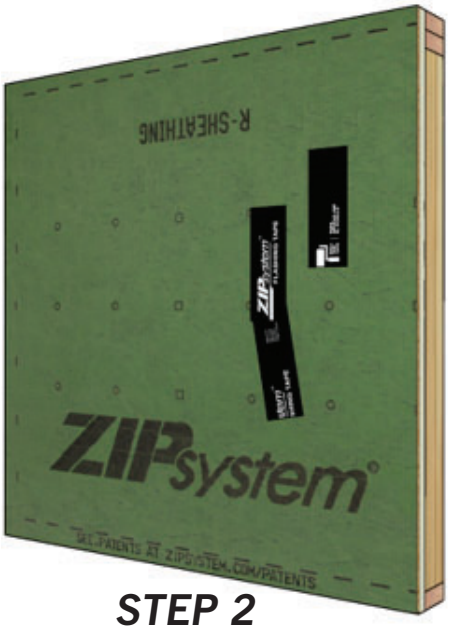
SAW KERFS

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™ flashing tape over the saw kerf and rolling the tape into place.

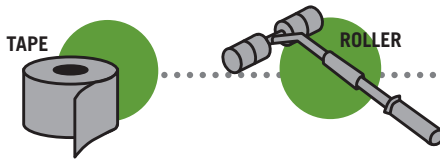


STEP 1



STEP 2

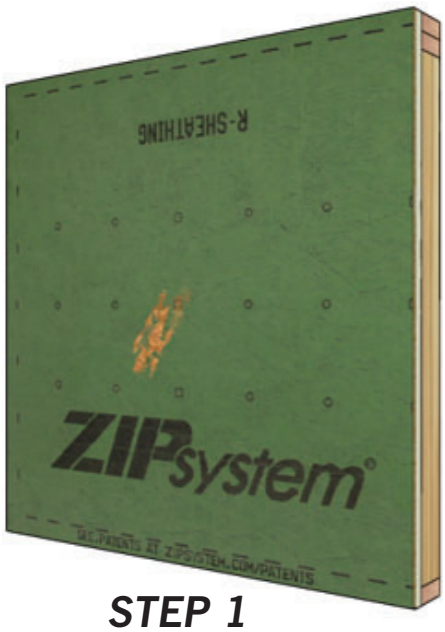
ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES



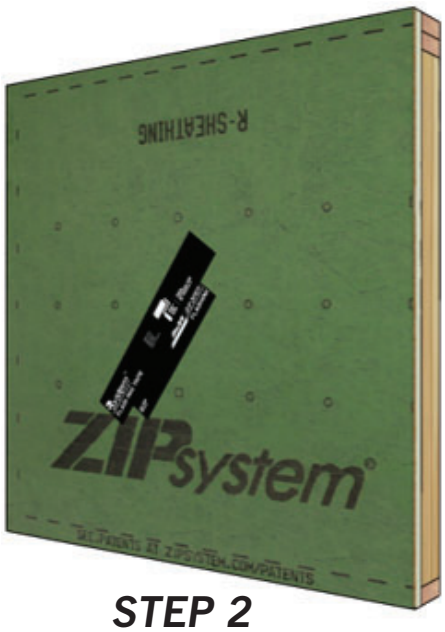
CHIPS IN THE OVERLAY

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™ flashing tape over the chip and rolling the tape into place.

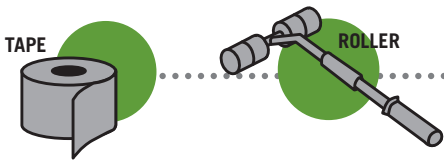


STEP 1



STEP 2

ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES



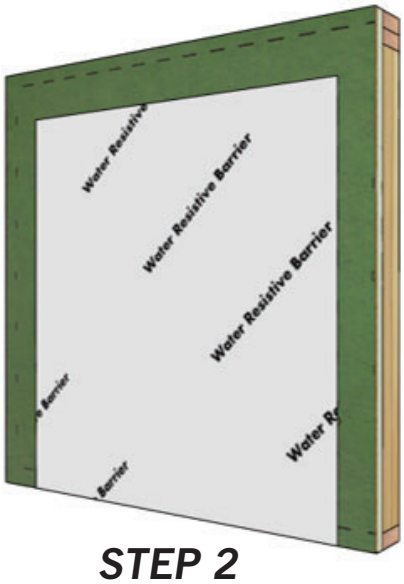
SIDING REMOVAL

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® R-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™ flashing tape along the edges. Roll the tape.

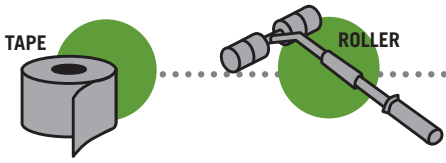
STEP 1



STEP 2

STEP 3

ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES



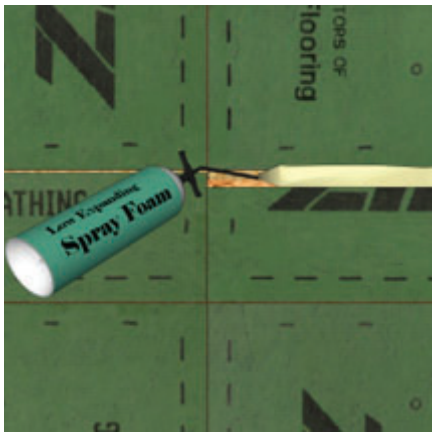
GAPS IN THE PANELS

Follow these steps if gaps in the panels need to be filled for thermal continuity. For more information, see the technical tip "Maximum Spacing for ZIP System Sheathing and ZIP System R-sheathing"

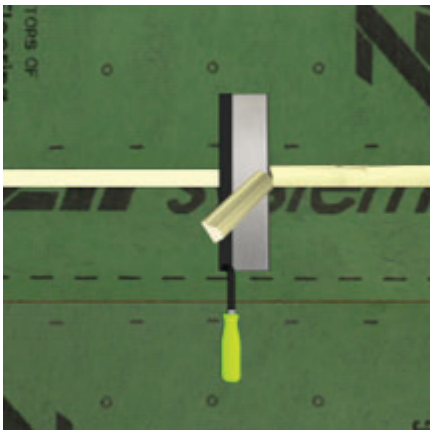
STEP 1: Install low-expanding window and door spray foam in the gap.

STEP 2: After allowing the low-expanding window and door spray foam to cure, cut down the foam flush with the surface of the ZIP System R-sheathing

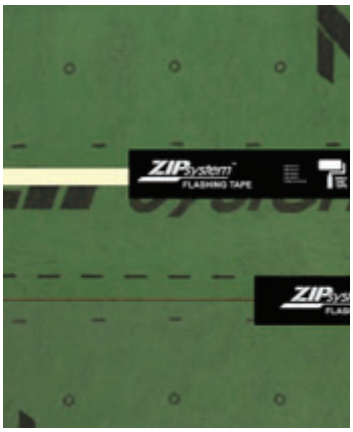
STEP 3: Tape the panel seam with ZIP System™ flashing tape and roll the tape.



STEP 1

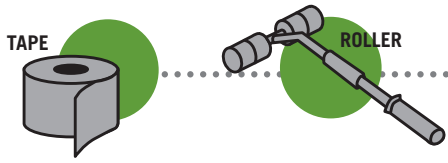


STEP 2



STEP 3

ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES



CRANE HOLES

Crane holes are often created in prefabricated wall sections in order to lift the sections into place. Crane holes in ZIP System® R-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 R-sheathing to blocking. Size to fit hole.

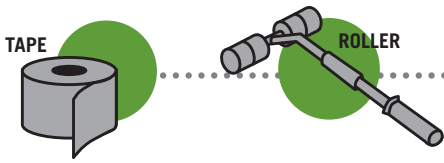
STEP 3: Tape all newly created panel seams with ZIP System™ flashing tape and roll the tape.

STEP 1

STEP 2

STEP 3

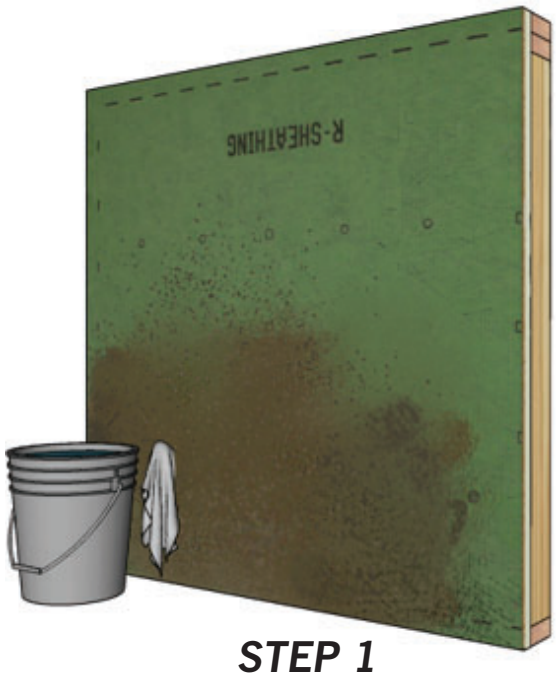
ZIP SYSTEM® SHEATHING AND TAPE // COMMON FIXES



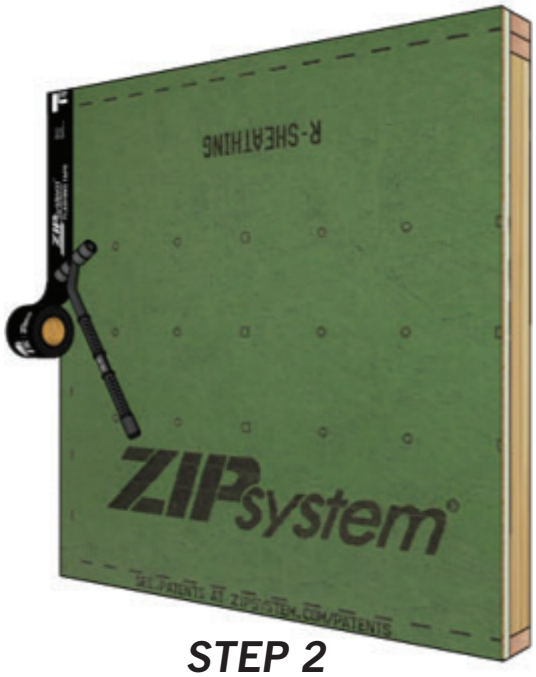
DIRTY PANELS

It is important that panels are free of any dirt or debris prior to installing ZIP System™ 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.



STEP 1



STEP 2