



# REVEAL

Panel System™



# INSTALLATION INSTRUCTIONS

Effective September 2018

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**REVEAL**<sup>™</sup>  
by **JamesHardie**

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## Section 1 Introduction

The material contained herein provides installation guidelines for the Reveal® Panel System by James Hardie. This document is intended for use by builders, cladding installers, and other contractors who may be involved with the installation of the Reveal Panel System.

The Reveal Panel System by James Hardie provides a durable, expressed joint panel appearance for building facades offering versatility to architects and builders. A variety of design styles can be created – panels installed vertically, horizontally or in a brick pattern, with exposed or countersunk fastening. The Reveal Panel System is intended for use for contemporary panel solutions up to 60 feet from the ground.

The guidance and instructions contained in this documents are generally applicable to the Reveal Panel System. They are not intended to replace the specifications and instructions supplied by a qualified architect or designer for your project.

The architect or designer is responsible for using the Reveal Panel System in compliance with local laws, building codes and any other requirements that pertain to moisture management, energy efficiency or structural integrity.

### IMPORTANT

Important: failure to follow James Hardie written installation instructions and comply with applicable building codes may violate local laws, affect building envelope performance and may affect warranty coverage. Failure to comply with all health and safety regulations when cutting and installing this product may result in personal injury. Before installation, confirm you are using the correct HardieZone® product instructions by visiting [hardiezone.com](http://hardiezone.com) or call 1-866-942-7343 (866-9-HARDIE).

If you are a specifier or other responsible party for a project, ensure the information in these specifications is appropriate for the application you are planning and that you undertake specific design and detailing for areas which fall outside the scope of these specifications.

**Before you begin** your siding project read the instruction manual completely and thoroughly. This document describes and illustrates the minimum steps required to install the Reveal Panel System.

No instruction manual can anticipate every condition, circumstance, situation or problem that might arise during installation over the course of the project. When in doubt about assembly details, contact the architect, specifier, or a building official. Contact your James Hardie Sales and Install Representative for product support 1-800-9HARDIE (1-800-942-7343).

### Preparation

Ensure the drainage plane is intact and all penetrations are sealed.

Plan your work, use the proper tools, techniques, and follow installation procedures as covered in this installation manual. It is important that builders, specifiers, and installers recognize requirements and information pertaining to:

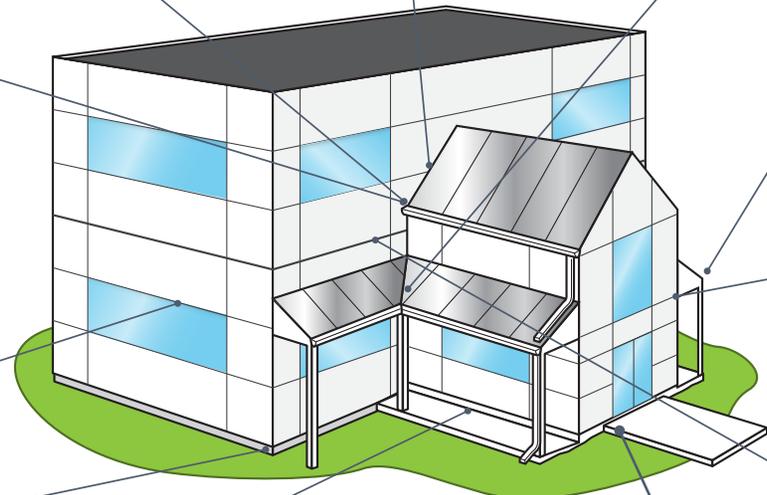
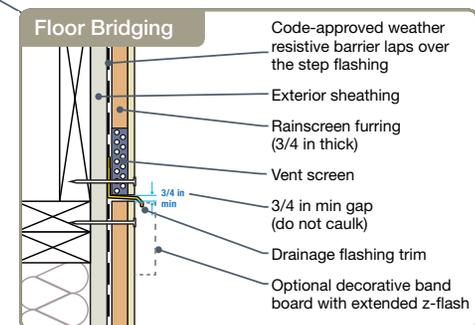
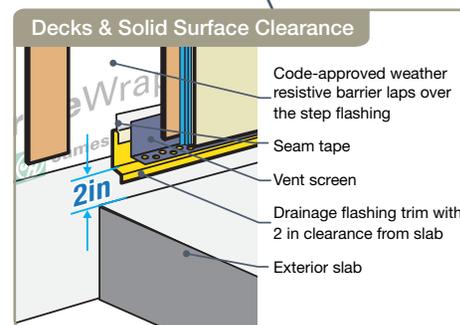
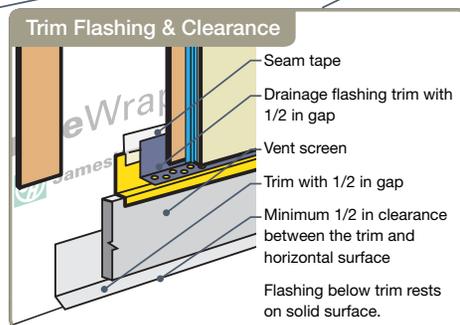
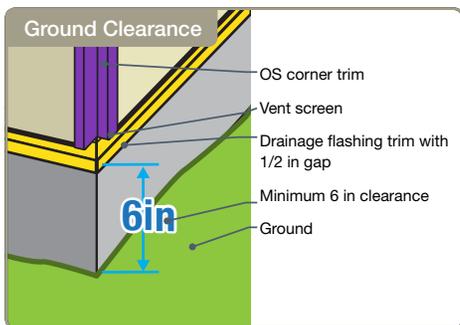
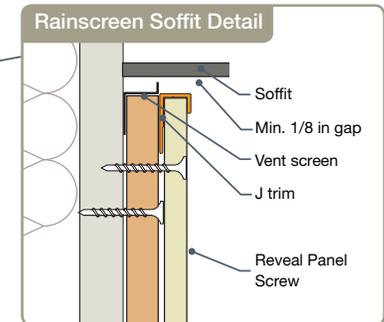
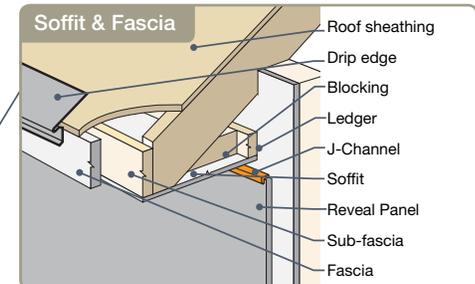
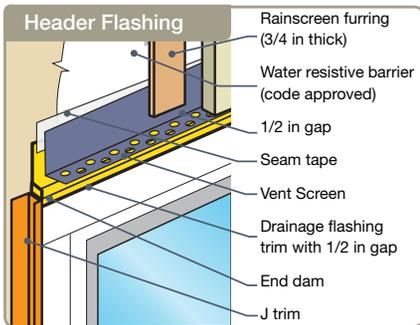
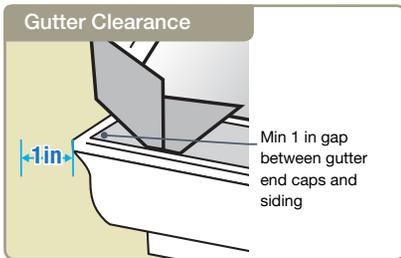
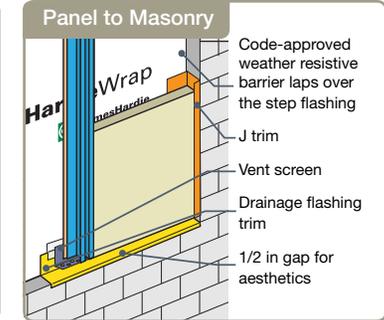
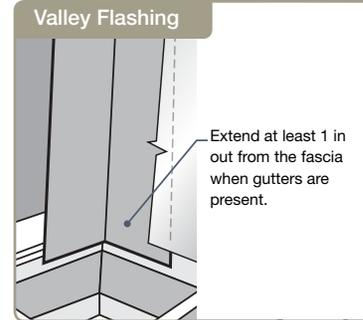
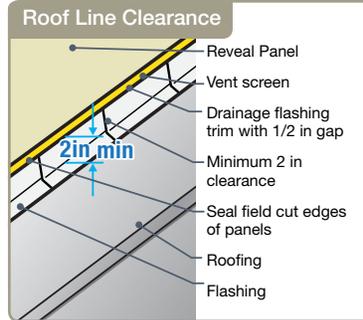
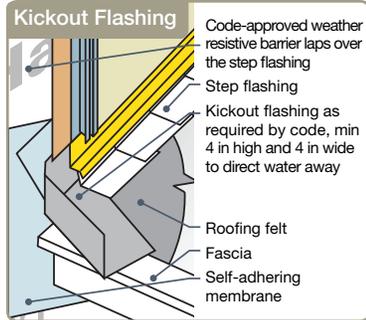
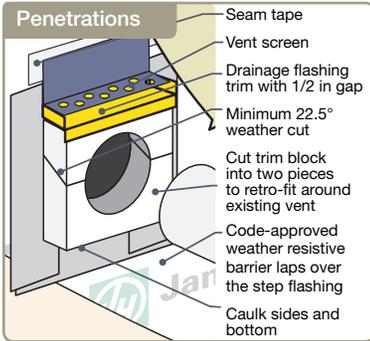
- Safety
- Storage and Handling
- Cutting
- Wall Preparation
- Fastening

For best results, before installation, ensure your Reveal panels are clean and free of dirt, dust, chalking, oil, grease, organic contaminants, or mold. Dust from cutting and construction should be removed immediately upon installation.

### Practice installing Material

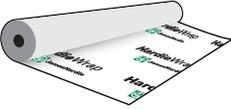
Utilize a mock-up to evaluate installation and finishing techniques, with a focus on specific applications designed by a design professional or engineer. The fastening practice and/or fastening tools shall be properly adjusted to avoid overdriving. Do not proceed with remaining work until workmanship, color, and sheen are approved. Repeat mock-up area as required to produce acceptable work.

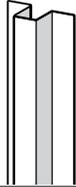
## Section 2 General Installation Requirements



## Section 3 Materials and Tools

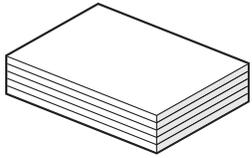
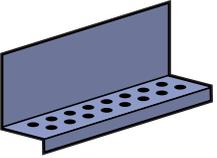
### Sub-wall and Rainscreen Materials

Product	Description
	<p><b>Weather Resistive Barrier</b> HardieWrap® weather barrier, or other code-approved weather resistive barrier.</p>
	<p><b>Seam Tape</b> HardieWrap® seam tape, or similar.</p>
	<p><b>Flex Flashing</b> HardieWrap® Flex Flashing, or similar.</p>
	<p><b>Pro-Flashing</b> HardieWrap® Pro-Flashing, or similar.</p>

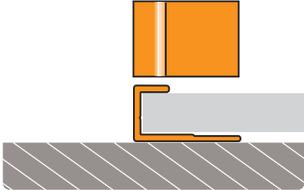
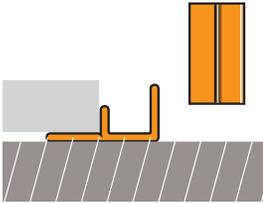
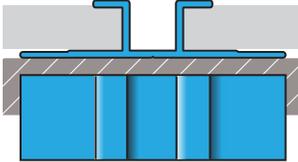
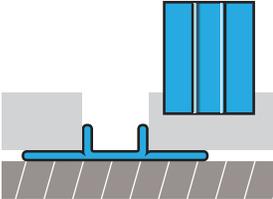
Product	Description
	<p><b>Wood Furring</b></p> <ul style="list-style-type: none"> <li>• Pressure treated wood (ACQ, CA, MCQ, or MCA).</li> <li>• Minimum 3/4 in nominal (23/32 actual) thick.</li> <li>• Minimum 4 in wide.</li> <li>• Non-permeable membrane covering the face of furring.</li> <li>• Select wood with minimum Specific Gravity of 0.42 to comply with James Hardie published wind load tables.</li> </ul> <p><b>Note: Pressure treated wood should not be installed in direct contact with metal.</b></p>
	<p><b>Steel Hat Channels or Z-Girts</b> Minimum 3/4 in depth, minimum 20 gauge (33 mil), maximum 16 gauge (54 mil) galvanized steel.</p>
	<p><b>Non-Permeable Membrane</b> Installed over full face of furring.</p>
	<p><b>Coated Aluminum Flashing</b> For grade, penetrations, window and door flashing/clearance.</p>

## Section 3 Materials and Tools

### Reveal® Panel System Materials Supplied by James Hardie

Product	Description	Quantity (Pcs. Per Box)
	<b>Reveal® Panels</b> Thickness: 7/16 in Size: 47.5 in x 95.5 in Weight: 3.1lb/sq ft	Pallets of 40 or 10
	<i>Installed First</i> <b>Vent Screen</b>	15

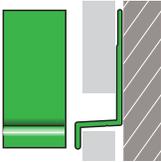
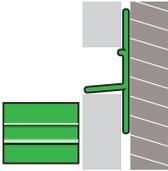
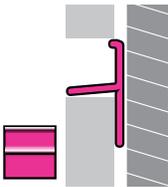
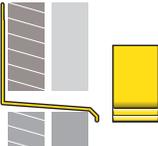
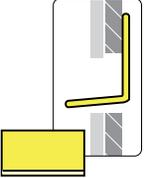
### VERTICAL PROFILES

Product	Description	Quantity (Pcs. Per Box)
	<b>Surround J-Channel Trim</b> Thickness: 16 gauge Length: 8 ft <i>Note: Can also be used horizontally only directly under penetrations and soffit.</i>	10
OR		
	<b>Recess F Vertical Trim</b> Thickness: 16 gauge Length: 8 ft <i>Note: Vertical use only; do not use horizontally.</i>	10
	<b>Surround Vertical Trim</b> Thickness: 16 gauge Length: 8 ft	20
OR		
	<b>Recess Vertical Trim</b> Thickness: 16 gauge Length: 8 ft	20

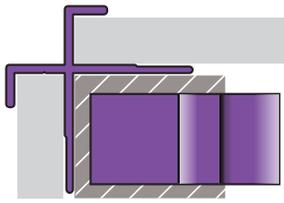
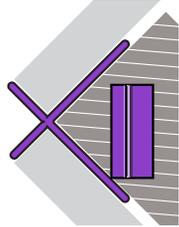
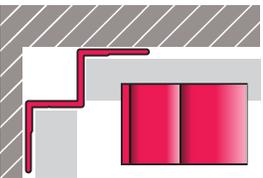
## Section 3 Materials and Tools

### Reveal® Panel System Materials Supplied by James Hardie

#### HORIZONTAL PROFILES

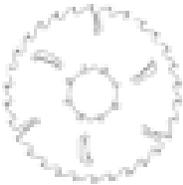
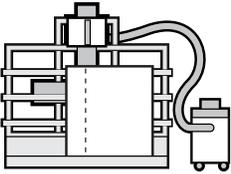
PRODUCT	DESCRIPTION	QUANTITY (Pcs. Per Box)
	<b>SURROUND HORIZONTAL TRIM</b> Thickness: 16 gauge Length: 8 ft  Available with or without termination notch.	20
OR		
	<b>RECESS HORIZONTAL TRIM</b> Thickness: 16 gauge Length: 8 ft	20
	<b>RECESS HORIZONTAL EDGE TRIM</b> Thickness: 16 gauge Length: 8 ft  Note: For use under windows, penetrations, and soffit.	20
	<b>SURROUND DRAINAGE FLASHING</b> Thickness: 16 gauge Length: 8 ft	20
OR		
	<b>RECESS DRAINAGE FLASHING</b> Thickness: 16 gauge Length: 8 ft	20

#### CORNER PROFILES

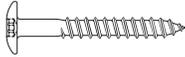
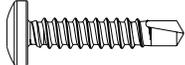
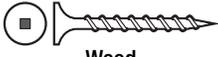
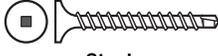
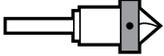
PRODUCT	DESCRIPTION	QUANTITY (Pcs. Per Box)
	<b>SURROUND OUTSIDE CORNER TRIM</b> Thickness: 16 gauge Length: 8 ft	20
OR		
	<b>RECESS OUTSIDE CORNER TRIM</b> Thickness: 16 gauge Length: 8 ft	20
	<b>SURROUND INSIDE CORNER TRIM</b> Thickness: 16 gauge Length: 8 ft	20

## Section 3 Materials and Tools

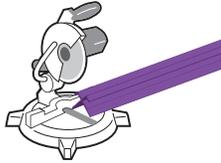
### Cutting Tools

PRODUCT	DESCRIPTION
	<b>NON-FERROUS METALS BLADE</b> 80-tooth
	<b>BLADE FOR FIBER CEMENT</b> HardieBlade® saw blade
	<b>PANEL SAW WITH VACUUM DUST COLLECTION SYSTEM</b>
OR	
	<b>7-1/4 IN CIRCULAR SAW WITH VACUUM DUST COLLECTION SYSTEM</b> Cutting against straight edge is recommended.

### Required Fasteners and Drilling Tools Supplied by James Hardie

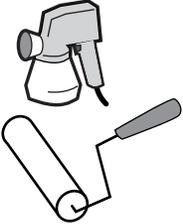
PRODUCT	DESCRIPTION
<b>Panel Fastener</b>  <b>Wood</b>  <b>Steel</b>	<b>EXPOSED FASTENER FOR WOOD</b> 1.5 in Length x 0.189 in x 0.472 in HD, 10-12 SS, T20W Torx Pan Head <b>FOR STEEL</b> 1.125in long x 0.189in x 0.472 in. HD, T20W Torx Pan Head Self-Drilling
<b>Panel Fastener</b>  <b>Wood</b>  <b>Steel</b>	<b>COUNTERSUNK FASTENER FOR WOOD</b> 1 5/8 in length x 0.39 in HD 316 SS, bugle head square drive <b>FOR STEEL</b> 1 5/8 in length x 0.39 in HD, 410 SS Bugle Head #2 Square Drive
	1/2 inch 90° countersink for pre-drilling Countersunk Fasteners <b>DRILL BIT</b> <b>DRILL COLLAR</b> Bit usage rate for countersunk fastening application, 1 unit per pallet (40 sheets)
	<b>FILLER FOR COUNTERSUNK FASTENERS</b> Filler usage rate, 1 unit per pallet (40 sheets)

### Other Tools Needed

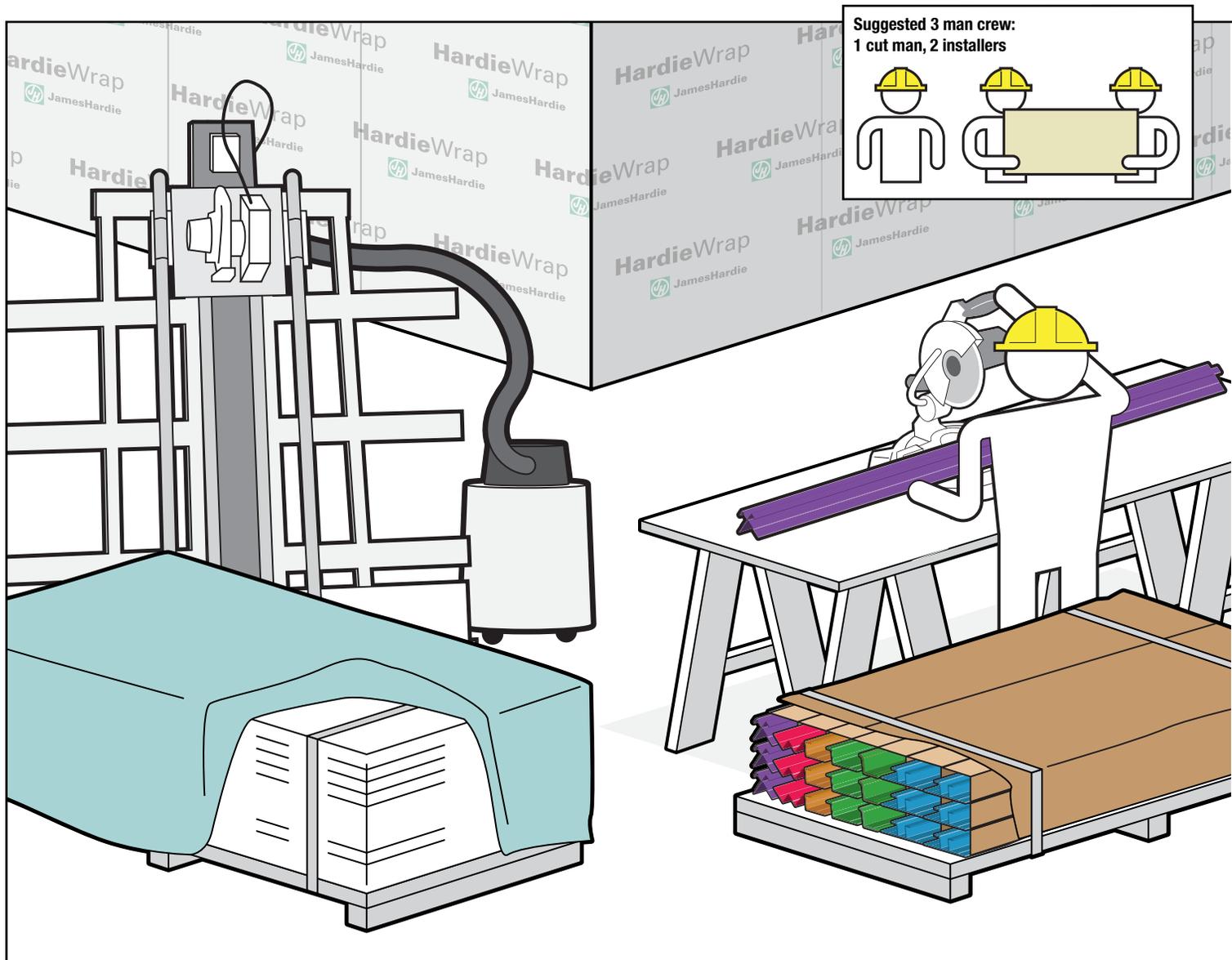
PRODUCT	DESCRIPTION
	<b>MITER SAW</b> To cut Reveal Panel System Trims
	<b>PNEUMATIC STAPLE GUN</b> <i>(Attaching to wood only)</i> .5 in x 0.25 in narrow crown galvanized staple For Fastening Reveal Trims to wood furring (Recommended) For information on attaching trims to metal and wood see page 14
	<b>STAPLES</b> 1/2 in x 1/4 in narrow crown galvanized staple
	<b>PNEUMATIC FINISH PIN NAILER</b> <i>(Attaching to steel only)</i> For fastening Reveal Trims to steel furring (recommended)
	<b>DRILL</b>
	<b>DRILL BIT</b> 0.25 in drill bit for pre-drilling exposed fasteners
	<b>T-20 TORX</b> For exposed fastener <b>#2 SQUARE</b> For countersunk fastener

## Section 3 Materials and Tools

### Recommended Finishing Materials

PRODUCT	DESCRIPTION
	<p><b>EDGE SEALER</b> For field cut edges of primed panels installed with Recess trim.</p>
	<p><b>SPRAY GUN AND ROLLER</b> Spray paint and back roll.</p>
	<p><b>PAINT</b> 100% acrylic exterior grade top coat should be used and applied according to manufacturer's guidelines.</p> <p>For Countersunk installations, flat or eggshell finish is recommended.</p>

## Section 4 Material Storage and Staging



Stage material for efficient use around the building (like a corner for example), on a flat surface.

### Storage

Reveal® Panel should be stored flat and kept dry in its original packaging in a garage, shed, or in some other covered area protected from weather whenever possible. These products must be kept covered on a pallet off of the ground; they must never be stored in direct contact with the ground. If Reveal panels become saturated, they must be laid on a flat surface and allowed to dry completely prior to installation.

Reveal panel should not be rolled-off or dumped-off of the truck or delivery vehicle during delivery to the jobsite. James Hardie recommends using a fork lift to off load material or unloading by hand.

### Handling

Reveal Panel weighs 3.1 lbs./sq ft. A 4 ft x 8 ft panel weighs 99 lbs; we recommend that two people carry and install panel products. Workers should hold the panel near each end and along edge.

## Section 5 Installation Process

### Wall Preparation

Structural attachment of furring, as the fastening substrate, is the responsibility of the design professional. Design alternatives such as attachment to structural horizontal girts must maintain James Hardie fastener schedule requirement minimums.

Before installing Reveal Panel, review and comply with all local building codes and regulations regarding wall construction.

Do not install siding over questionable wall construction. Irregularities in framing may become visible in the finished application. To minimize the effect of unevenness, shim the wall as necessary.

Take note of any special alignments or design reference points such as windows, etc. Double furring may be required.

Check and/or correct furring so that it is square and plumb.

### Structural Sheathing & Non-Structural Sheathing

Install furring over plywood, OSB, or other approved rigid sheathing. Furring must be attached to structural framing to withstand all applicable loads.

### Concrete Block (CMU) Walls

When installing Reveal Panel on CMU, wall flatness is critical. Follow local building codes for water resistive barrier requirements. Attachment of furring direct to block requires suitable widths to accommodate joint and fastener locations. If shimming of furring cannot re-establish a suitable flat plane then furring may be installed on horizontal girt secured to CMU.

### Flashing

Self-Adhered Flashing membrane (SAF) is recommended at inside and outside corners, attached to the sheathing; and beneath code approved WRB. Follow manufacture's guidance and requirements. Before any installation of furring or paneling make sure that windows and penetrations are properly flashed in accordance with the design professional's specification.

### Continuous Foam insulation Sheathing

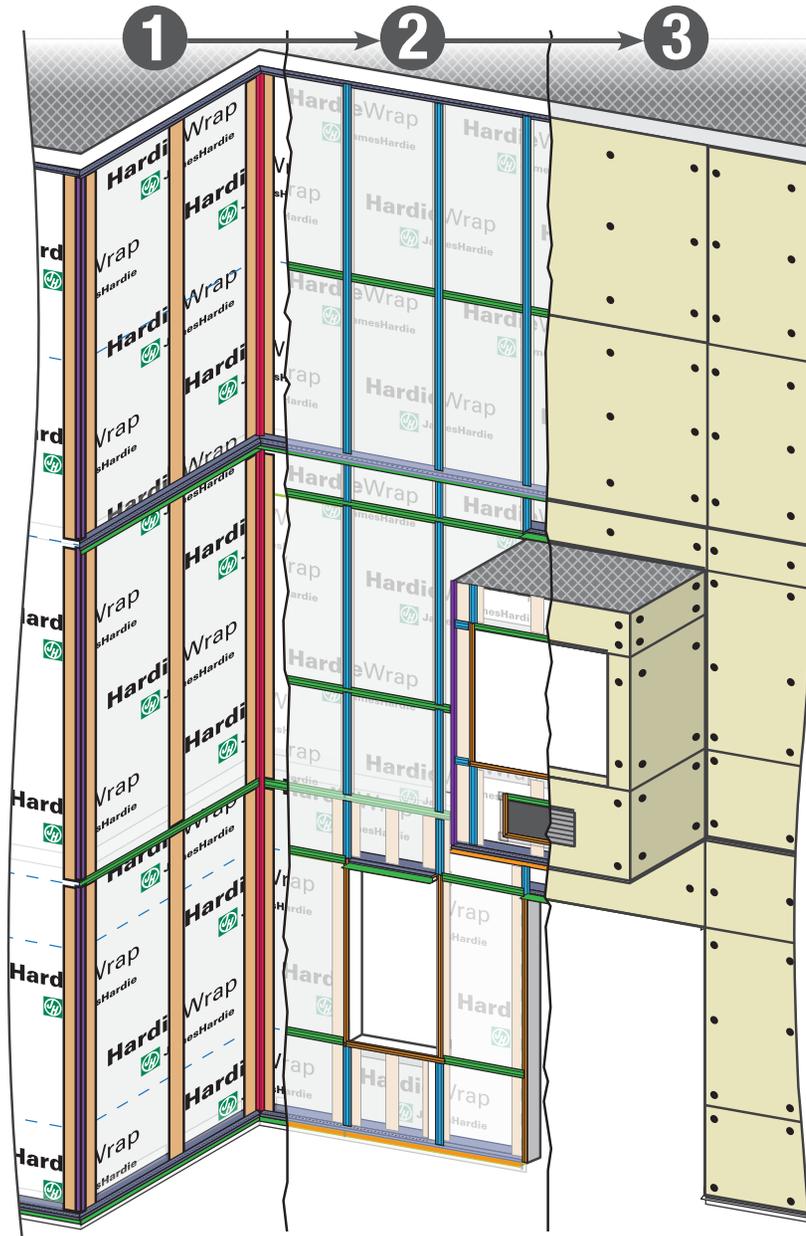
Where foam sheathing is used, furring must be secured to the framing structure and in accordance with design specifications to manage dead loads and traverse loads of the system.

## Section 5 Installation Process

### Overview

#### STEPS:

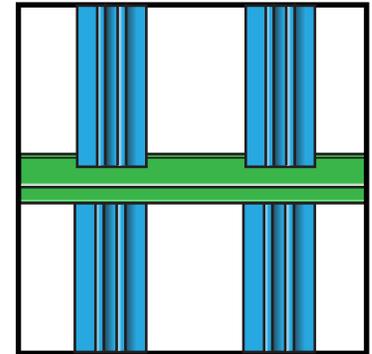
- 1 Install Water Resistant Barrier, Furring, Drainage Flashing, and Vent Screen.**
- 2 Prepare for Trim Layout**  
Ensure furring seams at floor breaks and drainage flashing is planned for every other floor.
- 3 Install Reveal® Trims and Panels**  
Install Reveal® trims, panels, and fasteners.



James Hardie metal trims can be:

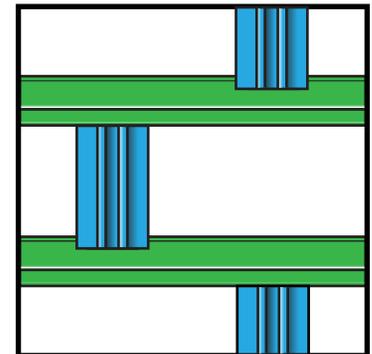
#### GRID PATTERN

Horizontal trim/flashing is continuous



#### BRICK PATTERN

Horizontal trim/flashing is continuous

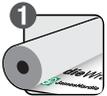


## Section 5 Installation Process

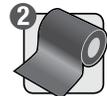
### Step 1: Install Water Resistive Barrier



Make sure all penetrations are weather tight.



1 Install code approved water resistive barrier in shingle fashion, with a 6 inch overlap.\*\*



2 Install flashing at clearance and vent points.



3 Install seam tape.



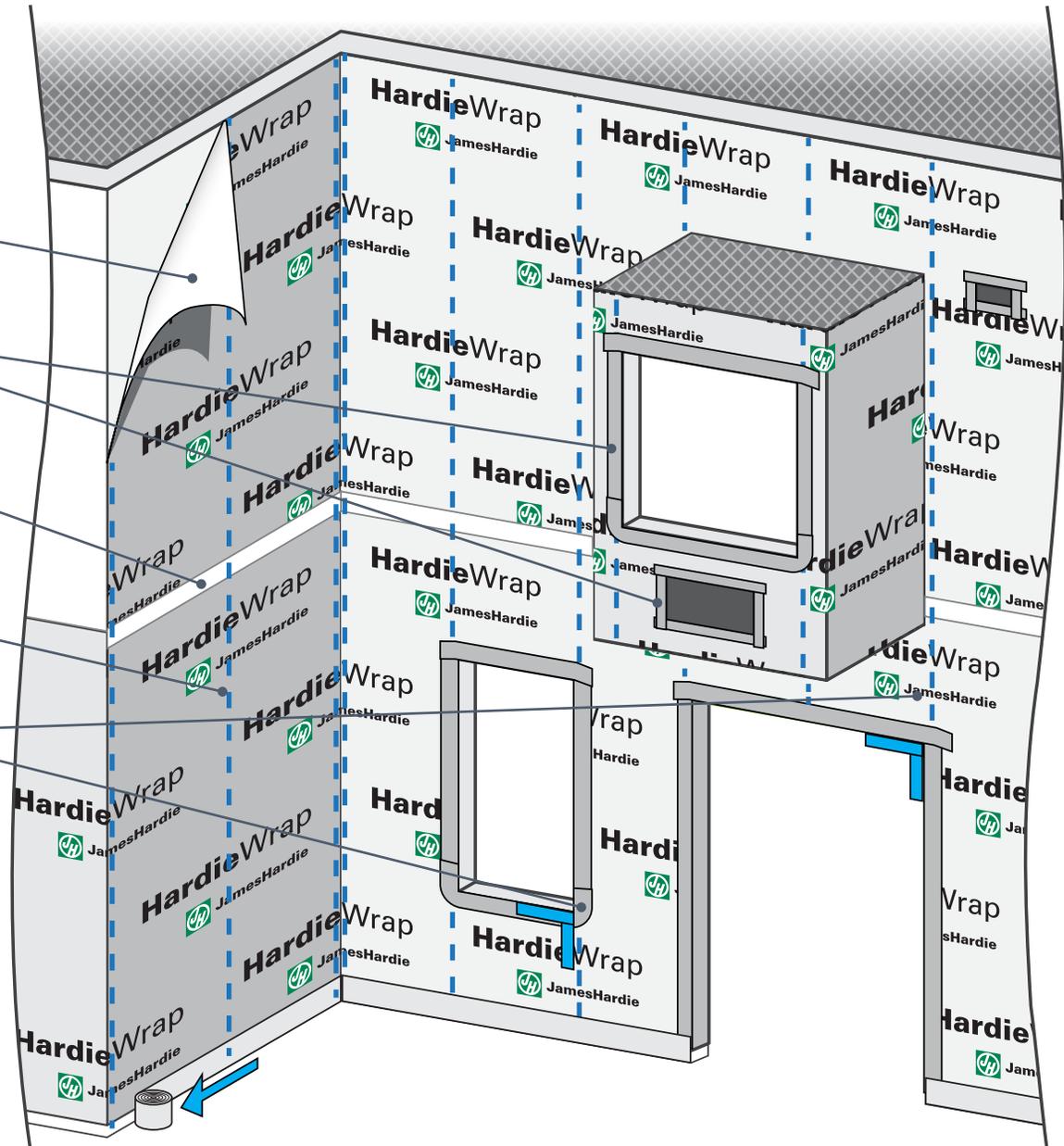
4 Mark studs.  
(16 in-24 in max. o. c.)



5 Mark reference points for furring and trim, remember that some lines will run continuously horizontally and vertically.

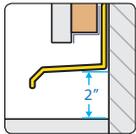


\*\*NOTE: When installing water resistive barrier always refer to manufacturer's requirements. The steps outlined here are guiding principles.



## Section 5 Installation Process

### Step 2: Install Drainage Flashing Trim and Vent Screen



#### Roof Line Clearance

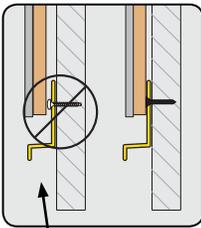
Leave 2 in gap above roof lines.



Install vent screen and drainage flashing trim at bottom of the walls above windows, bay areas, penetrations and every other floor break.



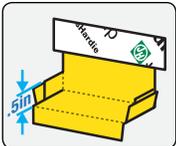
Secure trim every 24 in o.c. and apply seam tape as applicable.



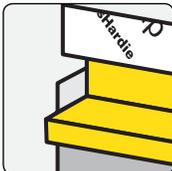
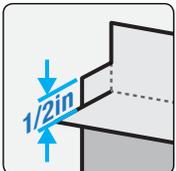
Attach trims to:  
Wood - using a staple, or finish nail or flat head roofing nail.  
Steel - using a hardened steel finish or flat-headed pin.

DO NOT use a button or bugle headed fastener when attaching trims

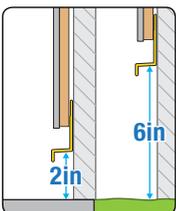
End dams are recommended and can be achieved by one of the



1) Cutting and folding the drainage flashing.

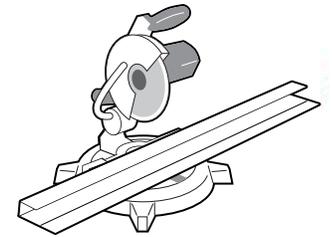
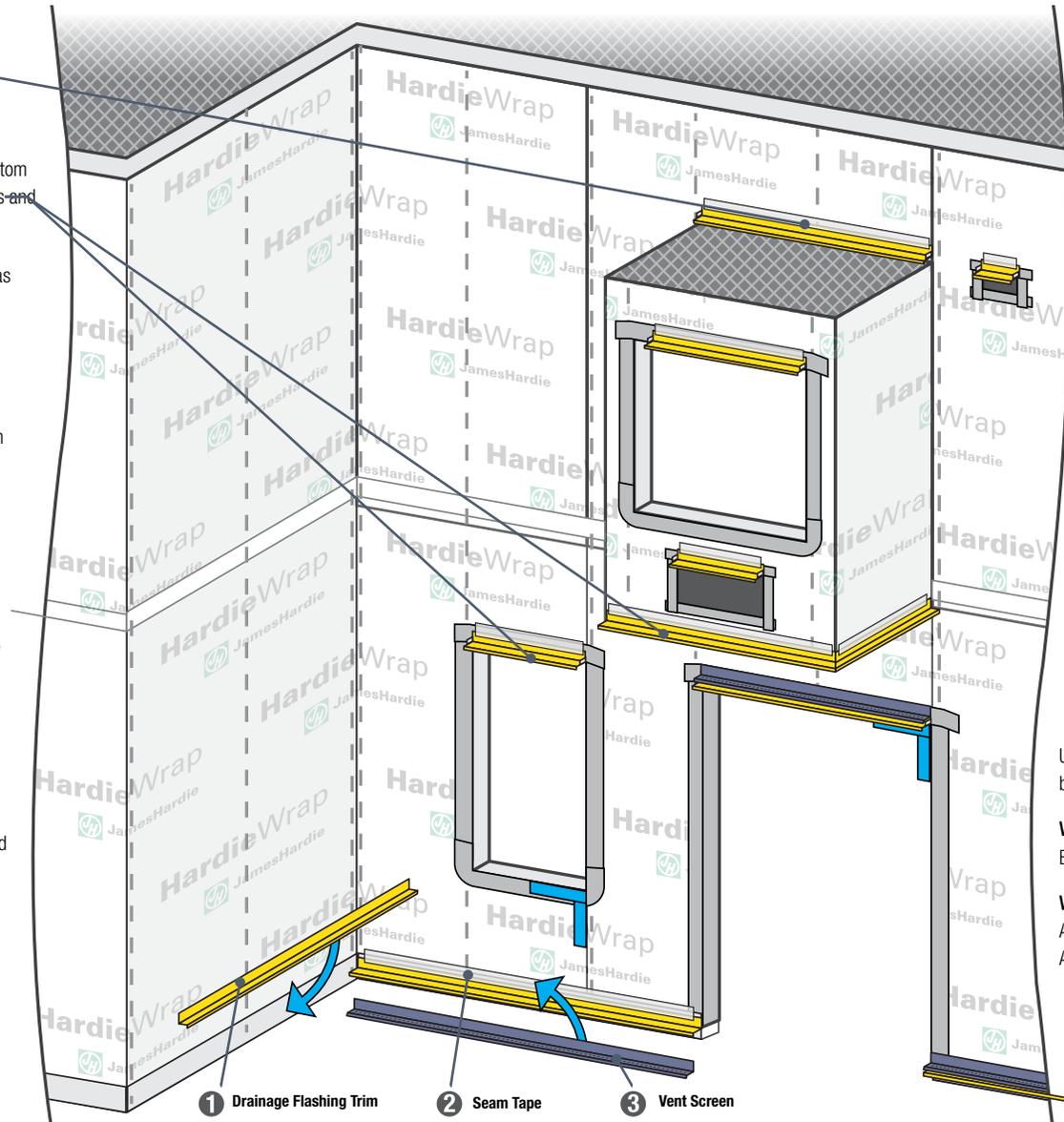


2) Placing a flashing behind the drainage flashing.



#### Clearance Requirements

Install drainage flashing trim 6 in above grade or 2 in above a hard surface.



Use a miter saw with non-ferrous metal blade to cut Reveal® trim to size.

**WARNING:** DO NOT USE AN ABRASIVE BLADE TO CUT ALUMINIUM TRIMS.

**WARNING:** DEBURR METAL SHARPS AND USE EYE AND HAND PROTECTION AS NEEDED.

## Section 5 Installation Process

### Step 3: Attach Furring for Rainscreen

#### Install Furring



Install furring plumb and square. Furring shall be securely fastened to framing. Furring fastener type and spacing must be determined by the job site engineer in accordance with specified design requirements.

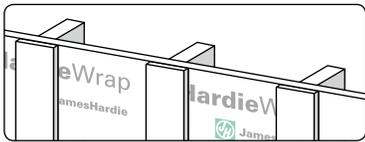


Furring can be steel (min. 20ga. (33 mil) & max 16ga. (54 mil)) furring or code approved wood timber batten furring in accordance with IBC 718.2.6 (2012). Place non-permeable membrane\* on face of wood furring strip only. Do not wrap entire furring strip.

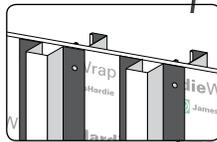
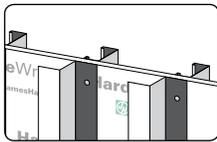
\*Non-permeable membrane such as, EPDM/Neoprene (min 1/16 in), polyethylene strips (min 6 mil), or similar.

Horizontal furring may be utilized if the furring system is designed to prevent moisture from being caught between the furring and cladding.

#### 3/4 in x 4 in Nominal Wood Furring



#### 4 in wide steel furring



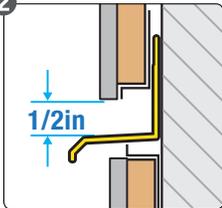
Know the penetration and panel layout to properly layout furring strips.



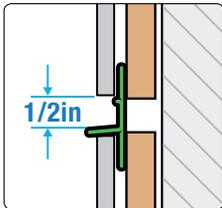
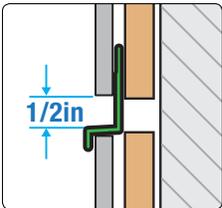
Install extra furring at corners, penetrations and for off stud joining if needed as fill-ins for trim substrate.

2

#### FLOOR BREAK WITH THROUGH-FLASHING



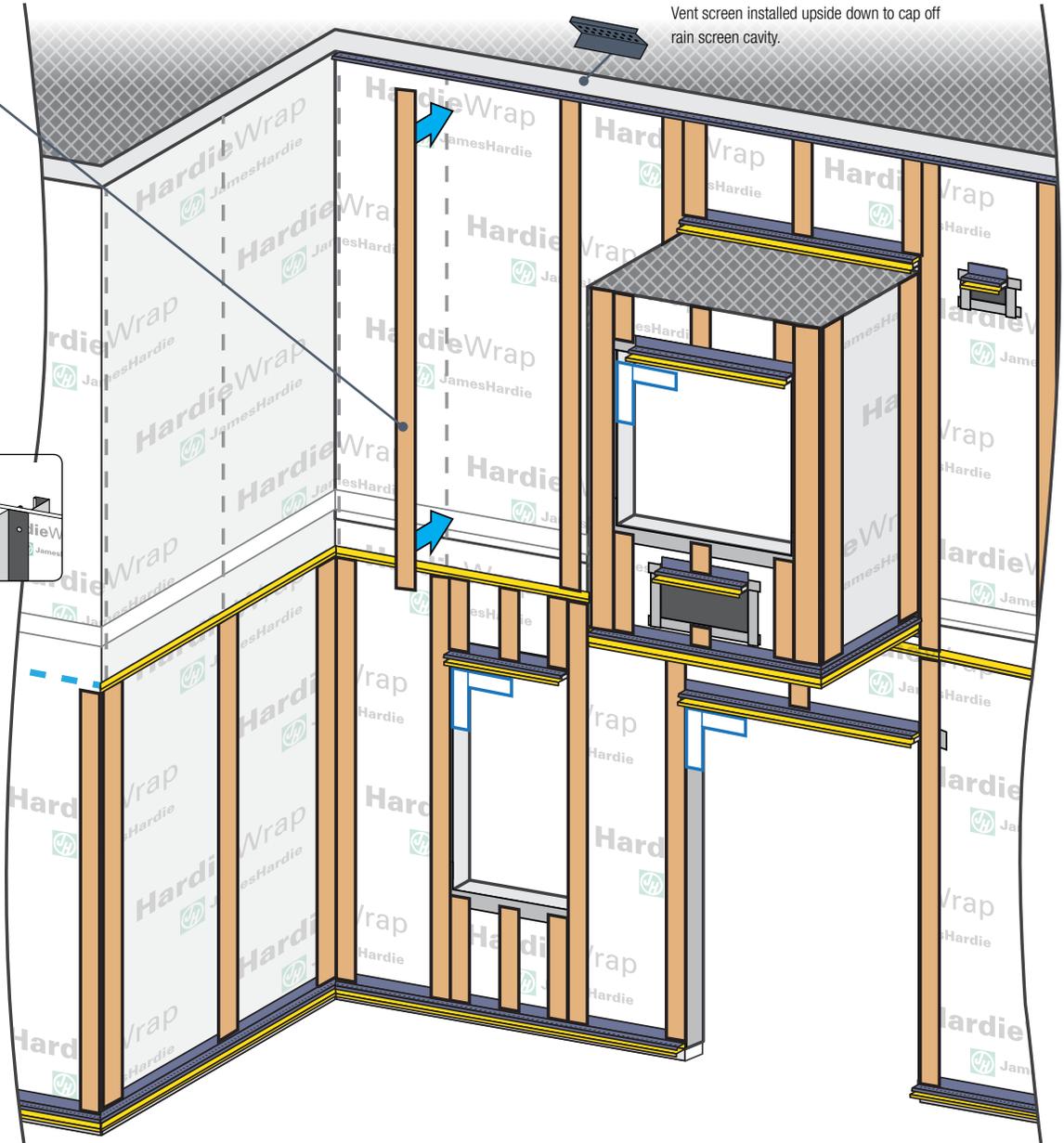
#### FLOOR BREAK WITHOUT THROUGH-FLASHING



For floor break guidance see page 16

3

Check for all square and plumb corners. Make any necessary adjustments.

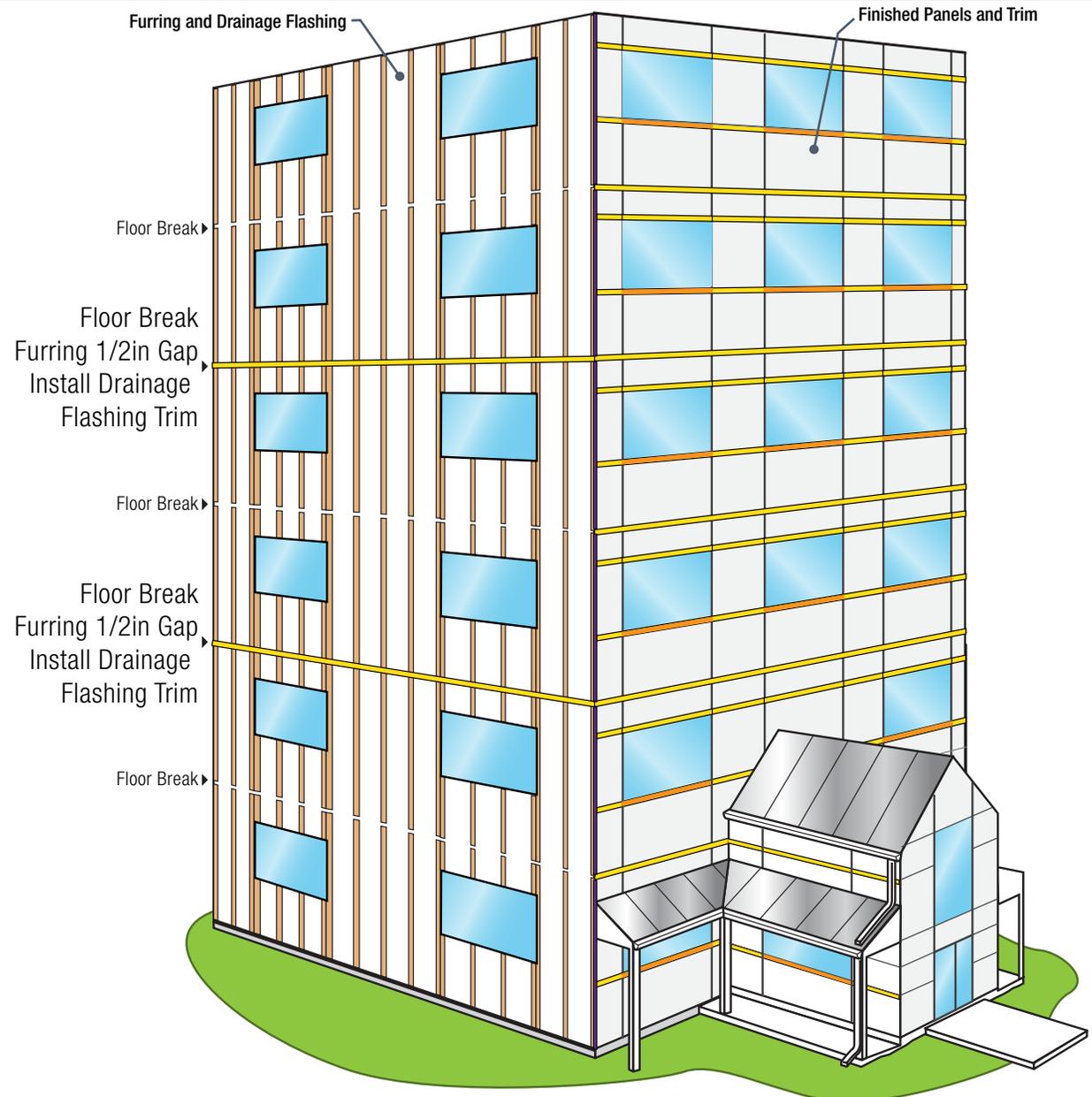


## Section 5 Installation Process

### Step 4: Floor Breaks and Trim Layout

#### Floor Breaks & Furring

Do not bridge floors with furring. install through flashing trim at every other floor break. Leave 1/2 in gap for furring. Use a 1/2 in spacer for installation. Do not caulk opening.

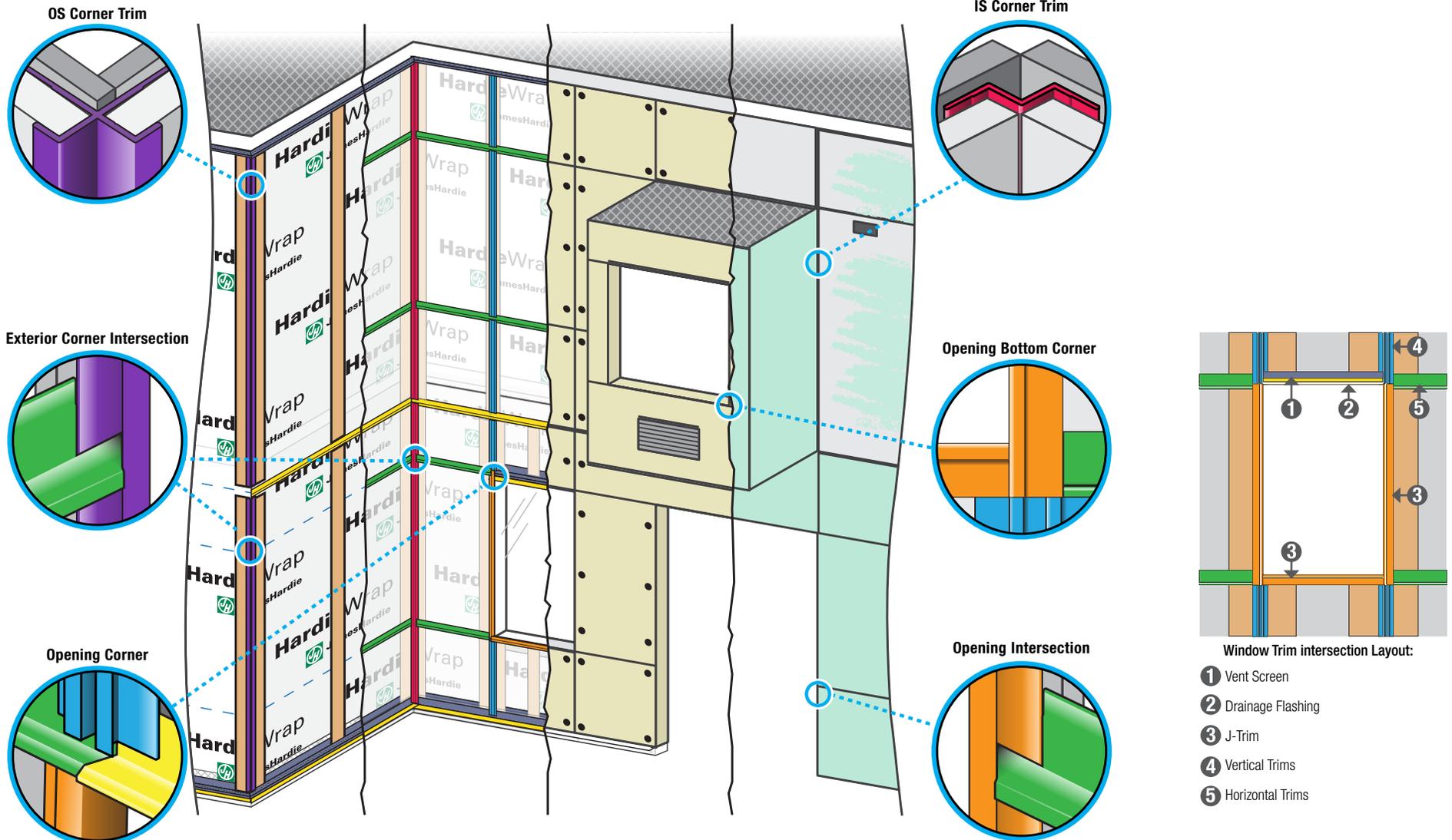


## Section 5 Installation Process

### Surround Trim Layout

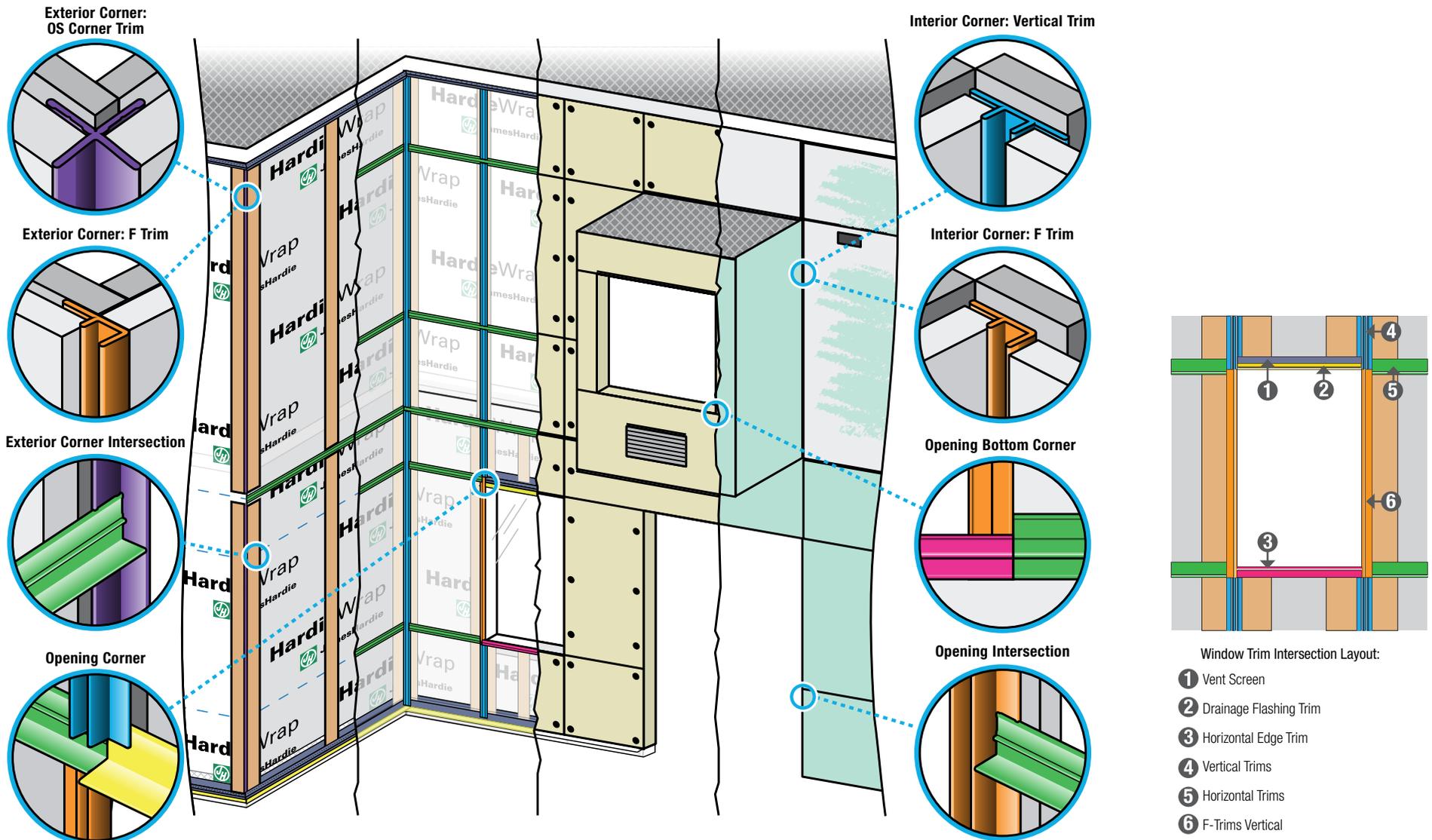
Please review the sample diagrams below and on the following pages to familiarize yourself with common types of trims and joints.

Note: Additional scenarios may be identified during installation. Please contact your James Hardie representative or James Hardie Technical Services with any questions about trim layouts not covered here.



## Section 5 Installation Process

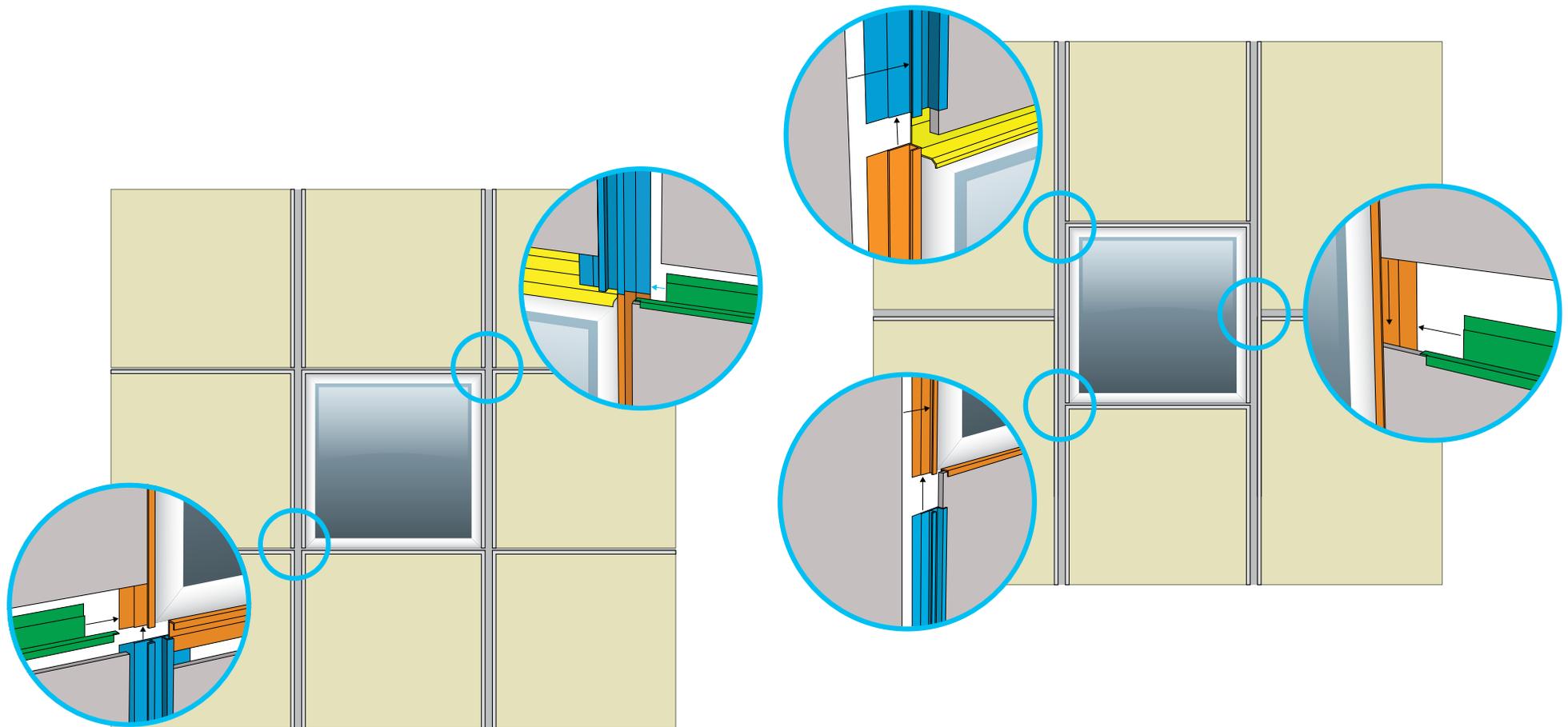
### Recess Trim Layout



## Section 5 Installation Process

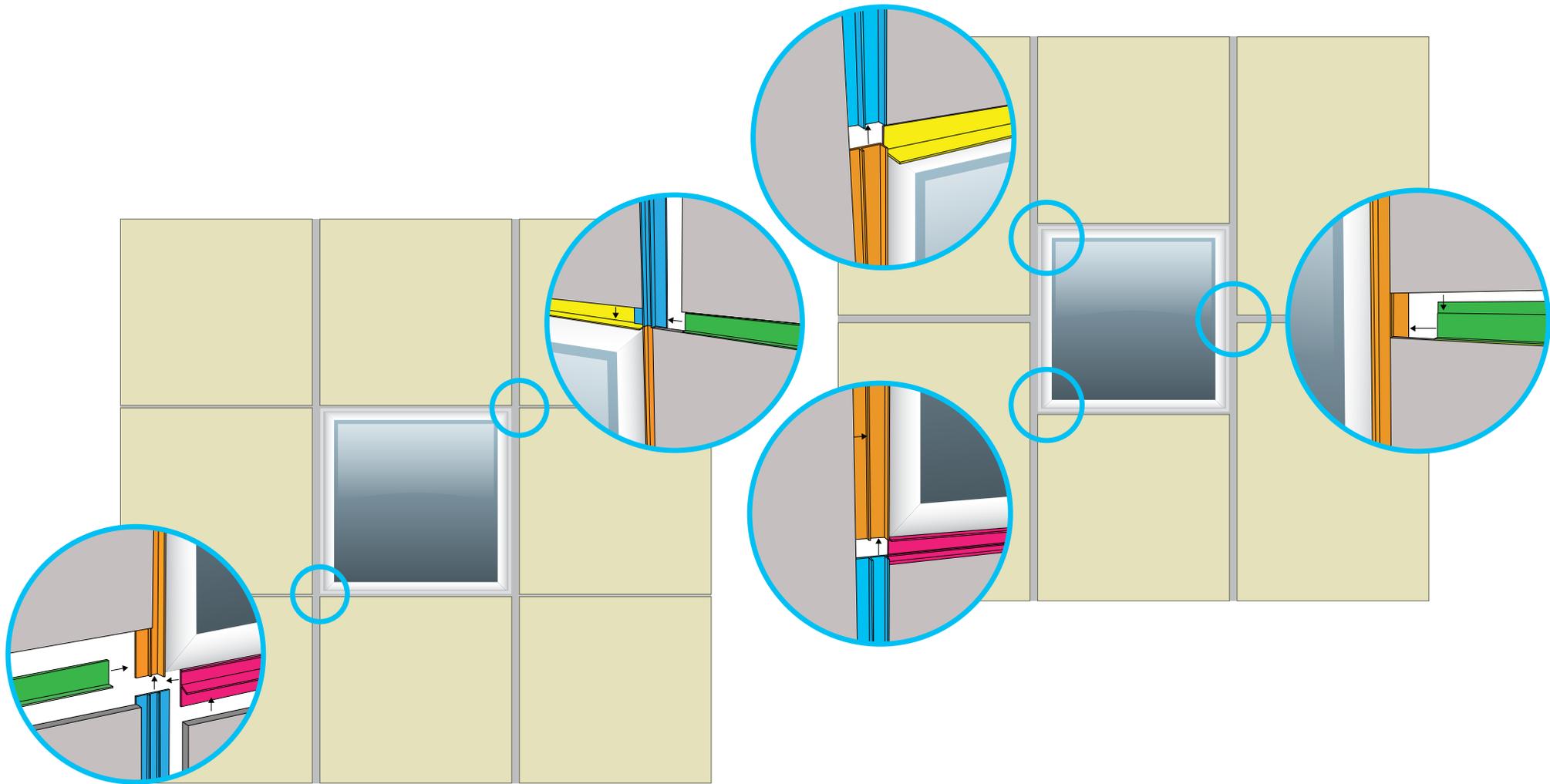
### Surround Window Treatment

Note: Where trims overlap, notching techniques may be used for better finished aesthetics.



## Section 5 Installation Process

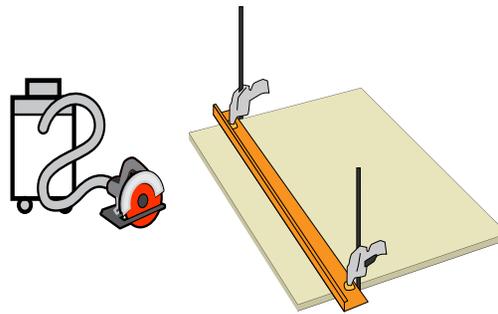
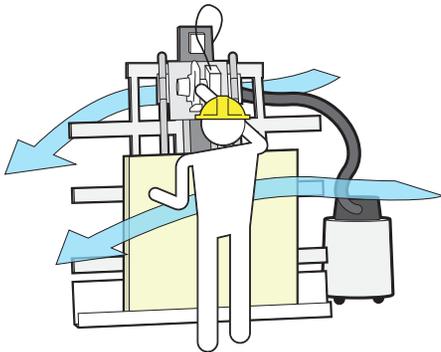
### Recess Window Treatment



## Section 5 Installation Process

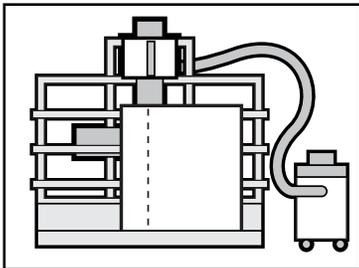
### Step 5: Cutting Panels

#### USE DUST COLLECTORS



- NEVER grind or cut with a power saw indoors.
- NEVER dry sweep dust; use wet dust suppression or vacuum to collect dust.
- For best performance when cutting with a circular saw, James Hardie recommends using HardieBlade® saw blades.

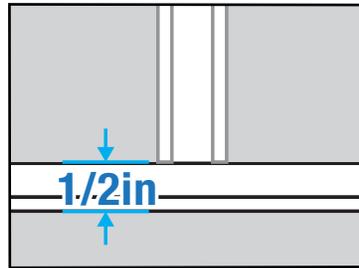
Measure and cut panels square and plumb with a tolerance of (+/-)1/16 in



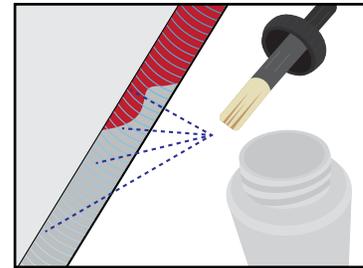
A panel saw with vacuum is recommended for straight, square cuts.



Use a HardieBlade® to cut Reveal Panels.



Install as many factory cut ends to the weather, as possible.



Seal all field cut panel edges when installing with Recess Trims.

**SILICA WARNING: DANGER:** May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product. Refer to the current product Safety Data Sheet before use. The hazard associated with fiber cement arises from crystalline silica present in the dust generated by activities such as cutting, machining, drilling, routing, sawing, crushing, or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust. When doing any of these activities in a manner that generates dust you must (1) comply with the OSHA PEL for silica dust and/or other applicable law, (2) follow James Hardie cutting instructions to reduce or limit the release of dust; (2) warn others in the area to avoid the dust; (4) when using mechanical saw or high speed cutting tools, work outdoors and use dust collection equipment; and (5) if no other dust controls are available, wear a dust mask or respirator that meets NIOSH requirements (e.g. N-95 dust mask). During clean-up, use a well maintained vacuum and filter appropriate for capturing fine (respirable) dust or use wet clean-up methods - never dry sweep.

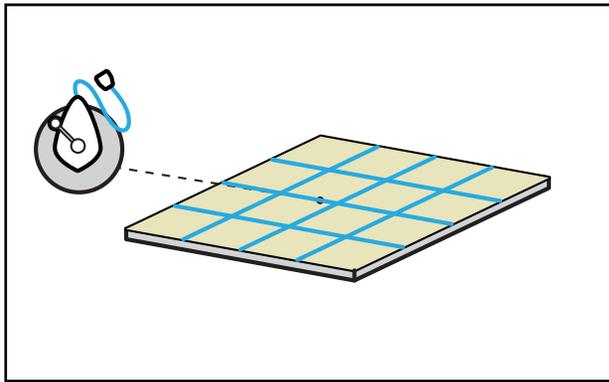
**WARNING:** This product contains a chemical known to the State of California to cause cancer. For more information go to [P65Warnings.ca.gov/product](http://P65Warnings.ca.gov/product).

## Section 5 Installation Process

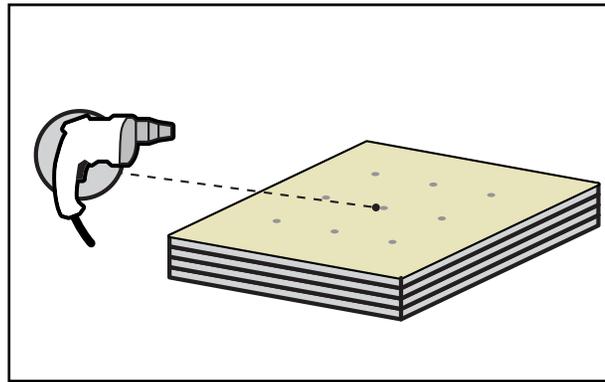
### Step 6: Pre-Drilling Panels

- For exposed fastening, panel must be pre-drilled with a 0.25 in clearance hole.
- For countersunk fastening use countersinking bit and collar instead of a drill bit. Set the Countersink collar position so that the screw head is 1 to 1.5 mm below the panel surface.
- The approved fastener layouts can be found in Section 6.

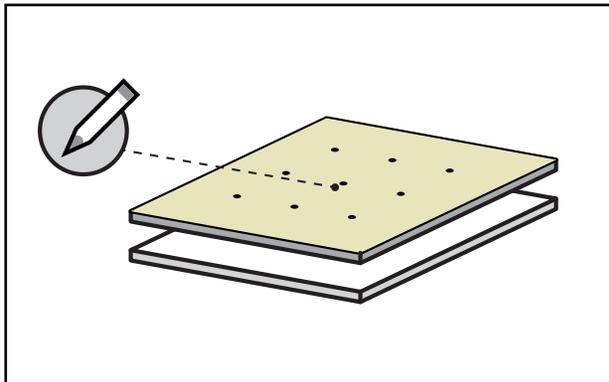
The pattern layout can be achieved using these pattern suggestions:



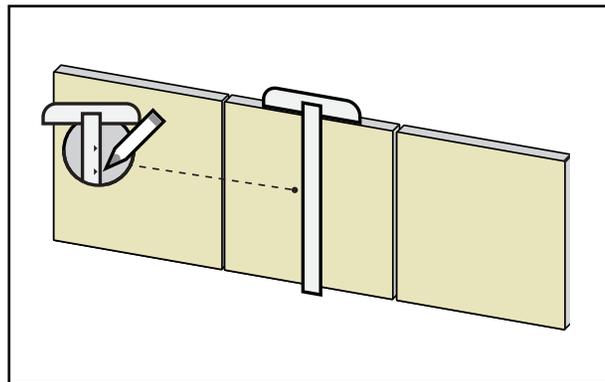
- Snap 'blue' chalk line grid over panels.



- Pre-drill several similar panels at once.



- Use a peg board template to mark the holes you need.



- Use a T-square to make markings.

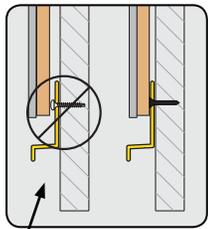
**REMINDER:** Clean as needed to remove dirt, dust, chalking, oil, grease, or organic contaminants.  
Dust from cutting and construction dust should be removed IMMEDIATELY upon installation.

## Section 5 Installation Process

### Step 7: Trim and Panel Installation

- 1 Install first panel into a corner, leveling and making adjustments as needed.
- 2 Install vertical trims and subsequent panels along the horizontal.
- 3 Install panels and trims across the exposure from corner to corner, then move upwards a level.

**NOTE: Metal trims must be permanently fixed with panel in place. Do not leave metal trims tacked in place, especially in high wind areas.**



Attach trims to:  
Wood - using a staple, or finish nail or flat head roofing nail.  
Steel - using a hardened steel finish or flat-headed pin.

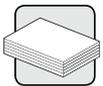
Secure trim every 24 in o.c. and apply seam tape as applicable.

DO NOT use a button or bugle headed fastener when attaching trims

**NOTE: Do not over-drive panel screws or drive at an angle. Fastener heads should fit snug against siding (no air space). Adjust fastening tools accordingly.**

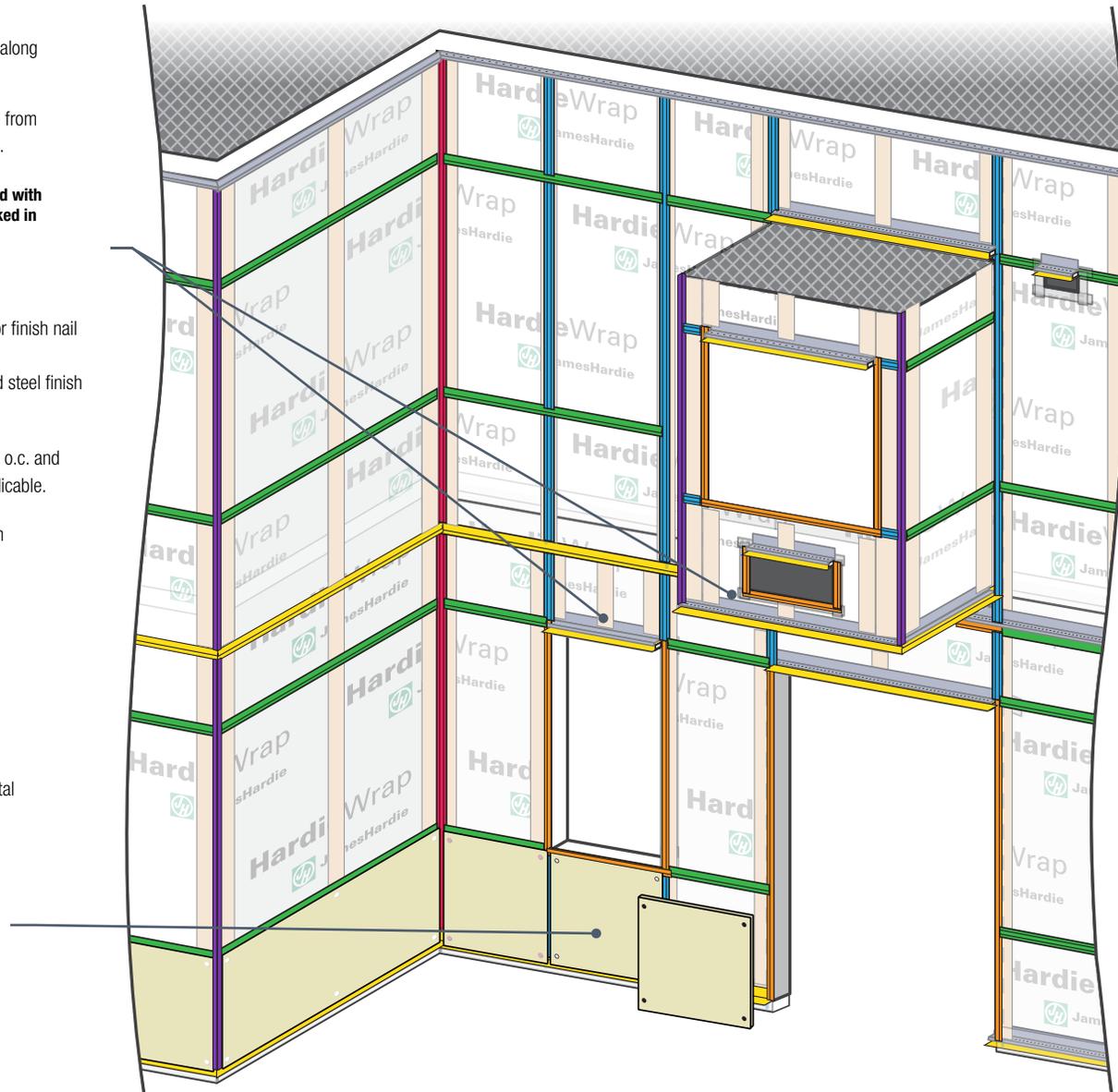


DO NOT bridge floors with Hardie® Reveal® Panel siding or trims. Horizontal joints shall be created between floors.



Place panel inside trim layout.

NOTE: Utilize cut pieces where possible to avoid waste. See Section 6 for Fastening Schedule.

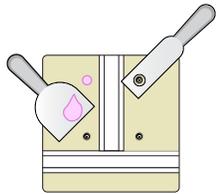


## Section 5 Installation Process

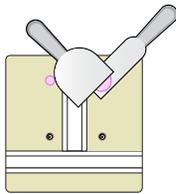
### Step 8: Finishing

Before finishing, assure that the panel is sufficiently dry, not wet to the touch.

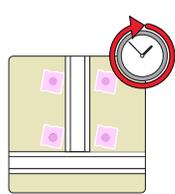
#### 1 Fill Countersunk Fastening Holes



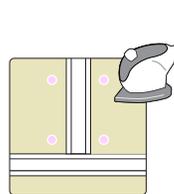
A. Place the patching template over the screw.



B. Use a putty knife to apply putty over the template hole.



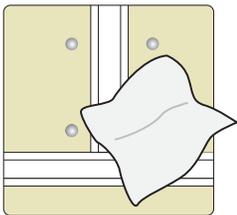
C. Allow putty to dry in accordance with manufacturers instructions.



D. Sand putty surface with 80 grit sand paper.

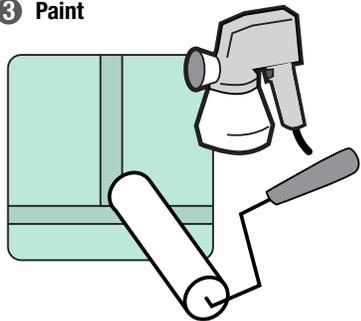
#### For Countersunk & Exposed Fastening Applications

#### 2 Clean off Dust



Wipe the surface of the panel clean prior to painting.

#### 3 Paint



Spray 2 coats of high quality 100% acrylic paint and back roll.

Exposed fastening

Countersunk fastening

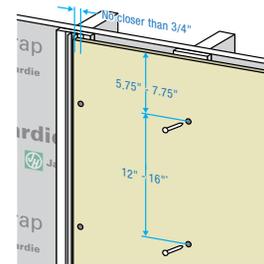
## Section 6 Fastener Layout

### Exposed Fastening

NOTE: The configurations shown below are for illustrative purposes only. Refer to Technical Data Sheet for allowable wind loads and fastener selection.

Fastener schedule must meet configuration minimums as prescribed in the wind load tables applicable to your project.

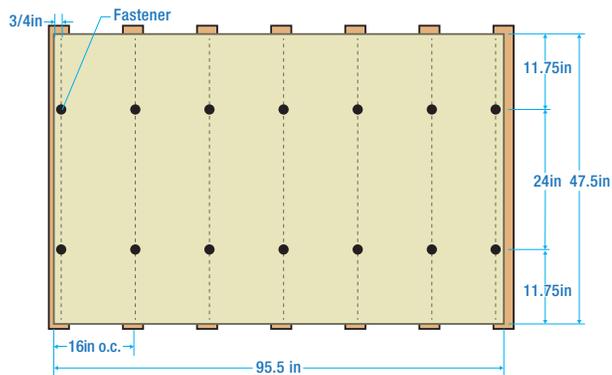
- Drive fasteners perpendicular and snug to siding and framing.
- Fasteners position may be no closer than 3/4 in from panel edge.
- Refer to figure on the right for fastener placement requirements.
- Do not over-drive panel screws or drive at an angle. Fastener heads should fit snug against siding (no air space). Adjust fastening tools accordingly.
- If fastener breaks, add a fastener near to site and use a cementitious compound to fill the hole. Use a primer as necessary.



\*Reference applicable configuration below for exact distance.

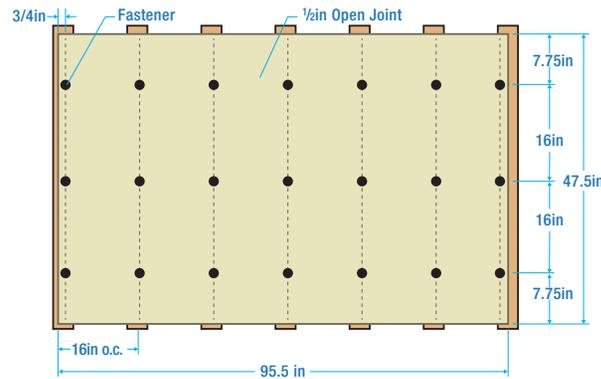
#### Configuration 1 (Exposed):

Wind Load Design for **Wood** (16 in o.c.), allowable -42.5 PSF



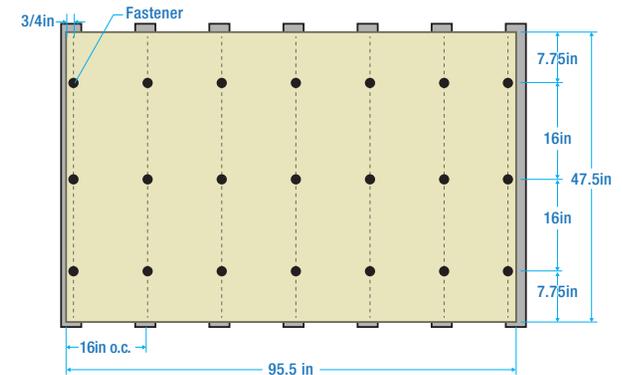
#### Configuration 2 (Exposed):

Wind Load Design for **Wood** (16 in o.c.), -68.7 PSF



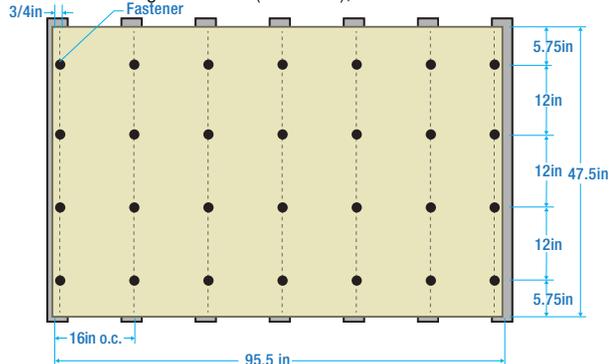
#### Configuration 3 (Exposed):

Wind Load Design for **Steel** (16 in o.c.), -56.3 PSF



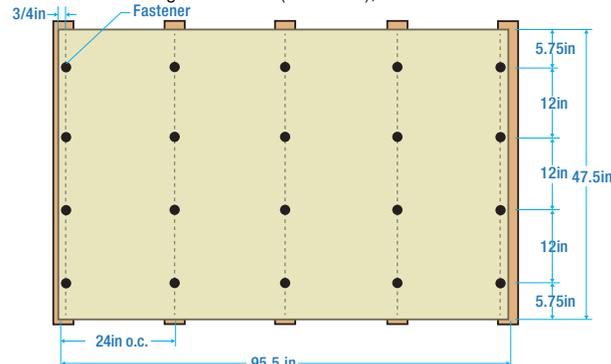
#### Configuration 4 (Exposed):

Wind Load Design for **Steel** (16 in o.c.), -69.2 PSF



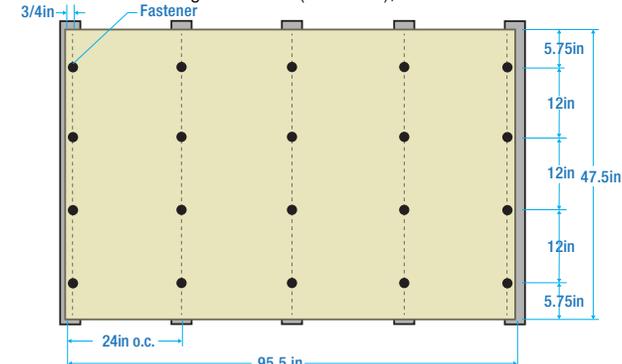
#### Configuration 5 (Exposed):

Wind Load Design for **Wood** (24 in o.c.), -57.4 PSF



#### Configuration 6 (Exposed):

Wind Load Design for **Steel** (24 in o.c.), -50.0 PSF



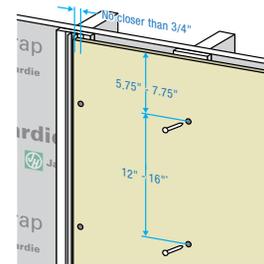
## Section 6 Fastener Layout

### Countersunk Fastening

NOTE: The configurations shown below are for illustrative purposes only. Refer to Technical Data Sheet for allowable wind loads and fastener selection.

Fastener schedule must meet configuration minimums as prescribed in the wind load tables applicable to your project.

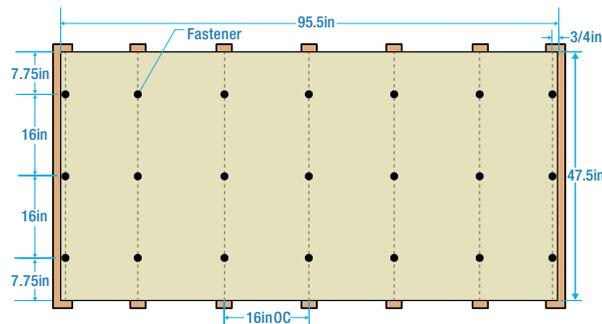
- Drive fasteners perpendicular and snug to siding and framing.
- Fasteners position may be no closer than 3/4 in from panel edge.
- Refer to figure on the right for fastener placement requirements.
- Do not over-drive panel screws or drive at an angle. Fastener heads should fit snug against siding (no air space). Adjust fastening tools accordingly.
- If fastener breaks, add a fastener near to site and use a cementitious compound to fill the hole. Use a primer as necessary.



\*Reference applicable configuration below for exact distance.

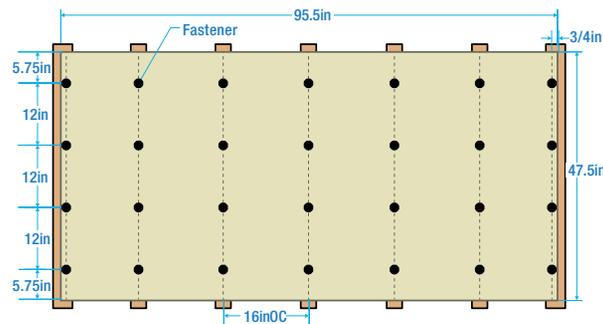
#### Configuration 7 (Countersunk):

Wind Load Design for **Wood** (16 in o.c.), -37.1 PSF



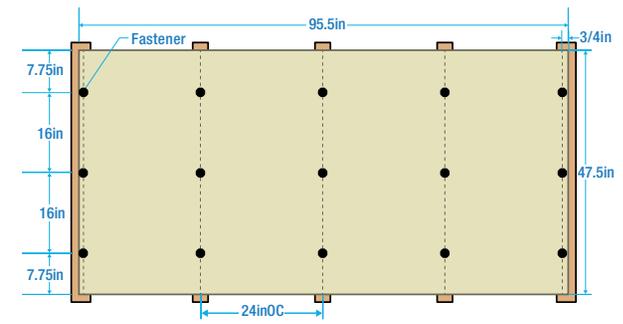
#### Configuration 8 (Countersunk):

Wind Load Design for **Wood** (16 in o.c.), -44.8 PSF



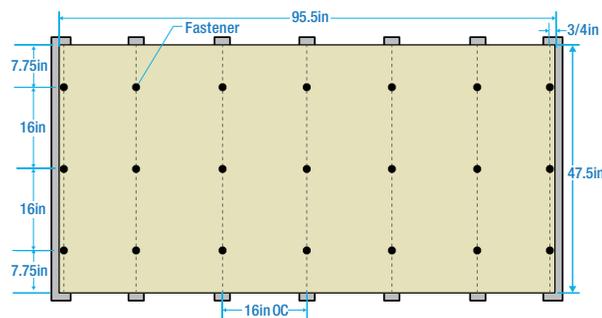
#### Configuration 9 (Countersunk):

Wind Load Design for **Wood** (24 in o.c.), -36.7 PSF



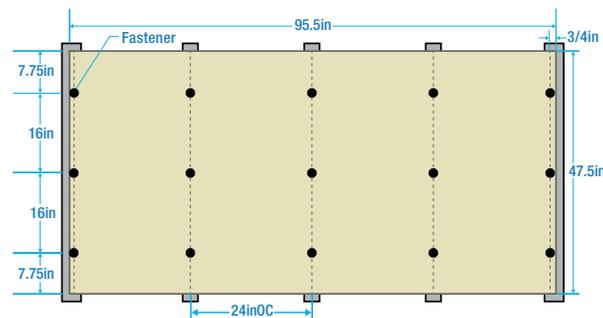
#### Configuration 10 (Countersunk):

Wind Load Design for **Steel** (16 in o.c.), -42.5 PSF



#### Configuration 11 (Countersunk):

Wind Load Design for **Steel** (24 in o.c.), -33.2 PSF

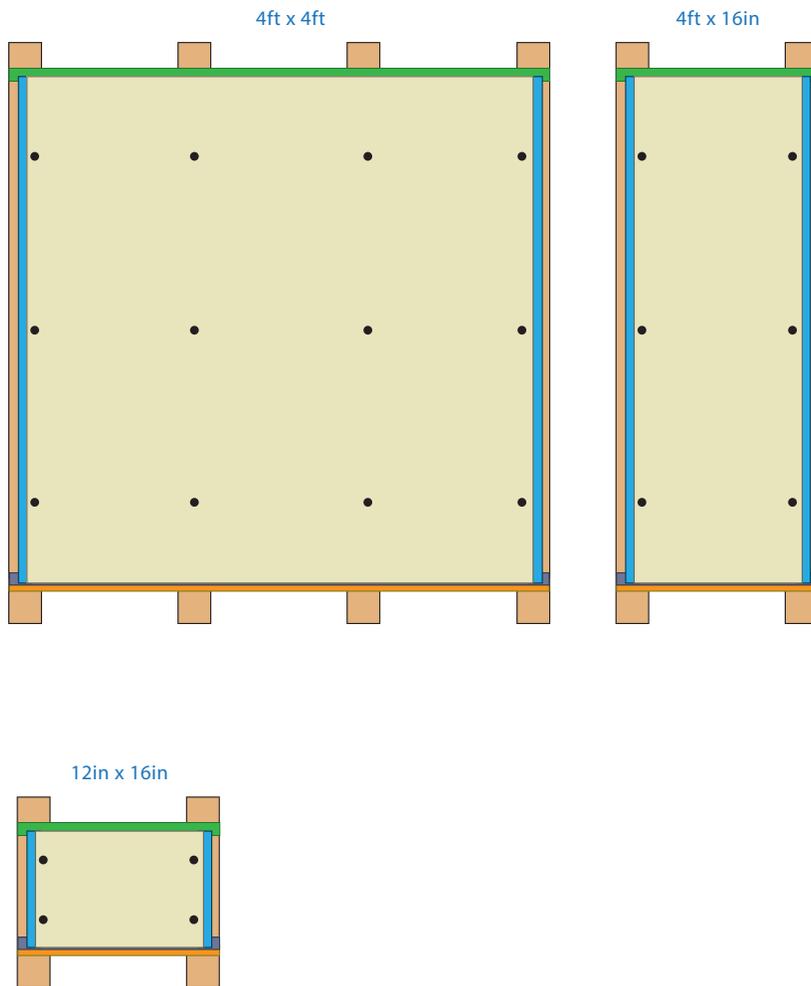


## Section 6 Fastener Layout

### Fastener Layout and Off Stud Trim Placement

#### Panel Sizing Alternatives

When panels are cut down, wind rating is maintained by prescribed fastener schedule configuration.



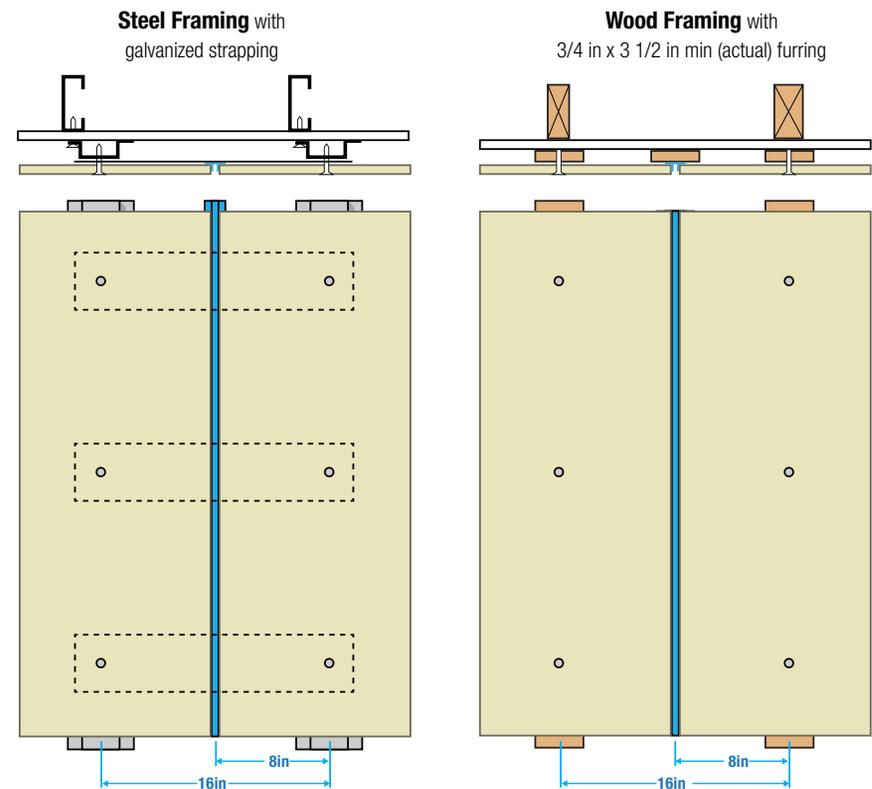
**NOTE:** The minimum number of fasteners must consist of four fasteners for any given panel. For panel sizes smaller than the prescribed fastener spacing, fasteners shall be no closer than 4 inches from horizontal edges.

#### Off-Stud Joining Options

- Vertical joints must land mid-center of stud bay
- For steel, flat stock strapping must be a minimum of 20 ga. (33 mil) and maximum 16 ga. (54 mil), installed horizontally, and fastened to the vertical furring
- For wood, the added wood furring must be secured to a backing

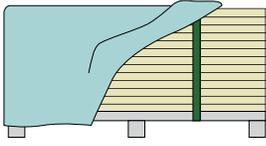
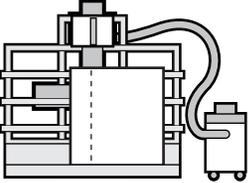
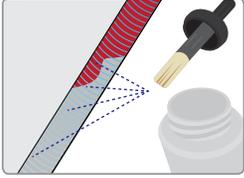
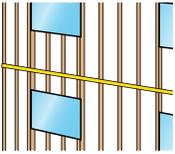
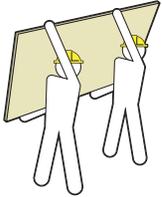
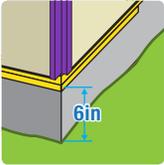
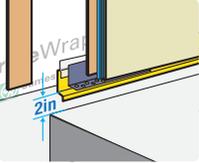
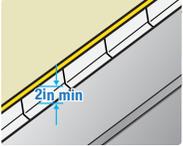
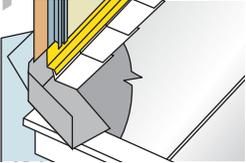
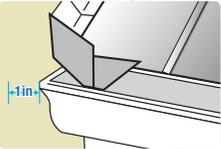
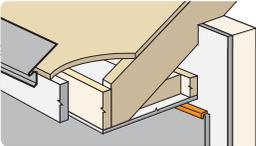
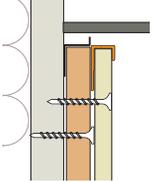
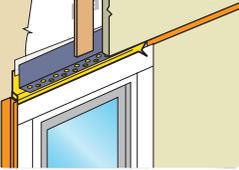
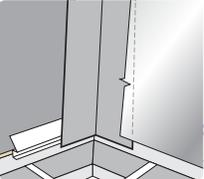
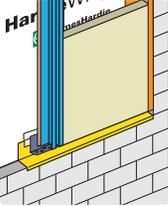
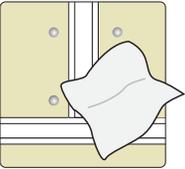
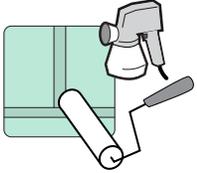
The purpose of the flat stock strapping and mid-bay wood furring is for attachment of the Reveal Trims only and does not contribute to wind load values of the panel.

**NOTE:** Off-stud joining options are limited to a maximum 16 in o.c., (24 in o.c. not permitted). When joining off-stud, the following requirements must be met:



**NOTE:** Reference Technical Data Sheets for required fastening schedule.

# Builder's Installation Checklist

<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Keep Reveal® panel dry prior to installation.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Panel saw or straight edge use in conjunction with vacuum dust collection.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Seal all field cut edges of primed panels installed with Recess trim.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Floor Break Furring 1/2in Gap, Install Drainage Flashing Trim</p>  <p>Furring is installed plumb and square over studs. (Max spacing 24 in o.c.)</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>At minimum Drainage Flashing Trim installed every other floor.</p>
<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Reveal Panel corners and edges not damaged.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>6 in Grade Clearance.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>2 in Clearance at Slabs, Decks, Porches &amp; Patios.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>2 in Clearance roof to wall intersections.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Kickout flashing at roof/wall intersections.</p>
<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Gutter &amp; End Cap minimum 1 in from panel.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Sub-Fascia with drip edge required with HardieTrim.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Rainscreen cavity is properly capped off with vent screen.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Furring is installed plumb and square over studs. (Max spacing 24 in o.c.)</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Drainage flashing trim, vent screen and 1/2 in gap for all horizontal surfaces/penetrations.</p>
<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Valley Flashing.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>L Flashing between Reveal Panel and masonry.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Blocked Penetrations on Hose Bibs and Dryer Vents.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Wipe off dust prior to painting.</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>  <p>Spray 2 coats of high quality 100% acrylic latex paint and back roll.</p>

## NOTICE:

These instructions will enable you to install the Reveal Panel System by James Hardie, but do not purport to address every design iteration or problem that might come up during a project. When in doubt of assembly details contact the architect, specifier, or a building official. Always follow local building code.

### FOR MORE INFORMATION:

For questions about systems installation or a technical inquiry regarding James Hardie Products speak with your James Hardie representative or contact at:

**[info@jameshardie.com](mailto:info@jameshardie.com)**

Samples and Literature, Technical Support, and General Inquiries: **1-800-942-7343**

Multifamily Desk: **1-877-236-7526**

Warranty: **1-866-375-8603**

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by **JamesHardie**