

# 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 properly install ZIP System® R-Sheathing. We urge anyone installing this product to read these guidelines in order to minimize the 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. Please acknowledge that it is solely your obligation for all safety requirements and code compliance. For additional information, contact Huber Engineered Woods LLC.



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



Follow all OSHA regulations, any other safety guidelines and safety practices.



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



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



Do not apply flame directly to foam layer. Foam will burn and smoke if exposed to an ignition source of sufficient heat and intensity or open flame, such as a welder's torch.



# CONTENTS

Overview	6
Notes & Limitations	7
Storage & Handling	9
Panel Sizes	
Tape Sizes	10
Fastening Guide	11
General Information & Compatibility	12
Fasteners	
Sealant	12
Compatible Substrates: ZIP System® R-sheathing	12
Compatible Substrates: ZIP System™ flashing tape	13
Flashings: Tapes	13
Flashings: Fluid Applied	13
Wrinkles in the Tape	14
Gaps in the Foam	14
Building Layout	14
Tools	15
Fire Rated Assemblies	15
General Practices	16
Panel Orientation	16
Strapping	17
Non-Structural Use	17
Shear Walls - Prescriptive	18
Shear Walls - Engineered	19



# **CONTENTS CONTINUED**

Taping	20
Common Detail	
Outside Corner	22
Inside Corner	23
Pipe - Boot	
Pipe – Stretch Tape	
Flanged Window	26
Recessed Window	
Door	34
Foundation Spacing	37
Foundation Flashing	
Lap Siding	
Brick Veneer	
Stucco	43
Adhered Stone	
Deck Ledger	47



#### 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. When properly installed and taped, ZIP System® R-Sheathing provides a water-resistive barrier, air barrier and exterior insulation in one product. It may also be used in the construction of braced wall panels or shear walls in certain conditions. See the SHEAR WALLS – Prescriptive and SHEAR WALLS – Engineered sections of this installation manual for more information.

The OSB substrate complies with Voluntary Product Standard PS2 for wood structural panels and the water-resistive barrier complies as an alternate to the water-resistive barrier prescribed in the IRC and IBC building code. ZIP System® R-Sheathing is available with a 1/2-inch (R-3), 1-inch (R-6), 1-1/2-inch (R-9) and 2-inch (R-12) foam insulation panel.

HEW warrants the adhesion of the ZIP System<sup>™</sup> flashing tape, ZIP System<sup>™</sup> stretch tape and ZIP System<sup>™</sup> liquid flash where ever they make direct contact with ZIP System<sup>®</sup> sheathing panels. HEW does not warrant the adhesion of ZIP System<sup>™</sup> flashing tape, ZIP System<sup>™</sup> stretch tape and ZIP System<sup>™</sup> 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<sup>®</sup> sheathing.



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

- ZIP System® R-Sheathing is warranted for wall use only. Not warranted for use on roofs.
- Do not use abutted against stone or masonry without providing a minimum of a 1/2-inch gap from the edge of the OSB.
- O not install ZIP System™ flashing tape in temperatures less than 0° F.
- ZIP System® R-Sheathing products are not approved for manufactured housing applications that are built under Federal building code administered by the U.S. Department of Housing and Urban Development (HUD).
- Not intended to replace traditional wood structural panels in applications where the wall sheathing is designed to resist combined wind uplift and shear.
- Do not use in fire-rated assemblies in lieu of a required "wood structural panel."
- Do not apply secondary coatings to the overlay on ZIP System® R-Sheathing.



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

- Minimum 1/2-inch gypsum wall board must be installed on the interior side of the wood wall studs as a thermal barrier using code-recognized fasteners per International Residential Code (IRC) or International Build Code (IBC) requirements.
- Only use in building of Type V construction for projects falling under the IBC or construction permitted under the IRC.
- The bottom edge of ZIP System R-sheathing shall be a minimum of 6-inches above finished grade for projects governed by the IRC and a minimum 8-inches above grade for those governed by the IBC.
- In cladding systems requiring multiple layers of water-resistive barriers, traditional hard-coat stucco and adhered stone veneers, ZIP System® R-Sheathing is intended only to replace the first layer.
- ZIP System® R-Sheathing should be covered with the finished wall cladding within 180-days of installation.
- When the original cladding is removed from ZIP System® R-sheathing, an additional water resistive barrier must be installed prior to new wall cladding.



## ZIP SYSTEM® R-SHEATHING // STOREAGE & HANDLING

Set panel stack on three supports (stickers) to keep a minimum of 4 inches of clearance above ground level.

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

R-3, 4'x8' | Total Thickness – 15/16" - 7/16" ZIP System panel with ½" foam

R-6, 4'x8' | Total Thickness – 1-7/16" - 7/16" ZIP System panel with 1" foam

R-9, 4'x8' | Total Thickness – 1-15/16" - 7/16" ZIP System panel with 1-1/2" foam

R-12, 4'x8' | Total Thickness – 2-7/16" - 7/16" ZIP System panel with 2" foam

## ZIP SYSTEM® R-SHEATHING // TAPE SIZES

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



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

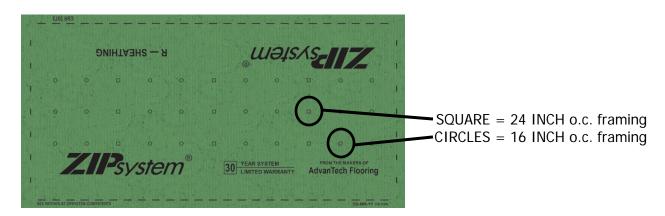




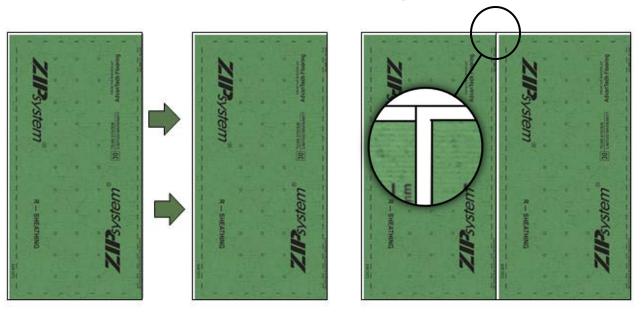


## ZIP SYSTEM® R-SHEATHING // FASTENING GUIDE

ZIP System<sup>®</sup> sheathing <u>circles</u> denote 16-inch o.c. framing and <u>squares</u> denote 24-inch o.c. framing.



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



DISCLAIMER: Foam enlarged for illustration purposes



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

#### **FASTENERS**

ZIP System<sup>®</sup> R-sheathing must be installed per Table 1 or Table 2 found within the following sections. Please note, fasteners used to install ZIP System<sup>®</sup> R-sheathing are not required to be ringshank, galvanized or stainless steel unless otherwise stated by the local building code, designer of record or the engineer of record. Non structural applications, see page 17.

#### **SEALANTS**

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

COMPATIBLE SUBSTRATES: ZIP SYSTEM® R-SHEATHING ZIP System® R-sheathing can be installed over dimensional wood framing<sup>1</sup>, light gauge metal framing<sup>2</sup>, CMU/concrete walls<sup>3</sup> and new or existing OSB and plywood sheathing<sup>4</sup>.

- 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



# COMPATIBLE SUBSTRATES: ZIP SYSTEM<sup>™</sup> FLASHING TAPE

ZIP System<sup>™</sup> flashing tape is compatible with dimensional lumber (treated and untreated), OSB, plywood, house-wraps, PVC, vinyl and metal substrates. Please note, the ZIP System<sup>®</sup> R-sheathing substrate must be dry to the touch and free of any dirt, debris or oil-films at the time of tape installation.

#### FLASHINGS: TAPES

ZIP System<sup>™</sup> flashing tape must be used where two ZIP System<sup>®</sup> panels come together to create a seam at inside corners, outside corners and in the same plane; however, other code approved flashing tapes that satisfy AAMA-711 or AC-148 may be used to flash penetrations, fenestrations and as counter flashing only.

## FLASHINGS: FLUID APPLIED

ZIP System<sup>™</sup> liquid flash can be used in lieu of ZIP System<sup>™</sup> flashing tape where two ZIP System<sup>®</sup> panels come together to create a seam at inside corners, outside corners and in the same plane. Other code approved liquid applied flashing membranes that satisfy AAMA- 714 may be used to flash penetrations and fenestrations. When using Liquid Flash or other fluid applied flashing products over ZIP System<sup>™</sup> flashing tape, use a primer such as 3M Hi-Strength 90 or rub the tape with an acetone cleaner.

ZIP System<sup>™</sup> liquid flash can be installed over ZIP System<sup>™</sup> flashing tape. For more information please review the Tech Tip, "Compatibility of ZIP System Tape with ZIP System Liquid Flash"



## WRINKLES IN THE TAPE

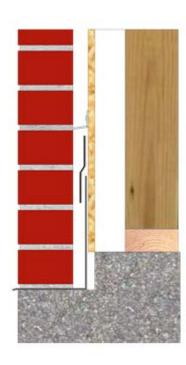
Rolling the tape during installation will significantly reduce the chance of tape wrinkling occurring. If wrinkles occur in the ZIP System<sup>TM</sup> flashing tape, there are two options: First, try to roll the wrinkles out with the ZIP System<sup>TM</sup> tape roller. This should help eliminate any wrinkles or fish mouths (avenues for water to get to the seam). Second, if rolling the tape does not remove the fish mouths, remove that section of tape and apply a new piece of tape that overlaps the existing tape by three inches or place another piece of tape over the fish mouth and roll the tape.

#### GAP IN THE FOAM

If gaps or voids are present between ZIP System<sup>®</sup> R-sheathing panels. Please go to huberwood.com and follow the guidance and options listed in the Tech Tip, *Maximum Panel Spacing for ZIP System 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" air space required by IRC and IBC building codes. Designer and general contractor should make any necessary adjustments to the design.





## **TOOLS**

#### Common

- Pneumatic nail gun

- Framing hammer

- Air compressor

- Speed square

- Tape Roller

- PPE

- Circular Saw

- Table Saw

#### Recommended

- Flush nail collar
- Air line regulators



## 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
  - UL V318
- 1-Hour Exterior Fire Rated Assemblies
  - UL U364



## ZIP SYSTEM® R-SHEATHING // GENERAL PRACTICES

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 always be followed.

## ZIP SYSTEM® R-SHEATHING // PANEL ORIENTATION

Install ZIP System® R-Sheathing panels positioned with the water-resistive barrier facing out. The panels may be installed with the long side of the panel oriented either horizontally or vertically to the framing members. Wall panels that are designed to resist lateral shear forces should have solid framing or blocking behind all panel edges.



**Vertical Orientation** 

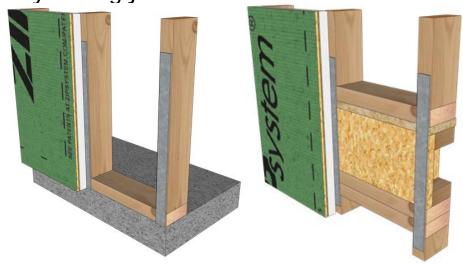


**Horizontal Orientation** 



#### ZIP SYSTEM® R-SHEATHING // STRAPPING

Install any metal straps, ties or other connectors designed to resist uplift, shear or diaphragm loading directly to the framing **prior** to installing ZIP System<sup>®</sup> R-Sheathing. The requirement for mechanical uplift connections shall be determined by the designer-of-record, local building codes or authority having jurisdiction.



**PRO TIP**: Straps, ties and connectors installed on the exterior face of stud will not be visible after ZIP System<sup>®</sup> R-Sheathing panels are installed. Schedule any necessary anchor or nailing inspections accordingly.

## ZIP SYSTEM® R-SHEATHING // NON-STRUCTURAL USE

ZIP System® R-Sheathing that is not intended to resist wind or seismic loads may be attached to framing using 0.113" diameter shank nails spaced at 6 inches on center on panel edges and 12 inches on center in the field of the panel. 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

ZIP System® R-Sheathing wood-framed walls may be designed to resist lateral shear forces by prescriptive methods in accordance with the IRC and IBC as shown in 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. When designing in high seismic areas use IAPMO report ER-482

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

R-	FRAMING⁴		Fasteners		
SHEATHING TYPE <sup>3</sup>	Nominal Stud Size (min.)	Maximum Stud Space (inches)	Fastener Specifications <sup>2</sup>	Max. Edge/Field Spacing (inches)	Min. Penetration into Framing (inches)
R-3	2x4	24	0.131-inch shank nails	4/12	1.5
R-3	2x4	16	16 ga, 7/16″ crown, 2″ length	3/6	1.0
R-6	2x4	24	0.131-inch shank nails	4/12	1.5
			15 ga, 7/16" crown, 2-1/2" length	3/6	1.0
R-9	2x4	24	0.131-inch shank nails	3/12	1.5
R-12	2x4	24	0.131-inch shank nails	3/12	1.5

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

<sup>1.</sup> 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

ZIP System® R-Sheathing wood-framed walls may be designed to resist lateral shear forces by engineered methods in accordance with the IRC and IBC as described in Table 2. When ZIP System R-sheathing panels are being used to resist lateral loads, panel edges must be backed by solid wood framing. When being used as part of an engineered design, only intermittent bracing method for a WSP is permitted. 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. When designing in high seismic areas use IAPMO report ER-482

TABLE 2: ENGINEERED METHOD: FASTENING REQUIREMENTS AND ALLOWABLE SHEAR CAPACITY FOR ZIP SYSTEM® R-SHEATHING WITH FRAMING OF DOUGLAS FIR-LARCH<sup>2</sup> FOR WIND OR SEISMIC LOADING.

R-	FRAI	FRAMING		Fasteners		ALLOWABLE
SHEATHING TYPE <sup>4</sup>	Nominal Stud Size (min.)	Maximum Stud Space (inches)	Fastener Specification <sup>3</sup>	Edge/Field Spacing (inches)	Min. Penetration into Framing (inches)	SHEAR CAPACITY <sup>5,6,7</sup> (plf)
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 = 25.4 mm; 1 pound per foot (ppf) = 14.59 N/m.

<sup>1.</sup> All fasteners must be located a minimum of 3/8 inch from panel edges. 2. For framing of other species, 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 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 2015, 2012 and 2009 IBC. 7. All panel edges must be backed by framing.



## ZIP SYSTEM® R-SHEATHING // TAPING

Apply ZIP System<sup>™</sup> flashing tape after all ZIP System<sup>®</sup> R-sheathing panels are fully fastened to wall-framing members. ZIP System<sup>™</sup> flashing tape is a contact tape that requires pressure for an adequate seal.

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



Only ZIP System<sup>™</sup> flashing tape or liquid flash should be used to seal the seams of ZIP System<sup>®</sup> R-sheathing, including inside and outside corners.



Ensure that the panel surface is dry and free of sawdust, oil 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".



At T-joints, tape pieces should overlap by at least 1".



Tape over any areas of the panel that are damaged during construction that is smaller than 2" in diameter.



Use the ZIP System® tape gun or roller to apply pressure to the tape and smooth out any wrinkles.



## ZIP SYSTEM® R-SHEATHING // TAPING

Take special care to remove any voids and/or trapped air at splice areas and T-joints. When taping inside corner seams, 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 the tape in tension, place it in the inside corner. Repeat as you go up the full height of the wall.

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

#### T-Joint



## Horizontal Tape Overlap





#### INSTALLATION // OUTSIDE CORNER

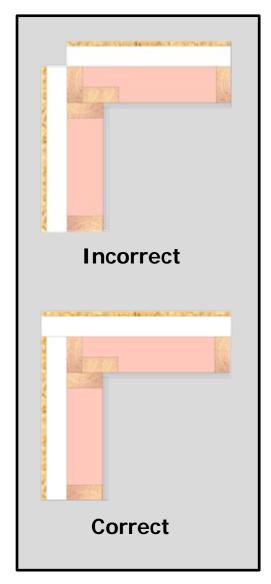




Install ZIP System<sup>™</sup> flashing tape at all exterior corners with minimum 1-inch contact on overlay of both panels. For wider thicknesses, R-9 and R-12, use 6-inch ZIP System<sup>™</sup> flashing tape or multiple pieces of 3-3/4-inch. Roll the tape once installed.



**PRO TIP**: Avoid creating cold corners and nailing voids by shifting over one of the outside corner panels the thickness of the ZIP System® R-sheathing used.



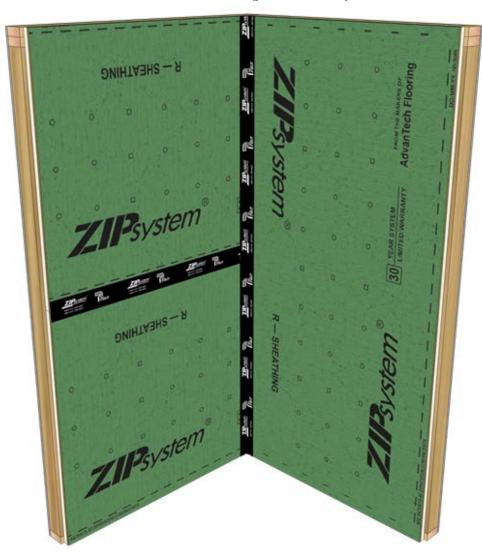


#### INSTALLATION // INSIDE CORNER





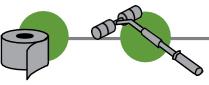
Install ZIP System<sup>™</sup> flashing tape at all inside corners with minimum 1-inch contact on overlay of both panels.



**PRO TIP:** Install ZIP System<sup>™</sup> flashing tape in arm's lengths increments and work tape into corner with a plastic tool. For more tips see the technical tip, "Proper Inside Corner Flashing with ZIP System Tape"



## PENETRATION // PIPE - Boot



- STEP 1: Insert the boot over the penetration.
- STEP 2 (OPTIONAL): Place a piece of ZIP System<sup>™</sup> flashing tape over the bottom edge of the boot. This helps with air leakage.
- STEP 3: Place a piece of ZIP System<sup>™</sup> flashing tape on each of the boot flashing jambs.
- STEP 4: Place a piece of ZIP System<sup>™</sup> flashing tape on the head of the boot flashing and roll all tape.

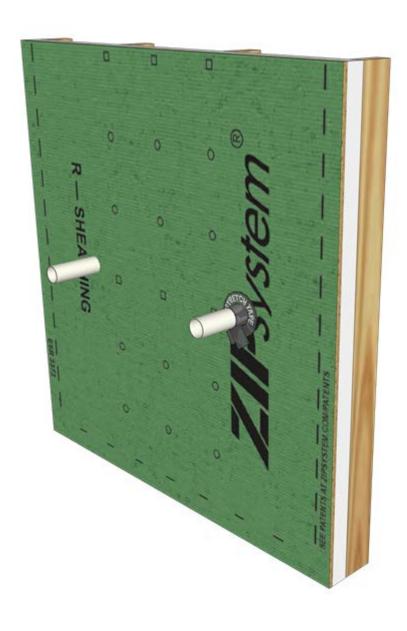








- STEP 1: Starting from the top, center a piece of ZIP System™ stretch tape so that the tape can be pulled down on either side of the pipe.
- STEP 2: Pull the tape together until it can meet in the middle of the pipe. The overlap should take place on the bottom of the pipe. Roll the Tape.





WINDOW // FLANGED WINDOW SILL PAN



STEP 1: Install a piece of ZIP System<sup>™</sup> stretch tape ensuring the tape extends a minimum of 6-inches up the jambs.

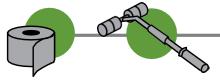
Always follow window manufacturer's written instructions. Roll the Tape.



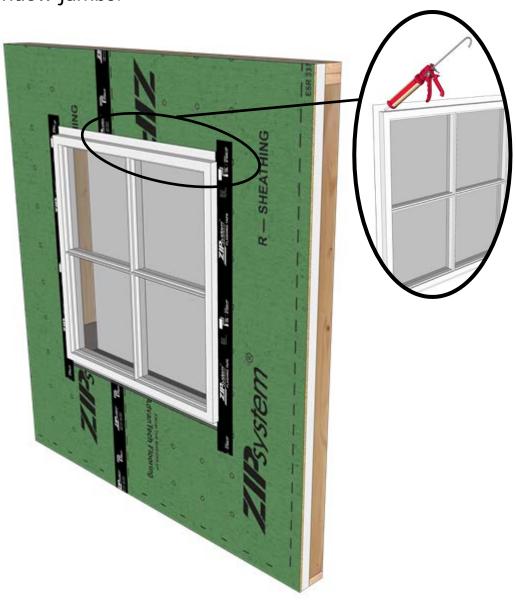
**PRO TIP:** Tape the bottom panel seams prior to installing pan flashing.



#### WINDOW // FLANGED WINDOW SILL PAN



STEP 2: Apply sealant on the back side of the window flange and set into the rough opening. Shim, level and square-up window per window manufacture's written instructions. Install ZIP System™ flashing tape on the window jambs.





#### WINDOW // FLANGED WINDOW SILL PAN



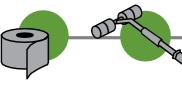


STEP 3: Install ZIP System<sup>™</sup> flashing tape at the head of the window extending 1" past the jamb flashing tape. When a "T-Joint" occurs in the head of the window, ensure the vertical panel seam tape overlaps the head flashing. For alternative details please see page 30. Roll the Tape.





WINDOW // FLANGED WINDOW SILL PAN

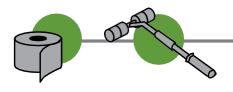


STEP 4: Install head flashing above window. Optional for selfflashed J-channel windows. Tape top of head flashing. From the back side of the window, install low expanding window/ door foam per the window manufacturer's installation guidelines. Roll the Tape.





WINDOW // "T-JOINT"



## 6" ZIP System™ flashing tape

In the event the vertical panel seam has been taped prior to the window being installed, tape the head of the window with 6" or wider ZIP System™ flashing tape. Roll the Tape.



## 3-3/4" ZIP System™ flashing tape

In the event the vertical panel seam has been taped prior to the window being installed, tape the head of the window with 3-3/4" ZIP System™ flashing tape. Where the vertical panel seam intersects the head flashing, install a "hat" piece of 3-3/4" ZIP System™ flashing tape extending 1" on either side of other vertical seam tape and centered on the edge of the head flashing tape. Roll the Tape.





#### WINDOW // RECESSED WINDOW



STEP 1: Install ZIP System<sup>™</sup> liquid flash into the entire rough opening. Ensure the liquid flash integrates onto the water resistive barrier a minimum of 2-inches. Trowel out the liquid flash using a spreader tool until a thickness of 12-15 mils is achieved. When installing ZIP System<sup>™</sup> liquid flash over the ZIP System<sup>™</sup> flashing tape, wipe the tape down with an acetone wipe or gentle scuff the tape first.





#### WINDOW // RECESSED WINDOW



STEP 2: Apply approved sealant per window manufacturer's written instructions on the back side of the window flange and set into the rough opening after the liquid flash in the rough opening has cured.

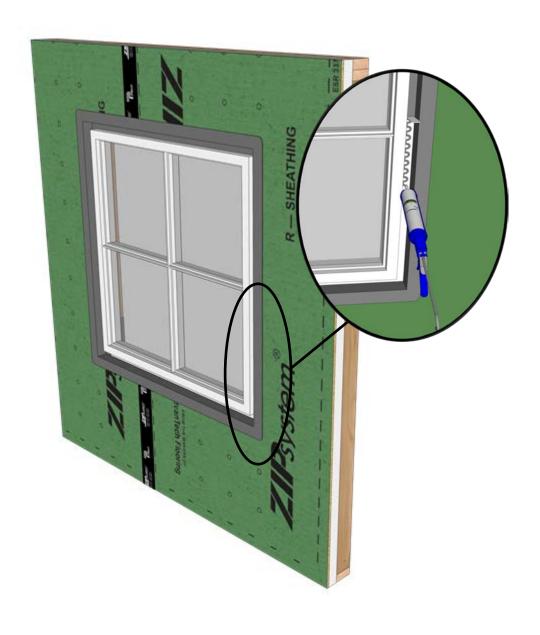




#### WINDOW // RECESSED WINDOW

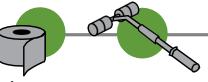


STEP 3: Secure window to manufacturer's written instructions, install ZIP System™ liquid flash on to the jamb and head flanges to the existing rough opening flashing a minimum of 1 inch. Trowel out the liquid flash using a spreader tool until a thickness of 12-15 mils is achieved.





PENETRATION // 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-inch up the jambs.







PENETRATION // DOOR

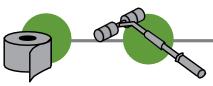


STEP 2: Once the door has been installed into the rough opening in accordance to the manufacturer's installation guidance, apply a bead of sealant at the molding/ZIP System® R-sheathing intersection. Ensure door fasteners are installed into solid framing and not the foam.





PENETRATION // DOOR

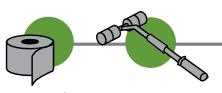


STEP 3: Install head flashing above door and then tape the top of heading flashing to the ZIP System® R-sheathing.

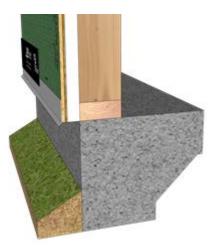




### FOUNDATION // FOUNDAITON SPACING



There are many ways the ZIP System® R-sheathing can interact with the foundation. Below are four scenarios, but other options may be viable. For alternative flashing options, see the next page. Follow IRC and IBC separation of WSP to top of finished grade.



Scenario 1: Back of foam flush with foundation.



Scenario 2: Foam over hangs the foundation.



Scenario 3: OSB flush with foundation. Min. 1/2" gap between OSB and foundation.



Scenario 4: OSB/foam connection flush with foundation. Min. 1/2" gap between OSB and foundation.



### FOUNDATION // FOUNDATION FLASHING

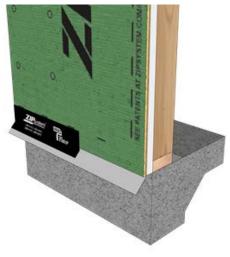
The state of the s

There are many ways the ZIP System® R-sheathing can be flashed. Below are just four options, but other options may be viable.





Scenario 1: drip edge



Scenario 2: termite shield



Scenario 3: Drip edge bent to Cover the bottom of the panel.



Scenario 4: fluid applied flashing or peel-n-stick membrane along bottom edge of panel onto the foundation.



CLADDING // LAP SIDING



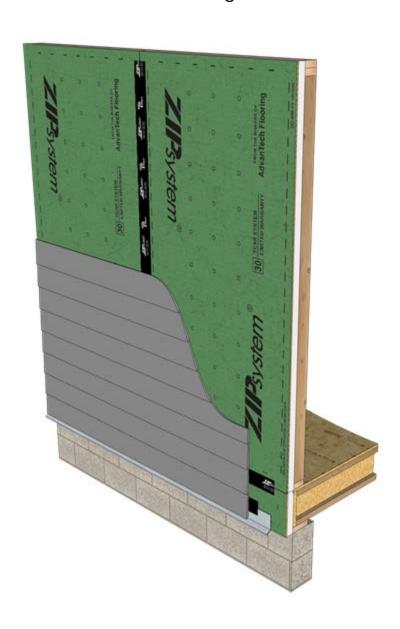
STEP 1: Tape top edge of drip edge back to the surface of ZIP System® R-sheathing. Install bottom wall flashing by other in accordance with designer of record or local building code.





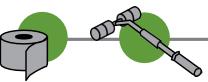
#### CLADDING // LAP SIDING

STEP 2: Install lapped siding in accordance to siding manufacturer's written instructions. When the lap siding is required to be install into framing, ensure the siding fastener is long enough to achieve the proper embedment into the framing.





#### CLADDING // BRICK VENEER



STEP 1: 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. Brick ties are to be installed into framing.





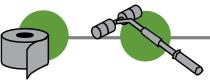
## CLADDING // BRICK VENEER

STEP 2: Install brick veneer with a minimum of a 1 inch air space per the local building code.





CLADDING // STUCCO



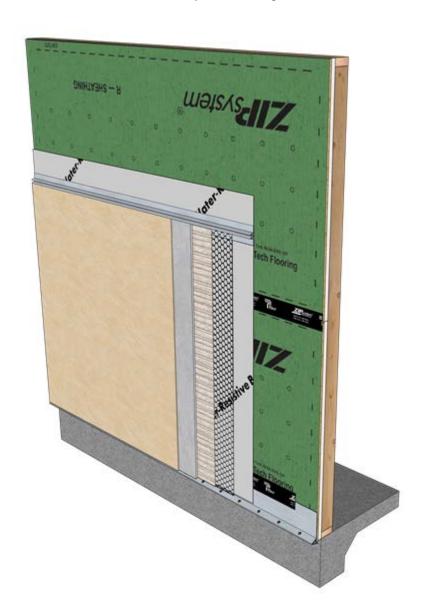
STEP 1: Tape the top edge of the weep screed flashing back to the ZIP System® R-sheathing. Install a mechanically fastened water resistive barrier equivalent to a Grade D felt paper after all ZIP System® R-sheathing panel seams have been taped. The building science industry promotes the use of a drainage gap behind porous claddings like stucco and adhered stone.





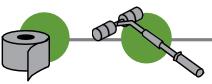
CLADDING // STUCCO

STEP 2: Install wire lath, scratch coat, brown and finish in accordance to stucco manufacturer's written instructions. Install expansion joints as needed.

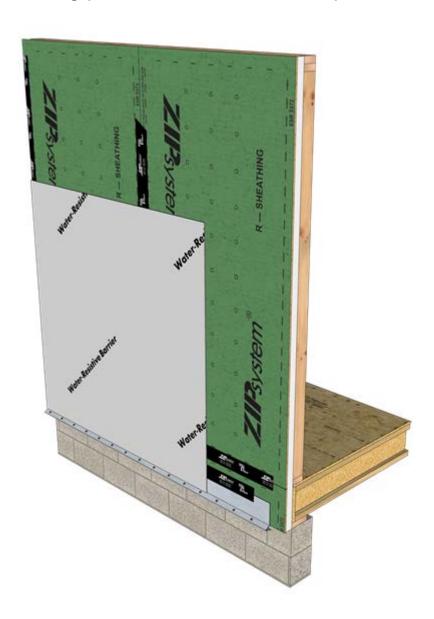




#### CLADDING // STONE VENEER



STEP 1: 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 equivalent to a Grade D felt paper after all ZIP System® R-sheathing panel seams have been taped.





### CLADDING // STONE VENEER

STEP 2: Install wire lath, scratch coat, brown and finish in accordance to stone manufacturer's written instructions.





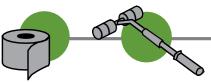
#### STRUCTURAL // DECK LEDGER

STEP 1: Install ledger board directly to framing. Remove portions of ZIP System<sup>®</sup> R-sheathing as needed. Cover deck ledger with a continuous piece of ZIP System<sup>™</sup> flashing tape or peel-n-stick membrane. Completely flash all panel seams prior to beginning with deck ledger attachment.





STRUCTURAL // DECK LEDGER



STEP 2: Install framing, flashing, counter flashing and decking per designer of record or engineer of record. The counter flashing can be ZIP System<sup>™</sup> flashing tape.



**PRO TIP:** For a free-standing deck option, please visit Huberwood.com.