

HardieTrim®

HardieTrim® Boards Products Description

HardieTrim® boards come finished with either the PrimePlus® factory primer and sealer or with ColorPlus® Technology. The ColorPlus® coating is a factory-applied, oven-baked finish available on a variety of James Hardie® siding and trim products. See your local dealer for details and availability of products, colors, and accessories.

5/4, 4/4 HARDIETRIM® BOARDS

5/4, 4/4 HardieTrim® board is a decorative non-load bearing trim product. 5/4 HardieTrim board is 25mm (1 in.) thick, 4/4 HardieTrim board is 19mm (¾ in.) thick, and both can be purchased in 3,038mm (10') and 3,658mm (12') lengths, based on local availability. In addition to frieze, rake, window, door, and corner details, 5/4, 4/4 HardieTrim boards may be used to construct light blocks, column wraps and decorative scroll work. Available in commonly-used nominal widths from 101mm (4 in.) to 304mm (12 in.).

HARDIETRIM® BATTEN BOARDS

HardieTrim® Batten Boards are a decorative non-load bearing trim product. HardieTrim® Batten Boards are 19mm (¾ in.) thick, 64mm (2½ in.) wide, and come on 3,658mm (12') lengths. See your local dealer for details and availability of product colors and accessories.



5/4, 4/4 HardieTrim board - Smooth



HardieTrim Batten board - Rustic and Smooth (not shown)



HardiePanel vertical siding with HardieTrim Batten board for the Board & Batten look.



WARNING

DO NOT caulk nail heads when using ColorPlus products. Refer to the ColorPlus touch-up section

A Complete James Hardie Exterior – Close-up on trim products.



ColorPlus TIP: 5/4, 4/4 HardieTrim boards with ColorPlus Technology is shipped with a protective laminate slip sheet. James Hardie recommends keeping the protective sheet in place during cutting and fastening to reduce damage to the boards. Remove the protective sheet only after installing the boards and filling the nail holes with a colored touch-up pen.



Installation of 5/4 & 4/4 HardieTrim® NT3® Back Grooved Boards

General Product Information

Working Safely

Tools for Cutting and Fastening

General Installation Requirements

General Fastener Requirements

Finishing and Maintenance

HardieTrim® Boards/Battens

HardieSoft® Panels

HardiePlank® Lap Siding

HardieShingle® Siding

HardiePanel® Vertical Siding

Appendix/ Glossary

CCMC Report

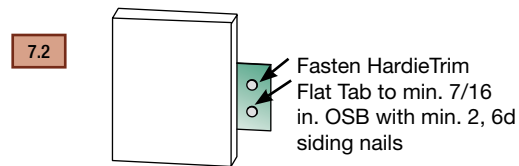
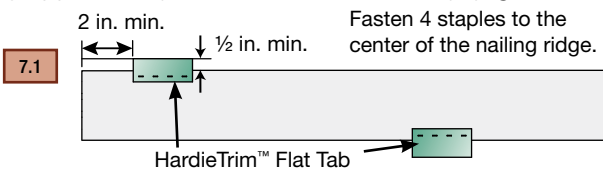
CONCEALED FASTENING TABS

For Corners, Band Boards, Windows, and Door Applications: HardieTrim® boards can be installed with Flat Tabs (JH sku no. 280154) and Corner Tabs (JH sku no. 280155) which provide concealed fastening. Only Flat and Corner Tabs can be used with HardieTrim® boards to create a concealed fastening. Additional framing may be required to ensure the Flat and Corner Tabs are fastened properly to the structure. Special attention should be paid to the framing when using a sheathing that does not have fastener holding equivalent to OSB or Plywood sheathing.

Step 1: Attach Flat Tabs to the back side of the trim with 4 18 ga. 1/2 in. L x 1/4 in. W narrow crown corrosion resistant staples, equally spaced in one row, positioned no closer than 1/2 in. from trim edges, using a pneumatic staple gun. (Figure 7.1)

Step 2: For wood frame construction, attach the trim to the building using 2, 6d siding nails fastened through the Flat Tabs. ET&F or equivalent fasteners may be used to attach the Flat Tabs to steel frame construction. (Figures 7.2)

Fastener spacing will vary based on application. Refer to specific sections in these instructions for required fastener spacing by application (window, band board, etc.). (Figures 7.17)



Installation of HardieTrim tabs in Coastal Regions:

James Hardie requires that stainless steel staples & fasteners be used when installing HardieTrim™ Tabs in coastal regions.

Installation of HardieTrim Tabs over Pressure Treated Lumber:

HardieTrim™ tabs shall not come in direct contact with ACQ or CA preservative-treated wood. Refer to the General Fastening section of this document for further information.

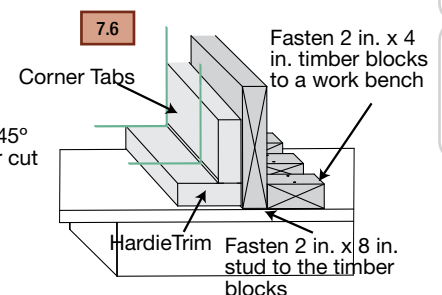
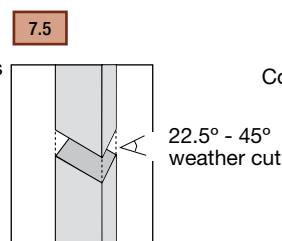
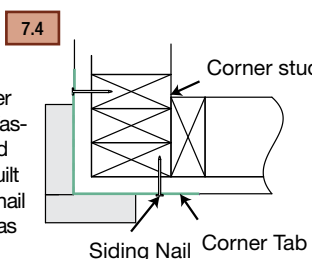
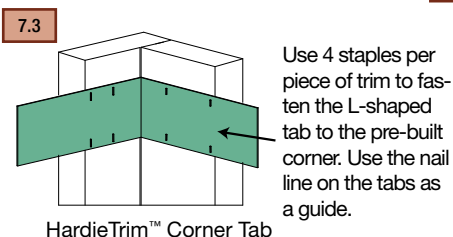
HardieTrim® NT3™ boards with ColorPlus® Technology:

Remove the laminate sheet as soon as possible after attaching the trim to the building.

TRIMMING CORNERS

HardieTrim® boards are installed around corners by pre-building the corner off the wall with the Corner Tabs (JH sku no. 280155).

- Attach Corner Tabs to the back side of the trim with 8 18 ga. 1/2 in. L x 1/4 in. W narrow crown corrosion resistant staples using a pneumatic staple gun. Ensure the Corner Tabs are fastened tight and straight to the trim boards. (Figures 7.3)
- For wood frame construction, attach the trim to the building with 2, 6d siding nails fastened through the Corner Tabs. ET&F or equivalent fasteners may be used to attach the Corner Tabs to steel frame construction. (Figures 7.4)
- Attach a Corner Tab 1 in. from each edge and every 20 in. o.c.
- TIP: Creating a jig for the work station is recommended to ensure the corners are fastened securely and straight. (Figures 7.6)

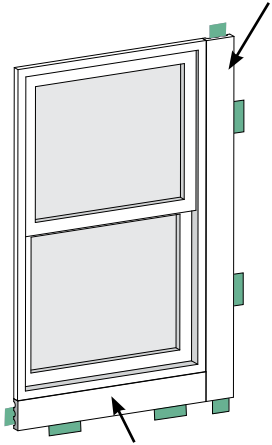


Installation of HardieTrim® 5/4, 4/4 & NT3™ Back Grooved Boards

TRIM APPLICATION FOR WINDOWS, DOORS & OTHER OPENINGS

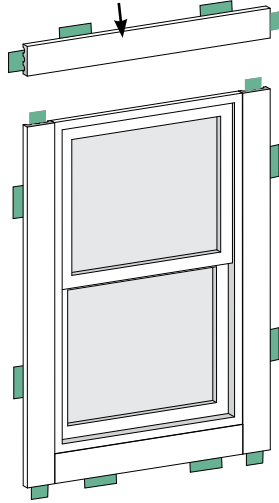
Trim the opening prior to the installation of the siding (Figure 7.7). Place a Flat Tab at the end of each trim board and one tab every 16 in. OC. Attach the trim boards and Flat Tabs around the opening as shown in Figures 7.7 and 7.8.

7.7 Side trim pieces go to the top of the window.



Bottom trim piece is the width of the window.

7.8 Header piece spans the window including the side trim pieces.

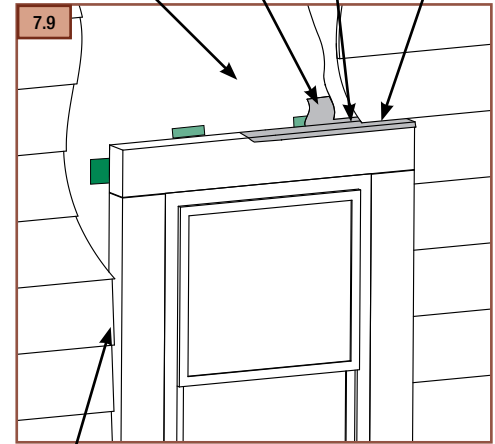


Flashing needs to be tucked under the water resistive barrier and over the Flat Tabs.

Do not caulk between the siding and the flashing.

Water-resistive Barrier

1/4 in. gap

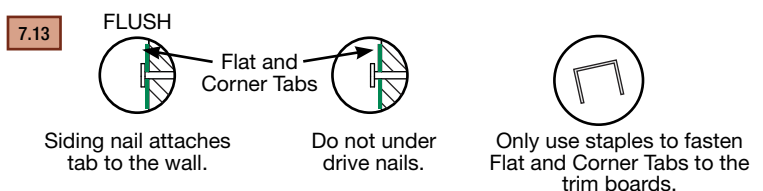
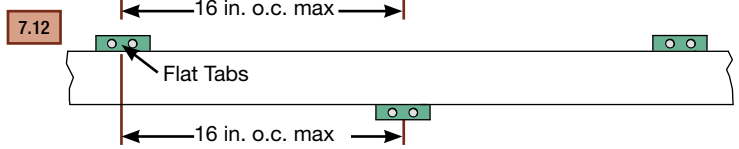
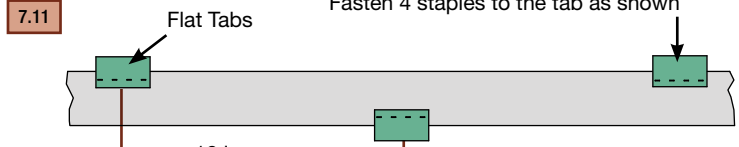
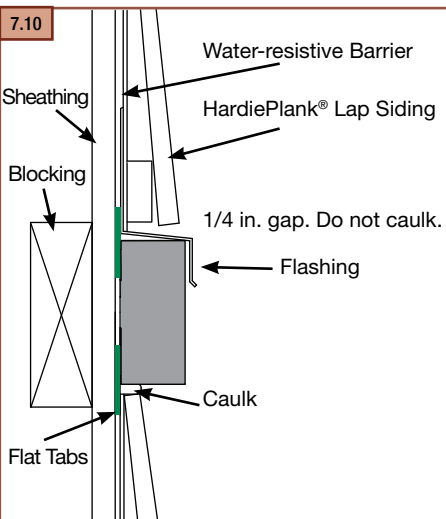


1/8 in. caulked gap is left between siding and the side trim pieces.

NOTE: Follow your window/door manufacturers installation instructions.

BAND BOARD

A flashing is required over the trim and Flat Tabs. (Figure 7.10) Terminate ends of the Band Board into Trim or Siding or miter cut the edges of the trim at the corners of the building. Place a Flat Tab at the end of each trim board and one tab every stud at a maximum of 16 in. o.c. The Flat Tabs should be attached to the trim in an alternating pattern to the top and bottom of the band board (Figures 7.11 and 7.12).



FASTENER TABLE

7.14

Application	Framing Material Tab is nailed into	Fastener (tab to framing)	Fastener (tab to Hardietrim)	Max Tab Spacing (inches on center)
Flat Tab	Wood Stud (minimum G=0.42)	One 6d corrosion resistant siding nail installed through center of flange into framing	Four 18 ga. X 1/2" long X 1/4" wide corrosion resistant crown staples, equally spaced in one row	16
	Minimum APA rated 7/16" OSB	Two 4d ring shank corrosion resistant siding nails equally spaced installed through flange into framing		
	Minimum 20 gauge steel	One No. 8 X 1" long X 0.323" head diameter screw (corrosion resistant) installed through flange into framing		
Corner Tab	Wood Stud (minimum G=0.42)	On each flange, Install one 6d corrosion resistant siding nail through flange into framing	For each piece of trim, install Four 18 ga. X 1/2" long X 1/4" wide corrosion resistant crown staples, equally space in two rows	20
	Minimum APA rated 7/16" OSB	On each flange, Install two 4d ring shank corrosion resistant siding nails through flange into framing		
	Minimum 20 gauge steel	On each flange, Install one No. 8 X 1" long X 0.323" head diameter screw (corrosion resistant) through flange into framing		

Wind-Borne Debris Region: "Supplemental fasteners may be necessary when installing tabs in a Wind-Borne Debris Region, please call Technical Services 800-942-7343 with any questions."

RECOGNITION: HardieTrim boards may be installed as an equal alternative to conventional trim permitted for use in; the 1997 Uniform Building Code, Section 601.5.5; the 1997 Standard Building Code, Section 1404.1; the 1999 BOCA National Building Code, Section 1407.2.2; 2003 International Building Code, Section 1402.1, the 2003 International Residence Code for One - and Two - Family - Dwellings, Section R703.1.

the 2003 International Residence Code for One - and Two - Family - Dwellings, Section R703.1. and the 1998 International One-and -Two -Family Dwelling Code, Section 601.1.

Installation of HardieTrim® 5/4, 4/4 & NT3® Back Grooved Boards

OUTSIDE CORNERS

Corners made from 5/4, 4/4 HardieTrim® boards can be pre-assembled before they're installed. Pre-assembled corners look better and generally make the installation go more quickly. To join two pieces of 5/4, 4/4 HardieTrim® boards for a corner, drive 50mm (2 in.) 16 ga. corrosion-resistant finish nails 13mm (½ in.) from the edge and spaced 406mm (16 in.) apart along the edge.

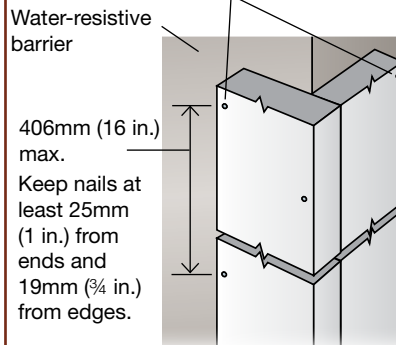
To fasten 101mm (4 in.) corners to the wall, drive a pair of finish nails or siding nails, (one nail into each face of the corner) with the nails spaced 406mm (16 in.) apart. For 152mm (6 in.) corners, drive a pair of finish nails or siding nails into each face spaced 406mm (16 in.) apart. Nails should be kept 19mm (¾ in.) from the edges of the board and 25mm (1 in.) from the ends.

When walls are more than 3,038mm (10') high, splice corner boards together using weather cuts of at least a 22.5° angle.

The angle of the weather cut must slope downward and away from the building. Then nail both boards to the building with the same attachment schedule as for pre-assembled corners, except that 101mm (4 in.) 5/4, 4/4 HardieTrim boards that should get two nails per side every 406mm (16 in.). Only install trim by butting to it with the siding. Do not install any trim product over James Hardie® siding.

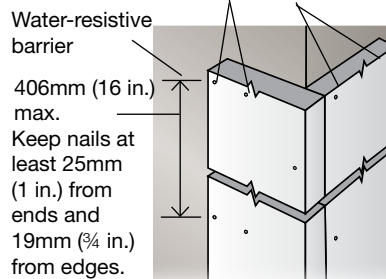
7.15 Pre-built corner installation 101mm (4 in.) boards

A pair of nails (one in each face) attach the corner to the building.



Pre-built corner installation 152mm (6 in.) boards

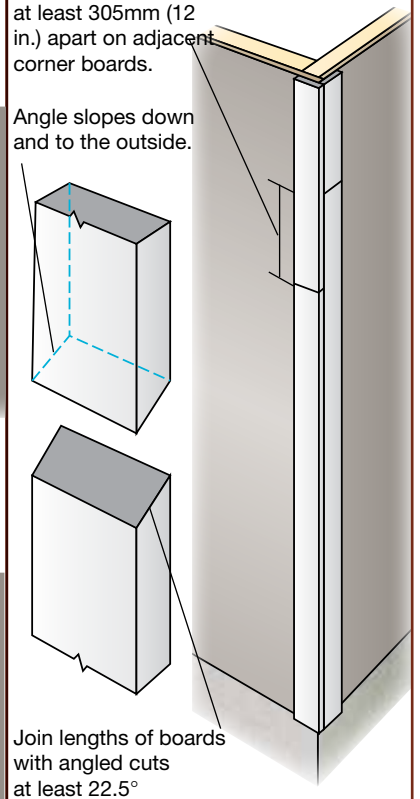
Two nails in each face attach the corner to the building.



7.16 Weather cuts

Keep weather cuts at least 305mm (12 in.) apart on adjacent corner boards.

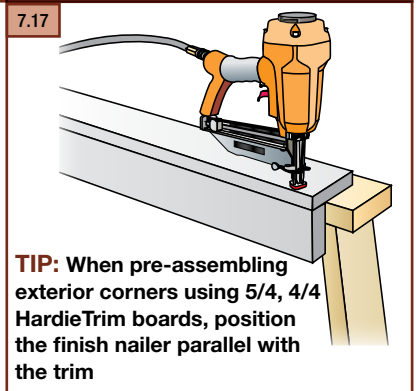
Angle slopes down and to the outside.



NOTE: All weather cut joints should be touched up prior to installation.

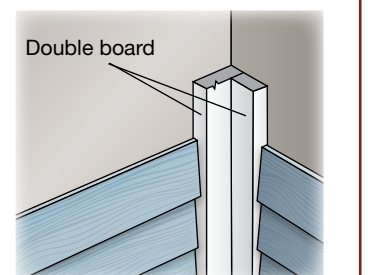
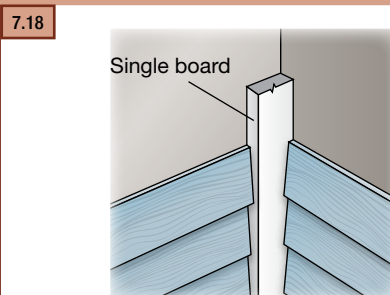
WARNING

Use only 50mm (2 in.) 16-ga. finish nails to pre-assemble 5/4, 4/4 HardieTrim® board corners.



INSIDE CORNERS

Inside corners can be made with either a single 5/4, 4/4 HardieTrim board in the corner, or with one board on each wall depending on the desired look.

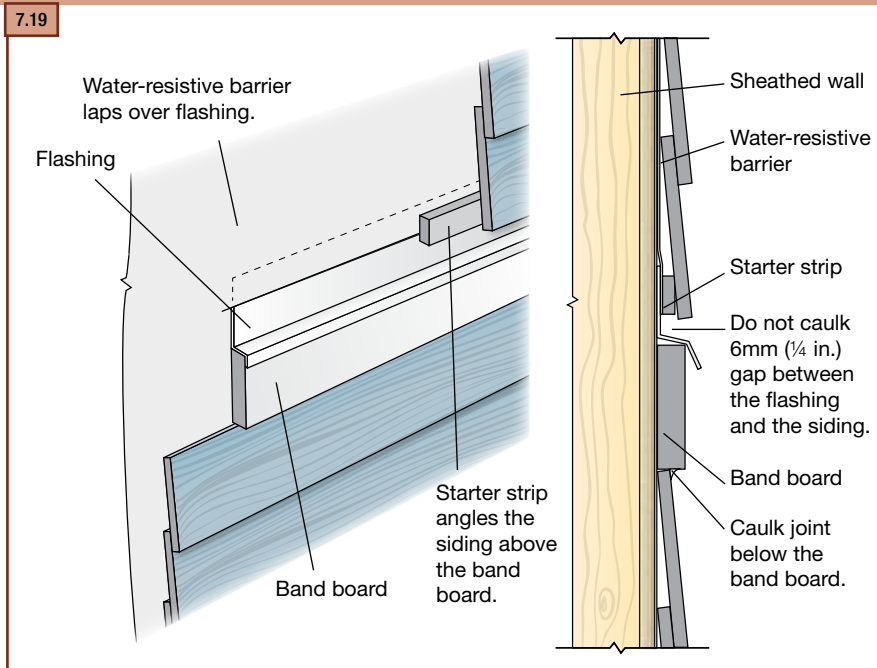


BAND BOARD

A Band board is a decorative horizontal trim used to break up the field of siding on a building. Any width of 5/4, 4/4 HardieTrim® boards can be used for band board depending on the type of detail desired. If installing a band board, pay special attention to flashing details and allow for potential shrinkage of solid rim joists in the walls that the band board may be attached to.



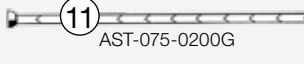
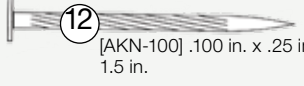
Caulk between the underside of the band board and the siding below. Do not caulk between the flashing and siding above the band board, and maintain a 6mm (¼ in.) gap between the two. Also make sure that the water-resistant barrier laps over the flashing for a continuous drainage plane. If running lap siding or shingle siding above the band board, a starter strip should be installed first to maintain the correct siding angle. Small Periodic gaps should be left in the starter strip to provide an escape route for excess moisture that may drain down behind the siding.

Use bevel-cut splice joints of at least 22.5° to join long lengths of 5/4, 4/4 HardieTrim boards. To attach band board to the building, drive two recommended fasteners every 406mm (16 in.) for 101mm (4 in.) and 152mm (6 in.) boards. For 203mm (8 in.) boards, use three fasteners every 406mm (16 in.), and use four fasteners every 406mm (16 in.) for 305mm (12 in.) boards.



5/4, 4/4 HARDIETRIM BOARDS FASTENER SPECIFICATIONS

The Fastener Specifications table shows fastener options for a variety of different nailing substrates. Please refer to the applicable wind load table to determine which fastener meets your wind load design criteria.

Fastening Substrate	Approved Fastener	Fastening Types	Nailing Patterns
wood studs	10	 <p>7 Ribbed Bugle-Head No. 8 .323 in. x 1.625 in. — screw</p>	<p>Pre-built corners</p> <p>101mm (4 in.) 1 nail every 406mm (16 in.) to attach boards together 1 nail every 406mm (16 in.) for each board</p> <p>152mm (6 in.) 1 nail every 406mm (16 in.) to attach boards together 2 nails every 406mm (16 in.) for each board</p>
over minimum 11mm (7/16 in.) OSB	10	 <p>10 16 gauge, 2 in. — finish nail</p>	
steel studs	7 12 11	 <p>11 AST-075-0200G — ET&F finish nail</p>	<p>Site-built corners & other areas (eg. windows, etc.)</p> <p>101mm (4 in.) & 152mm (6 in.) 2 nails every 406mm (16 in.)</p> <p>203mm (8 in.) 3 nails every 406mm (16 in.)</p> <p>305mm (12 in.) 4 nails every 406mm (16 in.)</p>
Pre-built corners	10	 <p>12 [AKN-100] .100 in. x .25 in. x 1.5 in. — ET&F</p>	

10 indicates recommended fasteners

TIP: James Hardie recommends using stainless steel finish nails when installing HardieTrim (Trim, Battens, Fascia, etc.) products.

Installation of HardieTrim® 5/4, 4/4 & NT3® Back Grooved Boards

WINDOW AND DOOR TRIM

Windows and doors must be installed per the manufacturer's instructions. Window flanges or flashings must be properly installed and lapped correctly under the water-resistive barrier prior to the installation of 5/4, 4/4 HardieTrim® boards. Once the 5/4, 4/4 HardieTrim® boards is put on, proper flashing must be installed above the trim and lapped under the water-resistive barrier correctly.

Install 5/4, 4/4 HardieTrim® boards around doors and windows using the "cap over" method, which means that the header or horizontal top piece of the trim extends and caps over the vertical jamb pieces on both sides. For windows, the bottom trim piece or sill trim fits in between the jambs.

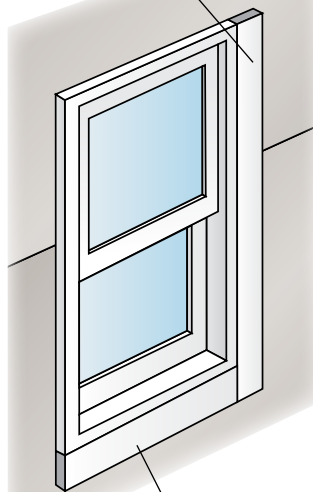
For cap-over trim installation:

- 1) Start by measuring the length of the bottom edge of the window, not including the flange.
- 2) Cut a piece of trim to that length and install it.
- 3) Next measure from the bottom of the installed trim to the top of the window.
- 4) Cut two pieces of trim to that length and install them on either side of the window.
- 5) For the cap, measure the distance between the outside edges of the side trim pieces. Cut a piece of trim to length and install it.

For doors the process is the same except that it starts with the side pieces, step three.

7.20 Window and door trim

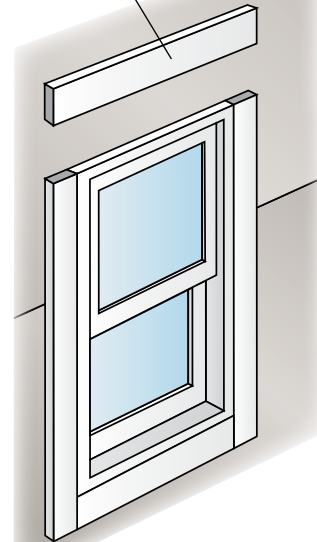
Side trim pieces go to the top of the window.



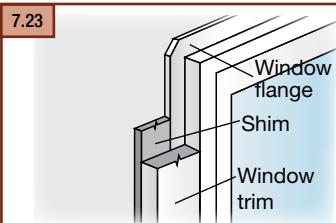
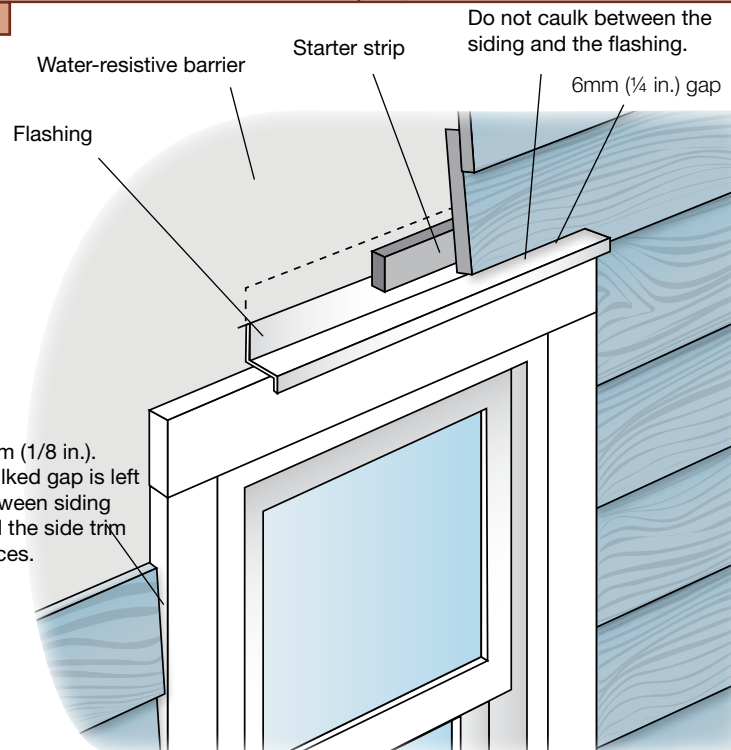
Bottom trim piece is the width of the window.

7.21

Header piece spans the window including the side trim pieces.



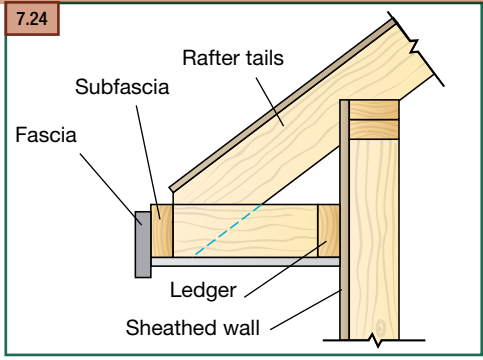
7.22



TIP: For trimming around windows and doors with attachment flanges, install a shim strip to build out the wall even with the flange. This strip lets the trim sit flat and parallel with the wall.

INSTALLING RAKE AND FASCIA BOARD

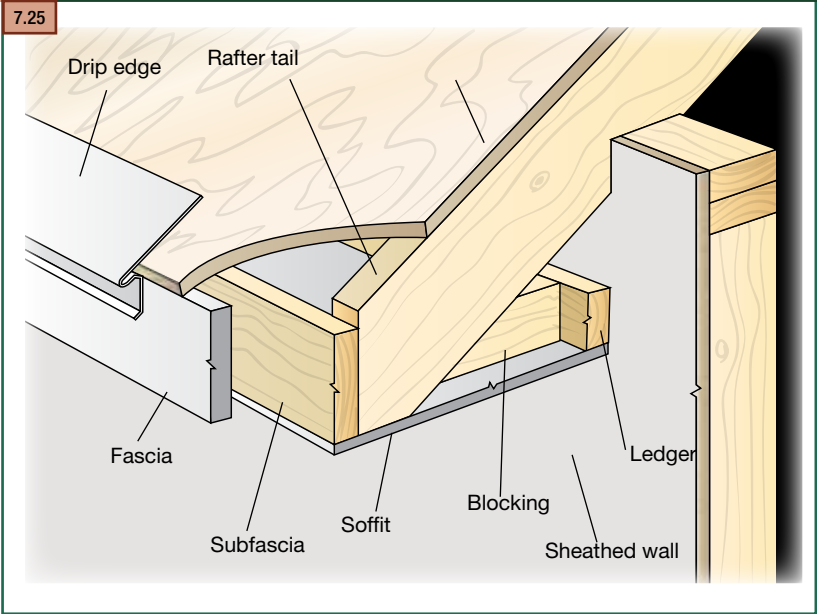
For fascia and rake board applications, James Hardie requires that all HardieTrim® products be nailed over a wood or steel subfascia. James Hardie recommends that the fascia be no more than 50mm (2 in.) larger than the subfascia, e.g. over a nominal 2x6 subfascia, install a 203 mm (8") (actual size 184 mm or 7 1/4") fascia board. On longer fascia runs, join HardieTrim boards with weather/bevel cuts.



WARNING
 HardiePlank® boards should not be used in fascia or trim applications.

DRIP EDGE

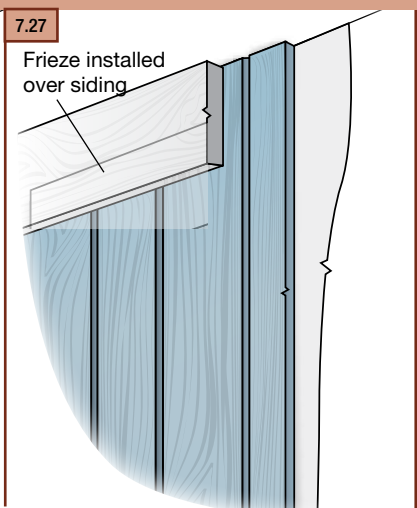
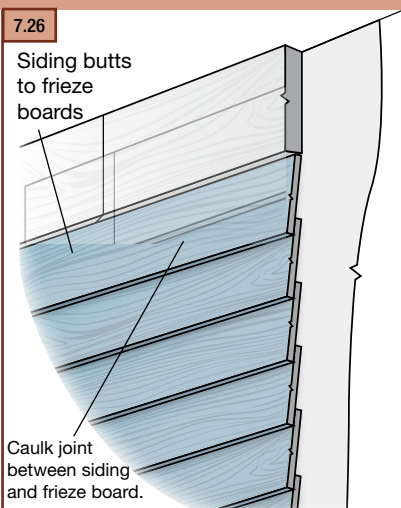
After the fascia is installed, a vinyl, coated aluminum or galvanized drip-edge flashing must be installed to the roof sheathing overlapping the fascia board. The drip edge helps protect the top edge of the fascia board and it minimizes water ingress into the soffit and/or cornice cavity. Choose a drip edge design that effectively channels water away from the face of the fascia and into gutters if present.



INSTALLING FRIEZE BOARDS

FRIEZE MADE FROM 5/4, 4/4 HARDIETRIM® BOARDS

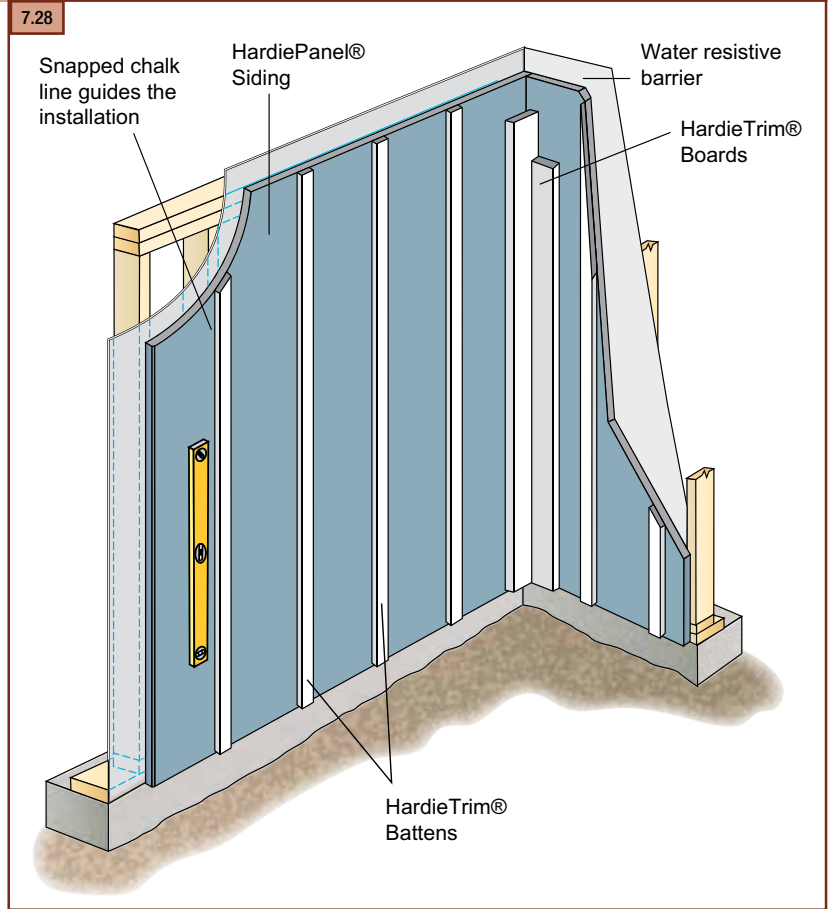
When using lap and shingle sidings, install 5/4, 4/4 HardieTrim® boards as a frieze board before putting in the siding. Then run courses of siding up to the frieze board and caulk the junction of the frieze board and siding. In a building sided with HardiePanel siding, the frieze board is commonly over the panel siding. If joints in the 5/4, 4/4 HardieTrim boards frieze are necessary for longer runs, join boards with a bevel cut. Nail the frieze board every 406mm (16 in.) using finish or siding nails.



Installation of HardieTrim® Battens

GETTING STARTED

HardieTrim® Battens are intended to be used with HardiePanel® vertical siding to achieve a board and batten look. HardieTrim Battens must be attached to wood or steel backing using an approved fastener from the table below. When installing HardieTrim Battens, determine layout and mark where battens will be attached. To ensure that HardieTrim Battens are installed vertically and parallel to each other, either snap chalk lines or use a level. When attaching battens ensure that fasteners are a minimum of 19mm (¾ in.) from edges, 25mm (1 in.) from ends, and a maximum of 406 mm (16 in.) o.c.




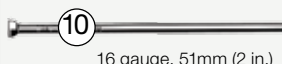


ColorPlus® TIP:

HardieTrim® Battens with ColorPlus® Technology are shipped with a protective laminate slip sheet. James Hardie recommends keeping the protective sheet in place during cutting and fastening to reduce damage to the boards. Remove the protective sheet only after installing the boards and filling the nail holes with a colored touch-up pen. Finish nails are required for ColorPlus® products.



HARDIETRIM BATTENS FASTENER SPECIFICATIONS

The Fastener Specifications table shows fastener options for a variety of different nailing substrates. Please refer to the applicable wind load table to determine which fastener meets your wind load design criteria.

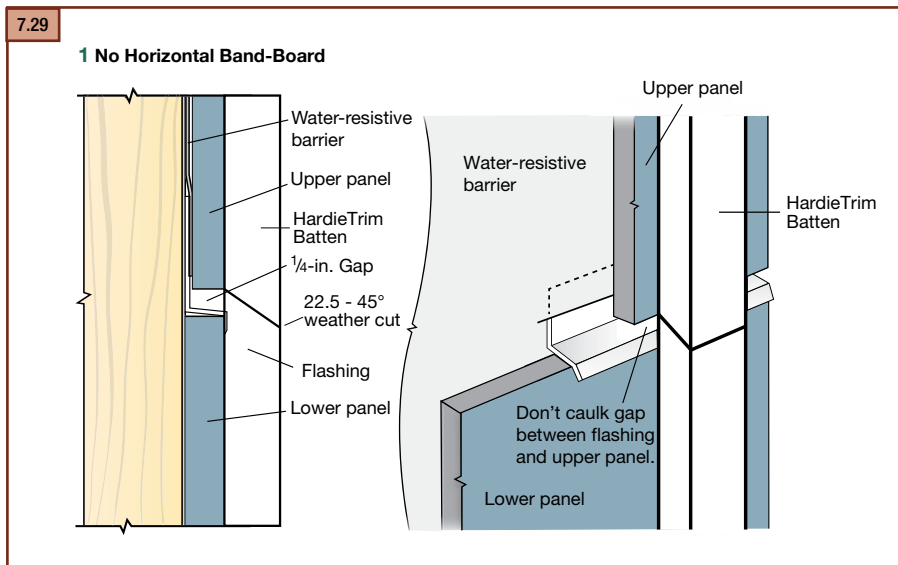
Fastening Substrate	Approved Fastener	
wood studs	② ③ ⑩	 Ribbed Bugle-Head No. 8 8.2mm x 41.3mm (.323 in. x 1.625 in.) screw
over minimum 11mm (7/16 in.) OSB	③ ⑩	 16 gauge, 51mm (2 in.) finish nail
steel studs	⑦ ⑫ ⑪	 AST-075-0200G ET&F finish nail
		 2.5mm x 6.4mm x 38.1mm (AKN-100 .100 in. x .25 in. x 1.5 in.) ET&F

TIP: James Hardie recommends using stainless steel finish nails when installing HardieTrim (Trim, Battens, Fascia, etc.) products.

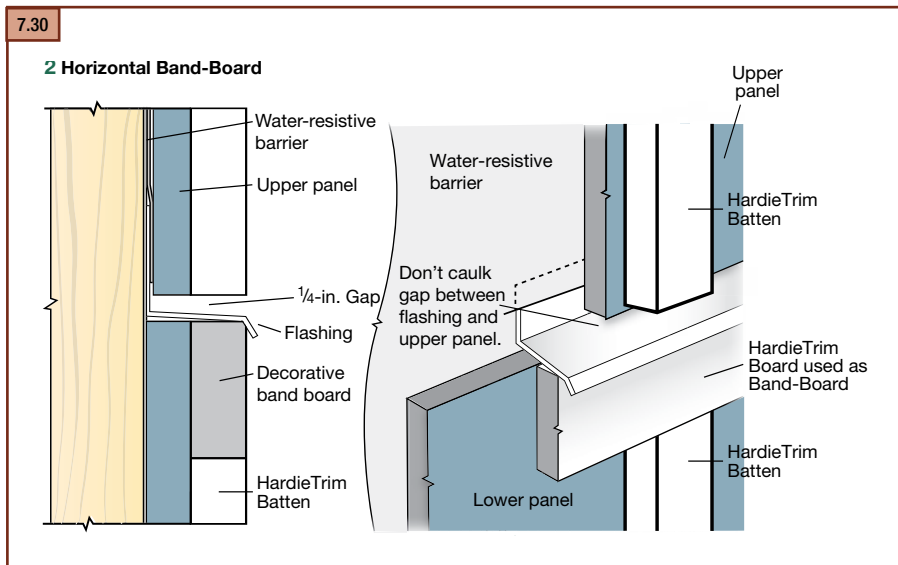
HORIZONTAL JOINT TREATMENT

Horizontal HardieTrim® Batten joints must occur at the same location as horizontal joints in HardiePanel® siding. Install horizontal HardieTrim Batten joints by using one of the following options:

1) If HardieTrim Battens are going to be installed over horizontal panel joints without the use of a horizontal band board, follow the procedure as illustrated in fig. 7.29. Start installing HardieTrim Battens by creating a weather-cut of at least a 22.5° angle, making a joint at the same location as the panel joint. Attach the bottom batten. Make sure the top batten has a matching weather-cut and then install top batten.



2) If HardieTrim Battens are to be installed over horizontal panel joints with the use of a horizontal band board, follow the procedure as illustrated in fig. 7.30. If HardieTrim Battens are to be installed horizontally, they must be installed in the same manner as in fig. 7.30. Make sure the horizontal Z-flashing is installed over both the lower panel and the horizontal band board. Attach the bottom batten tight to the bottom edge of the band board. Next, leaving a minimum 6mm (1/4 in.) gap above the horizontal Z-flashing, install the top batten.



WARNING
 Do not bridge floors with HardieTrim Battens and/or HardiePanel Siding. A horizontal joint should always be created between floors.

HardieTrim® **HT5** NT3™

4/4 & 5/4 Boards with Back Grooves



EFFECTIVE SEPTEMBER 2013



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INSTALLATION REQUIREMENTS - PRIMED & COLORPLUS® PRODUCTS

IMPORTANT: FAILURE TO INSTALL AND FINISH THIS PRODUCT IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND JAMES HARDIE WRITTEN APPLICATION INSTRUCTIONS MAY LEAD TO PERSONAL INJURY, AFFECT SYSTEM PERFORMANCE, VIOLATE LOCAL BUILDING CODES, AND VOID THE PRODUCT ONLY WARRANTY. BEFORE INSTALLATION, CONFIRM THAT YOU ARE USING THE CORRECT HARDIEZONE INSTRUCTIONS.

TO DETERMINE WHICH HARDIEZONE APPLIES TO YOUR LOCATION, VISIT WWW.HARDIEZONE.COM OR CALL 1-866-942-7343 (866 9HARDIE)

STORAGE & HANDLING:

Store flat and keep dry and covered prior to installation. Installing product wet or saturated may result in shrinkage at butt joints. Carry product on edge. Protect edges and corners from breakage. James Hardie is not responsible for damage caused by improper storage and handling of the product.



⚠ CUTTING INSTRUCTIONS

OUTDOORS

1. Position cutting station so that wind will blow dust away from user and others in working area.
2. Use one of the following methods:
 - b. Better:
 - i. Dust reducing circular saw equipped with a HardieBlade® saw blade and HEPA vacuum extraction
 - c. Good:
 - i. Dust reducing circular saw with a HardieBlade saw blade (only use for low to moderate cutting)

INDOORS

- NEVER use a power saw indoors
- NEVER use a circular saw blade that does not carry the HardieBlade saw blade trademark
- NEVER dry sweep – Use wet suppression or HEPA Vacuum

Important Note: For maximum protection (lowest respirable dust production), James Hardie recommends always using "Best"-level cutting methods where feasible.

NIOSH-approved respirators can be used in conjunction with above cutting practices to further reduce dust exposures. Additional exposure information is available at www.jameshardie.com to help you determine the most appropriate cutting method for your job requirements. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information. SD083105

INSTALLATION

Fastener Requirements

For Corners, Band Boards, Windows, and Door Applications:

HardieTrim NT3 boards with back grooves are installed with HardieTrim™ Flat Tabs (JH sku no. 280154) and HardieTrim™ Corner Tabs (JH sku no. 280155) which provide concealed fastening. Only HardieTrim Flat and Corner Tabs can be used with HardieTrim NT3 boards to create a concealed fastening.

Step 1: Attach HardieTrim Flat Tabs to the back side of the trim using four(4) 18 ga. 12mm(1/2") L x 6mm (1/4") W narrow crown corrosion resistant staples, equally spaced in one row, positioned no closer than 1/2" from trim edges using a pneumatic staple gun. (Figure 1)

Step 2: For wood frame construction, attach the trim to the building with minimum 6d siding nails fastened through the HardieTrim Flat Tabs. ET&F or equivalent fasteners may be used to attach the HardieTrim Flat Tabs to steel frame construction. (Figures 2 & 3)

Fastener spacing will vary based on application. Refer to fastener table on page 4. Refer to specific sections in these instructions for required fastener spacing by application (window, band board, etc.)

HardieTrim® NT3 boards can also be installed in a more traditional fashion with finish nails. Use minimum 16 ga. 50mm (2") galvanized finish nails spaced at 406mm (16") o.c. to attach the trim.

For Fascia, Rake, and Frieze board Applications:

For fascia, rake, and frieze board applications, use minimum 16 ga. 50mm (2") galvanized finish nails to attach the HardieTrim NT3™ boards. Position finish nails no closer than 12mm (1/2") from the edges and no closer than 25mm (1") from the ends of the trim. Fasteners may be spaced at a maximum of 406mm (16") o.c. Ensure trim is adequately fastened.

Installation of HardieTrim tabs in Coastal Regions:

James Hardie requires that stainless steel staples & fasteners be used when installing HardieTrim Tabs in coastal regions.

Installation of HardieTrim Tabs over Pressure Treated Lumber:

HardieTrim tabs **shall not** come in direct contact with ACQ or CA preservative-treated wood. Refer to the General Fastening section of this document for further information. James Hardie recommends using stainless steel fasteners when installing HardieTrim NT3 boards.

HardieTrim NT3 boards with ColorPlus® Technology: Remove the laminate sheet as soon as possible after attaching the trim to the building.

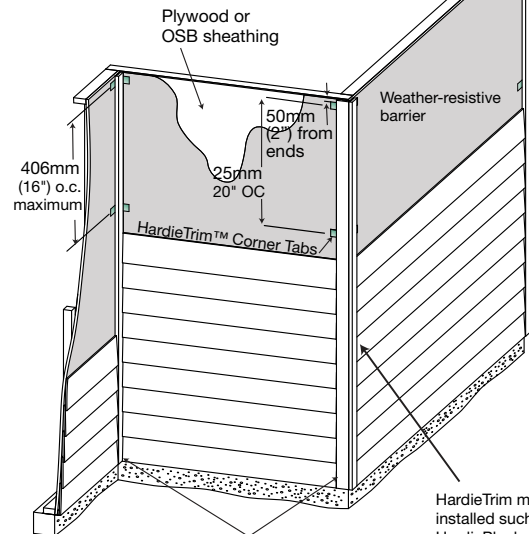
HardieTrim® NT3™ board is a decorative non-load bearing trim product.

GENERAL REQUIREMENTS:

References to the 2005 National Building Code (NBC) of Canada are made throughout this document. Local building code requirements may supersede the NBC in some locations.

- Wood or steel backing must be provided for attaching HardieTrim® NT3™ boards and the HardieTrim™ Flat Tabs. Additional framing may be required to ensure the HardieTrim™ Flat and Corner Tabs are fastened properly to the structure. Special attention should be paid to the framing when using a sheathing that does not have fastener holding equivalent to OSB or Plywood sheathing.
- A water-resistive barrier is required in accordance with Part 9.27.3.2 of the NBC. The water-resistive barrier must be appropriately installed with penetration and junction flashings in accordance with Part 9.27.3 of the NBC. James Hardie will assume no responsibility for water infiltration.
- Install James Hardie® products with a minimum 200 mm (8") clearance to the finished grade on the exterior of the building complying with Part 9.27.2.4 of the NBC (fig. 4).
- Flashing is required over horizontal protruding and exposed trim.
- Do not install James Hardie® products such that they may remain in contact with standing water.
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products
- DO NOT Install HardieTrim over any lapped siding products.

Figure 3



HardieTrim must be installed such that the HardiePlank or any lapped siding product butts into the trim. DO NOT Install HardieTrim over any lapped siding products.

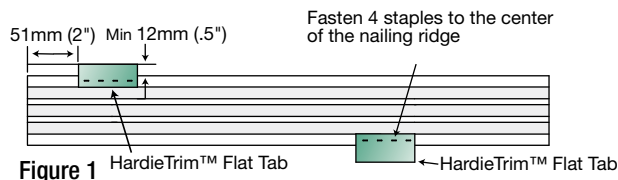


Figure 1



Figure 2

Leave a minimum 3mm(1/8") gap between the siding and trim, then caulk.

WARNING: AVOID BREATHING SILICA DUST

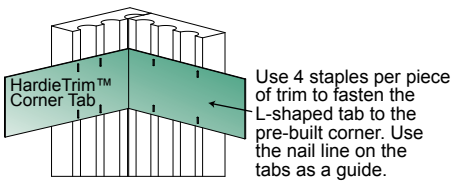
James Hardie® products contain respirable crystalline silica, which is known to the State of California to cause cancer and is considered by IARC and NIOSH to be a cause of cancer from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling: (1) work in outdoor areas with ample ventilation; (2) use fiber cement shears for cutting or, where not feasible, use a HardieBlade® saw blade and dust-reducing circular saw attached to a HEPA vacuum; (3) warn others in the immediate area; (4) wear a properly-fitted, NIOSH-approved dust mask or respirator (e.g. N-95) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. During clean-up, use HEPA vacuums or wet cleanup methods - never dry sweep. For further information, refer to our installation instructions and Material Safety Data Sheet available at www.jameshardie.com or by calling 1-800-9HARDIE (1-800-942-7343). FAILURE TO ADHERE TO OUR WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH. SD050905

TRIMMING CORNERS

HardieTrim® NT3™ boards with back grooves are installed around corners by pre-building the corner off the wall with the HardieTrim™ Corner Tabs (JH sku no. 280155).

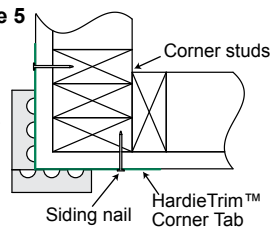
- Attach HardieTrim Corner Tabs to the back side of the trim using eight(8) - 18 ga. 12mm(1/2") L x 6mm (1/4") W narrow crown corrosion resistant staples using a pneumatic stapler. Ensure the HardieTrim Corner Tabs are fastened tight and straight to the trim boards. (Figure 4)
- For wood frame construction, attach trim to building using min. 6d siding nails fastened through the HardieTrim Corner Tabs attached to minimum 7/16" OSB *. (Figure 5)
- Attach a HardieTrim Corner Tab 25mm (1") from each ends and every 580mm (20") o.c.
- TIP: Creating a jig for the work station is recommended to ensure corners are fastened securely and straight. (Figure 7)

Figure 4



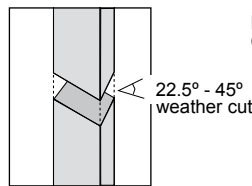
Use 4 staples per piece of trim to fasten the L-shaped tab to the pre-built corner. Use the nail line on the tabs as a guide.

Figure 5



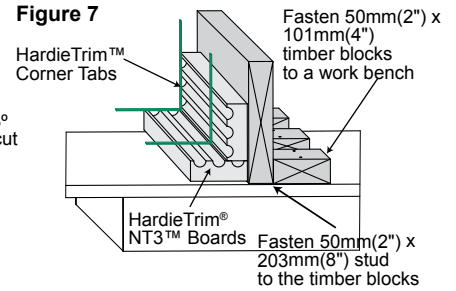
Corner studs
Siding nail
HardieTrim™ Corner Tab

Figure 6



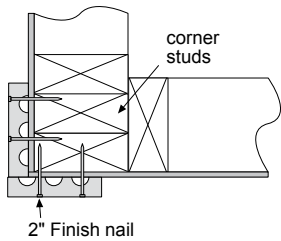
22.5° - 45° weather cut

Figure 7



Fasten 50mm(2") x 101mm(4") timber blocks to a work bench
HardieTrim™ Corner Tabs
HardieTrim® NT3™ Boards
Fasten 50mm(2") x 203mm(8") stud to the timber blocks

HardieTrim NT3™ boards with back grooves can also be installed directly to the building corners using minimum 16 ga. 50mm (2") galvanized finish nails 406mm (16") o.c.



2" Finish nail

Figure 8

CLEARANCES When installing James Hardie® products, all clearance details need to be followed.

Install siding and trim products in compliance of Part 9.27.2.4 of the NBC which requires a minimum 200mm (8") for clearance between the bottom edge of the siding and the adjacent finished grade.

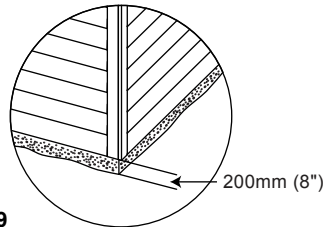


Figure 9

Maintain a minimum 50mm (2") clearance between James Hardie® trim products and decks, paths, steps and driveways.

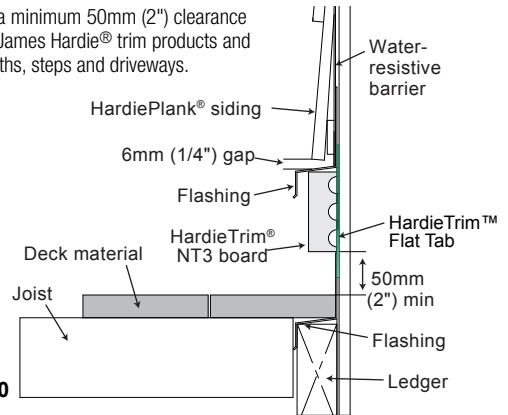
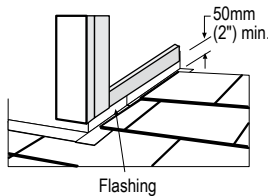


Figure 10

At the juncture of the roof and vertical surfaces, flashing and counterflashing shall be installed per the roofing manufacturer's instructions. Provide a 50mm (2") clearance between the roofing and the bottom edge of the trim.

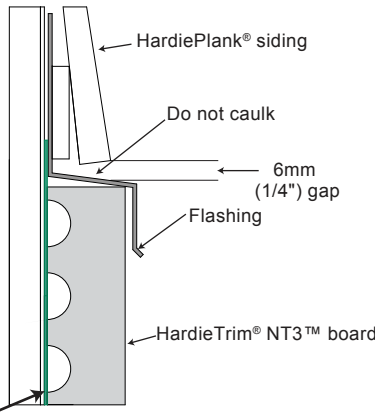
Figure 11



Flashing

Maintain a 6mm (1/4") clearance between the bottom of James Hardie® products and horizontal flashing. Do not caulk gap.

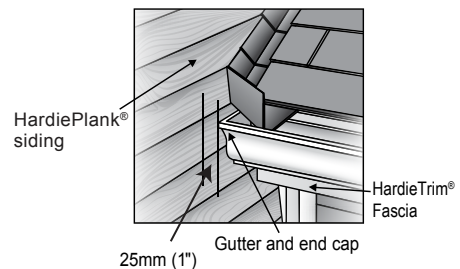
Figure 12



HardieTrim™ Flat Tab

Maintain a minimum 50mm (1") gap between gutter end caps and siding & trim.

Figure 13



25mm (1")

VALLEY FLASHING

The valley flashing must extend a minimum 50mm (2") past the HardieTrim® Fascia and 152mm (6") to either side. If the valley flashing has been cut flush with the roofing, an additional valley flashing extension must be installed. If rain gutter is present and roof shingles extend 25mm (1") past fascia, a valley flashing extension is not required.

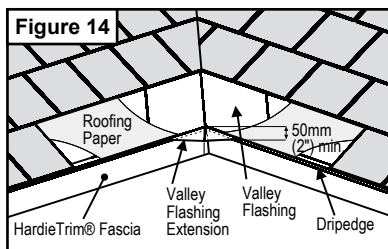
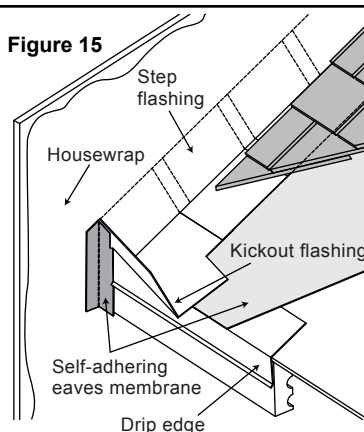


Figure 14

Roofing Paper
HardieTrim® Fascia
Valley Flashing Extension
Valley Flashing
Dripedge

Figure 15



KICKOUT FLASHING

Because of the volume of water that can pour down a sloped roof, one of the most critical flashing details occurs where a roof intersects a sidewall. The roof must be flashed with step flashing. Where the roof terminates, install a kickout to deflect water away from the siding.

It is best to install a self-adhering membrane on the wall before the subsfascia and trim boards are nailed in place, and then come back to install the kickout.

Figure 15, Kickout Flashing To prevent water from dumping behind the siding and the end of the roof intersection, install a "kickout" as required by IRC code R905.2.8.3 : "... flashing shall be a min. of 4" high and 4" wide." James Hardie recommends the kickout be angled between 100° - 110° to maximize water deflection

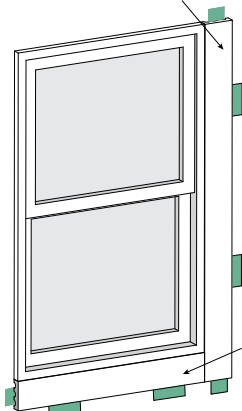
TRIM APPLICATION FOR WINDOWS, DOORS & OTHER OPENINGS

Trim the opening prior to the installation of the siding (Figure 16).

Place a Flat Tab at the end of each trim board and one tab every 16" OC. Attach the trim boards and Flat Tabs around the opening as shown in Figures 16 and 17. Use 16 ga. galvanized 2" long finish nails to ensure proper fastening if needed.

Figure 16

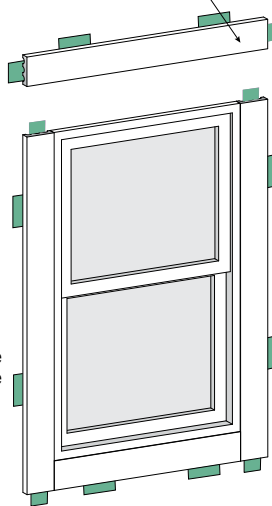
Side trim pieces go to the top of the window.



Bottom trim piece is the width of the window.

Figure 17

Header piece spans the window including the side trim pieces.

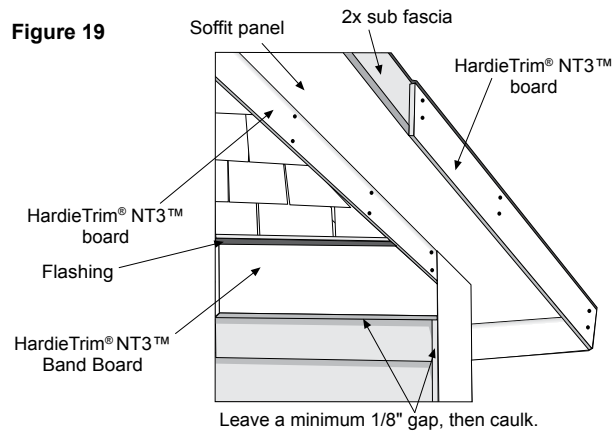


NOTE: Follow your window/door manufacturers installation instructions.

BAND BOARDS, FRIEZE BOARDS, RAKE TRIM & FASCIA

HardieTrim® NT3 boards may also be used as band boards, frieze boards, rake trim or fascia (Figure 19). Use 16 ga. galvanized 2" long finish nails to ensure proper fastening if needed.

Figure 19



FRIEZE BOARDS

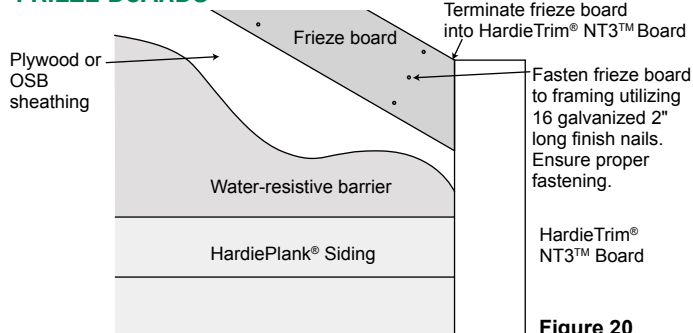


Figure 20

Flashing needs to be tucked under the water resistive barrier and over the Flat Tabs.

Do not caulk between the siding and the flashing.

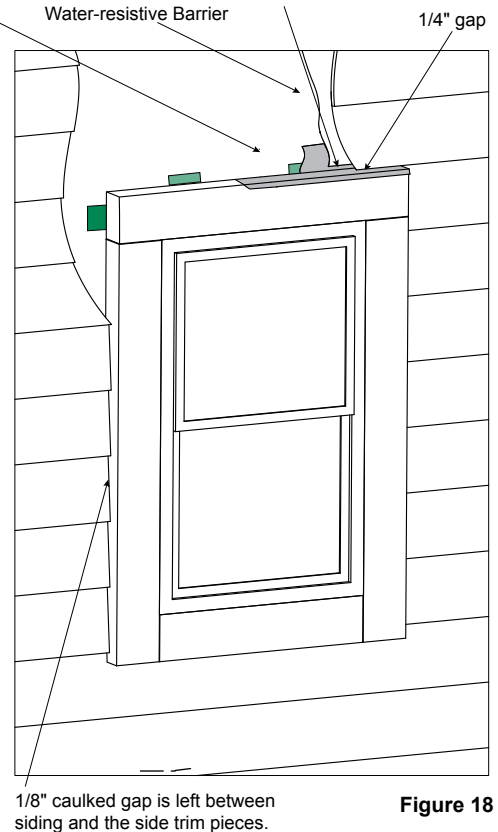


Figure 18

FASCIA & RAKE

For fascia and rake applications, a flashing is required over top of the fascia (Figure 21).

Figure 21

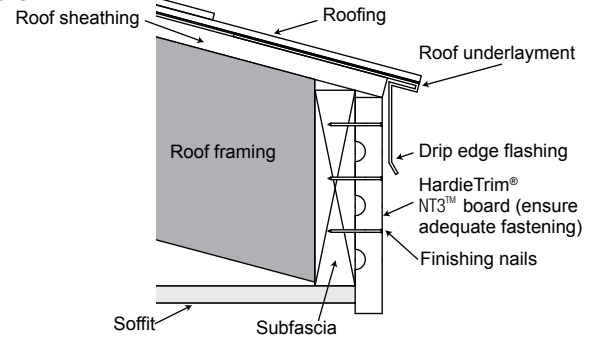
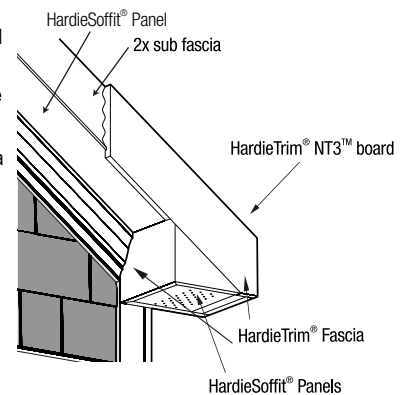


Figure 22
Birdhouse Detail

Ensure that all birdhouse trim is adequately fastened to a solid substrate.



BAND BOARD

A flashing is required over the trim and HardieTrim™ Flat Tabs. (Figure 23) Terminate ends of the Band Board into Trim or Siding or miter cut the edges of the trim at the corners of the building. Place a HardieTrim™ Flat Tab at the end of each trim board and one tab every stud at a maximum of 406mm (16") o.c. The HardieTrim™ Flat Tabs should be attached to the trim in an alternating pattern to the top and bottom of the band board (Figure 24, 25).

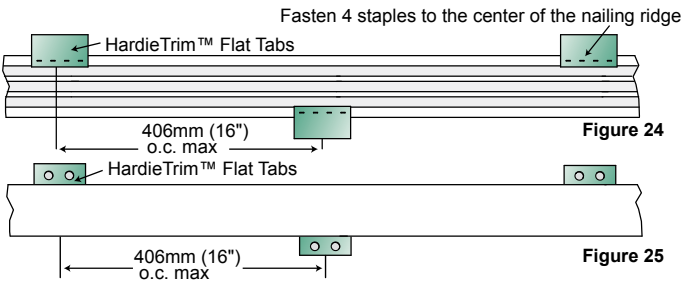
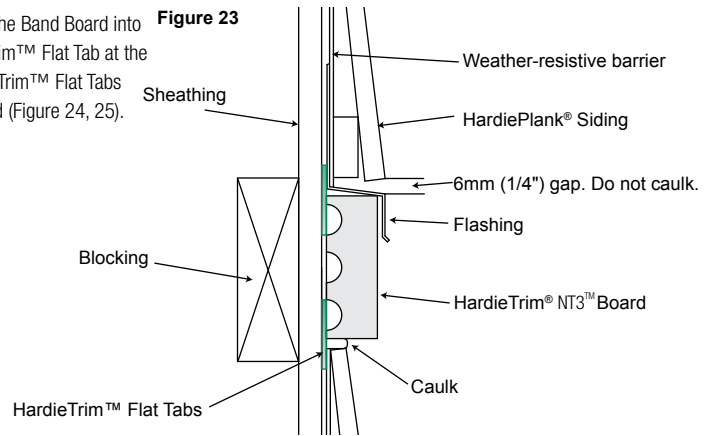


Figure 23



GENERAL FASTENING REQUIREMENTS

Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable but may exhibit premature corrosion. James Hardie recommends the use of quality, hot-dipped galvanized fasteners. James Hardie is not responsible for the corrosion resistance of fasteners. Stainless steel fasteners are recommended when installing James Hardie® products near the ocean, large bodies of water, or very humid climates.

Manufacturers of ACQ and CA preservative-treated wood recommend spacer materials or other physical barriers to prevent direct contact of ACQ or CA preservative-treated wood and aluminum products. Fasteners used to attach HardieTrim Tabs to preservative-treated wood shall be of hot dipped zinc-coated galvanized steel or stainless steel and in accordance to 2009 IRC R317.3 or 2009 IBC 2304.9.5.”

- Drive fasteners perpendicular to the trim and framing.
- Do not drive fasteners at an angle.
- For wood framing, under driven fasteners should be hit flush to the HardieTrim™ Flat and Corner Tabs with a hammer (for steel framing, remove and replace nail).
- **Do not use aluminum fasteners, staples, or clipped head nails to attach the product directly to the building.**

PNEUMATIC FASTENING:

HardieTrim® NT3™ boards with the back groove can be fastened with a pneumatic tool. All fasteners should be driven flush to the HardieTrim™ Flat and Corner Tabs (Figure 26). A flush mount attachment on the pneumatic tool is recommended. This will help control the depth the fastener is driven. If setting the depth proves difficult, choose a setting that under drives the fastener. (Drive under driven fasteners snug with a smooth faced hammer - Does not apply for installation to steel framing).

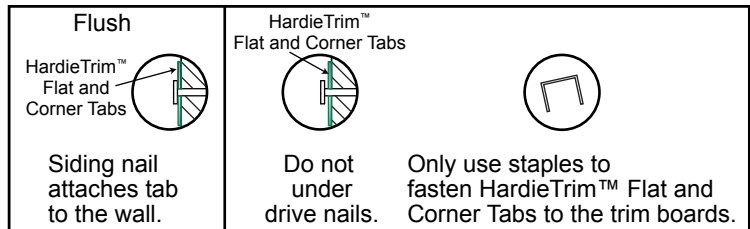


Figure 26

FASTENER TABLE

Application	Framing Material Tab is nailed into	Fastener (tab to framing)	Fastener (tab to Hardietrim)	Max Tab Spacing (inches on center)
Flat Tab	Wood Stud (minimum G=0.42)	One 6d corrosion resistant siding nail installed through center of flange into framing	Four 18 ga. X 12.7mm (1/2") long X 6.35mm (1/4") wide corrosion resistant crown staples, equally spaced in one row	406mm (16")
	Minimum APA rated 7/16" OSB	Two 4d ring shank corrosion resistant siding nails equally spaced installed through flange into framing		
	Minimum 20 gauge steel	One No. 8 X 25mm (1") long X 8.204mm (0.323") head diameter screw (corrosion resistant) installed through flange into framing		
Corner Tab	Wood Stud (minimum G=0.42)	On each flange, Install one 6d corrosion resistant siding nail through flange into framing	For each piece of trim, install Four 18 ga. X 12.7mm (1/2") long X 6.35mm (1/4") wide corrosion resistant crown staples, equally space in two rows	508mm (20")
	Minimum APA rated 7/16" OSB	On each flange, Install two 4d ring shank corrosion resistant siding nails through flange into framing		
	Minimum 20 gauge steel	On each flange, Install one No. 8 X 25mm (1") long X 8.204mm (0.323") head diameter screw (corrosion resistant) through flange into framing		

Wind-Borne Debris Region: "Supplemental fasteners may be necessary when installing tabs in a Wind-Borne Debris Region, please call Technical Services 800-942-7343 with any questions."

CUT EDGE TREATMENT

Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

CAULKING

Elastomeric Joint Sealant is required in accordance with Part 9.27.4 of the NBC, complying with ASTM C920 Grade NS, Class 25 or higher or a Latex Joint Sealant complying with ASTM C834. Caulking/Sealant must be applied in accordance with the caulking/sealant manufacturer's written instructions.

Note: OSI Quad as well as some other caulking manufacturers do not allow tooling. DO NOT caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section.

PAINTING

DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products. James Hardie products must be painted within 180 days for primed product and 90 days for unprimed. 100% acrylic topcoats are recommended. DO NOT paint when wet. For application rates refer to paint manufacturers specifications. Back-rolling is recommended if the siding is sprayed.

COLORPLUS® TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Care should be taken when handling and cutting James Hardie ColorPlus products. During installation use a wet soft cloth or soft brush to gently wipe off any residue or construction dust left on the product, then rinse with a garden hose.
- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up should be used sparingly. If large areas require touch-up, replace the damaged area with new HardieTrim NT3 board with ColorPlus Technology.
- Laminate sheet must be removed immediately after installation of each trim board.
- Terminate non-factory cut edges into trim where possible, and caulk. Color matched caulks are available from your ColorPlus® product dealer.
- Treat all other non-factory cut edges using the ColorPlus Technology edge coaters, available from your ColorPlus product dealer.

Note: James Hardie does not warrant the usage of third party touch-up or paints used as touch-up on James Hardie ColorPlus products.

Problems with appearance or performance arising from use of third party touch-up paints or paints used as touch-up that are not James Hardie touch-up, will not be covered under the James Hardie ColorPlus Limited Finish Warranty.

PAINTING JAMES HARDIE® SIDING AND TRIM PRODUCTS WITH COLORPLUS® TECHNOLOGY

When repainting ColorPlus® products, James Hardie recommends the following regarding surface preparation and topcoat application:

- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature
- DO NOT caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section

RECOGNITION: HardieTrim boards may be installed as an equal alternative to conventional trim permitted for use in; 2006, 2009, & 2012 International Building Code, Section 1402.1, and the 2006, 2009, & 2012 International Residence Code for One - and Two - Family - Dwellings, Section R703.1.

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Additional Installation Information,
Warranties, and Warnings are available at
www.jameshardie.com





These instructions are to be used for **HardieTrim® HZ™ Boards ONLY** and are **ONLY** valid in British Columbia.

IMPORTANT: FAILURE TO INSTALL AND FINISH THIS PRODUCT IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND JAMES HARDIE WRITTEN APPLICATION INSTRUCTIONS MAY LEAD TO PERSONAL INJURY, AFFECT SYSTEM PERFORMANCE, VIOLATE LOCAL BUILDING CODES, AND VOID THE PRODUCT ONLY WARRANTY. BEFORE INSTALLATION, CONFIRM THAT YOU ARE USING THE CORRECT HARDIEZONE INSTRUCTIONS. TO DETERMINE WHICH HARDIEZONE APPLIES TO YOUR LOCATION, VISIT WWW.HARDIEZONE.COM OR CALL 1-866-942-7343 (866 9HARDIE)

STORAGE & HANDLING:

Store flat and keep dry and covered prior to installation. Installing product wet or saturated may result in shrinkage at butt joints. Carry product on edge. Protect edges and corners from breakage. James Hardie is not responsible for damage caused by improper storage and handling of the product.



CUTTING INSTRUCTIONS

OUTDOORS

1. Position cutting station so that wind will blow dust away from user and others in working area.
2. Use one of the following methods:
 - b. Better:
 - i. Dust reducing circular saw equipped with a HardieBlade® saw blade and HEPA vacuum extraction
 - c. Good:
 - i. Dust reducing circular saw with a HardieBlade saw blade (only use for low to moderate cutting)

INDOORS

- NEVER use a power saw indoors
- NEVER use a circular saw blade that does not carry the HardieBlade saw blade trademark
- NEVER dry sweep – Use wet suppression or HEPA Vacuum

Important Note: For maximum protection (lowest respirable dust production), James Hardie recommends always using "Best"-level cutting methods where feasible.

NIOSH-approved respirators can be used in conjunction with above cutting practices to further reduce dust exposures. Additional exposure information is available at www.jameshardie.com to help you determine the most appropriate cutting method for your job requirements. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information. SD083105

HardieTrim board is a decorative non-load bearing trim product.

Do not use as fascia in HZ™ zones

GENERAL REQUIREMENTS:

- References to the 2005 National Building Code (NBC) of Canada are made throughout this document. Local building code requirements may supersede the NBC in some locations.
- Wood or steel backing must be provided for attaching HardieTrim 4/4 and 5/4 boards.
- A water-resistive barrier is required in accordance with Part 9.27.3.2 of the NBC. The water-resistive barrier must be appropriately installed with penetration and junction flashings in accordance with Part 9.27.3 of the NBC. **Flashing is required over horizontal protruding and exposed trim. James Hardie will assume no responsibility for water infiltration.**
- Install James Hardie® products with a minimum 200 mm (8") clearance to the finished grade on the exterior of the building complying with Part 9.27.2.4 of the NBC (fig. 4).
- When installing James Hardie products all clearance details in figs. 4, 5, 6, 7, 8 & 9 must be followed in accordance to your HardieZone.
- Adjacent finished grade must slope away from the building in accordance with local building codes.
- Flashing is required over all horizontal protruding and exposed trim.
- Do NOT install James Hardie products such that they may remain in contact with standing water.
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- DO NOT install HardieTrim over any lapped siding products.

INSTALLATION

HardieTrim may be installed using traditional fastening method or by concealed fastening method.

Traditional Fastener Requirements

See HZ10 4/4, 5/4 for formatting

Use 50mm (2") minimum 16 ga. finish nails to attach HardieTrim 4/4 and 5/4 boards to wood frame construction.

ET&F or equivalent fasteners or screws may be used to attach HardieTrim 4/4 and 5/4 boards to steel frame construction.

Fastening instructions are similar for all applications. Position finish nails no closer than 12mm (1/2") from the edges of the trim. Fasteners must be no closer than 25mm (1") from ends of trim and spaced a maximum of 406mm (16") o.c. Ensure trim is adequately fastened.

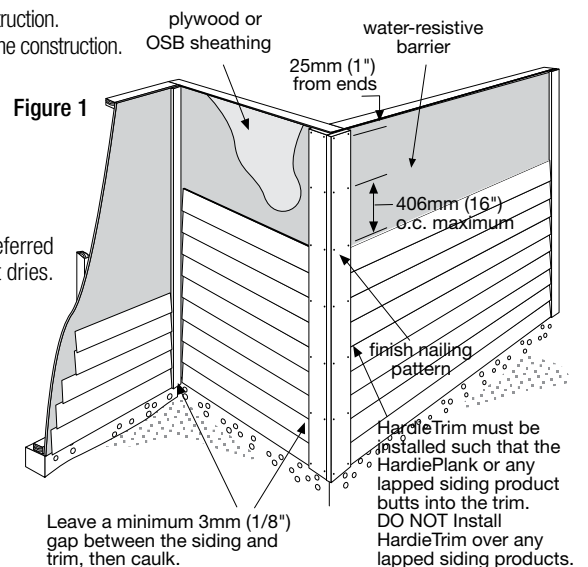
James Hardie recommends using stainless steel finish nails when installing HardieTrim products.

HardieTrim 4/4 and 5/4 boards with ColorPlus® Technology: A finish nail is required for installing HardieTrim 4/4 and 5/4 boards. Remove laminate sheet as soon as possible after nailing. Nail head touch up can be done before or after removal of the laminate sheet when using finish nails. The preferred method is to touch-up while the laminate sheet is in place. Remove the laminate sheet before paint dries.

Minimum fastener guide for finish nailing:

	Pre-built corner	Site Built Corners	Other areas (e.g. window trim, band boards and fascia)
4"	1 nail every 406mm to attach boards together + 1 nail every 406mm each board	2 nails every 406mm	2 nails every 406mm
6"	1 nail every 406mm to attach boards together + 2 nails every 406mm each board		
8"	-	3 nails every 406mm	3 nails every 406mm
12"	-	4 nails every 406mm	3 nails every 406mm

Use a 50mm (2") finish nail to fasten trim together. Longer finish nails may bend.



WARNING: AVOID BREATHING SILICA DUST

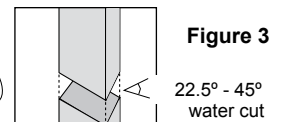
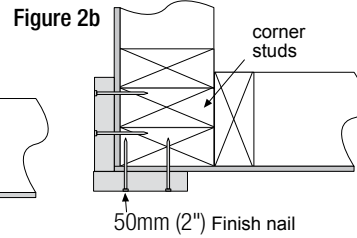
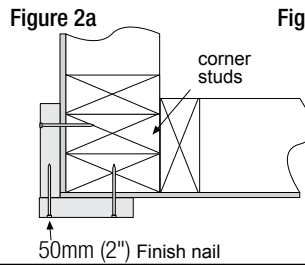
James Hardie® products contain respirable crystalline silica, which is known to the State of California to cause cancer and is considered by IARC and NIOSH to be a cause of cancer from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling: (1) work in outdoor areas with ample ventilation; (2) use fiber cement shears for cutting or, where not feasible, use a HardieBlade® saw blade and dust-reducing circular saw attached to a HEPA vacuum; (3) warn others in the immediate area; (4) wear a properly-fitted, NIOSH-approved dust mask or respirator (e.g. N-95) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. During clean-up, use HEPA vacuums or wet cleanup methods - never dry sweep. For further information, refer to our installation instructions and Material Safety Data Sheet available at www.jameshardie.com or by calling 1-800-9HARDIE (1-800-942-7343). FAILURE TO ADHERE TO OUR WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH. SD050905

TRIMMING CORNERS

When installing corners or other vertical trim, position boards on the wall and attach (fig. 2b). Use weather cuts sloped away from the wall to join (fig. 3). Alternatively corners can be pre-built (fig. 2a).

Pre-Built Corners

Corners can be pre-built off the wall using 2" finishing nails. Each side of the pre-built corner must be secured to the wall (fig. 2a).



CLEARANCES:

Install siding and trim products in compliance of Part 9.27.2.4 of the NBC which requires a minimum 200mm (8") for clearance between the bottom edge of the siding and the adjacent finished grade.

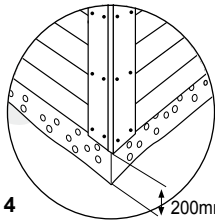


Figure 4

Maintain a minimum 50mm (2") clearance between James Hardie® trim products and decks, paths, steps and driveways.

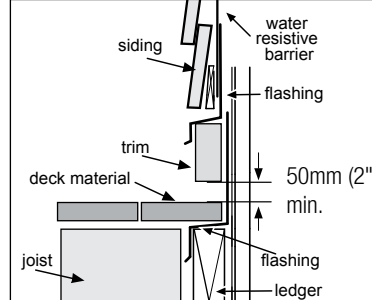


Figure 5

At the juncture of the roof and vertical surfaces, flashing and counterflashing shall be installed per the roofing manufacturer's instructions. Provide a 50mm (2") clearance between the roofing and the bottom edge of the trim.

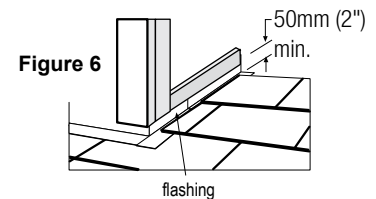


Figure 6

Maintain a 6mm (1/4") clearance between the bottom of James Hardie® products and horizontal flashing. Do not caulk gap.

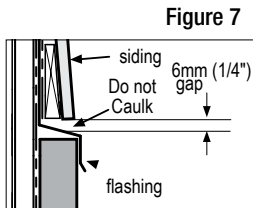


Figure 7

Maintain a minimum 25mm (1") gap between gutter end caps and siding & trim.

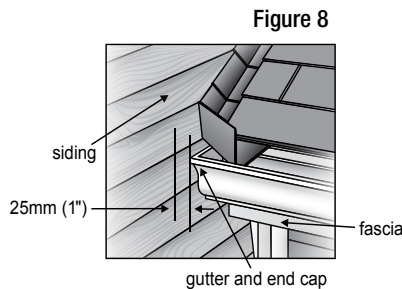


Figure 8

VALLEY FLASHING

The valley flashing must extend a minimum 50mm (2") past the HardieTrim® Fascia and 152mm (6") to either side. If the valley flashing has been cut flush with the roofing, an additional valley flashing extension must be installed. If rain gutter is present and roof shingles extend 25mm (1") past fascia, a valley flashing extension is not required.

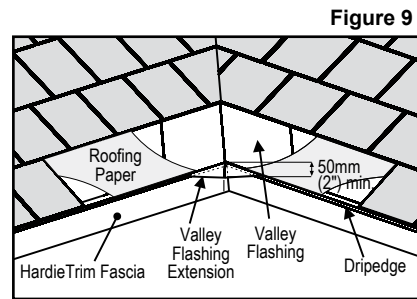
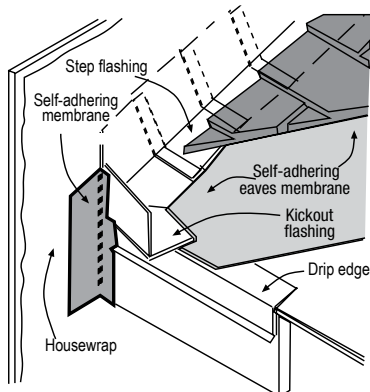


Figure 9

Figure 10



KICKOUT FLASHING

Because of the volume of water that can pour down a sloped roof, one of the most critical flashing details occurs where a roof intersects a sidewall. The roof must be flashed with step flashing. Where the roof terminates, install a kickout to deflect water away from the siding.

It is best to install a self-adhering membrane on the wall before the subfascia and trim boards are nailed in place, and then come back to install the kickout.

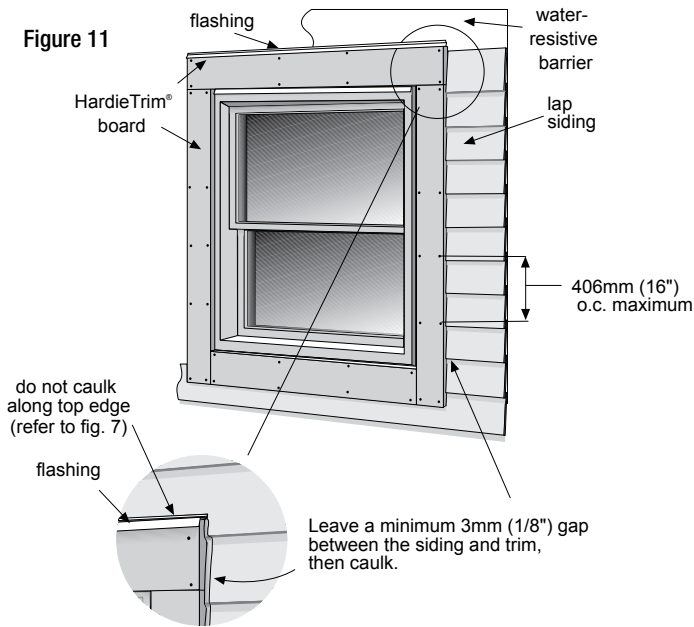
Figure 10, Kickout Flashing† To prevent water from dumping behind the siding and the end of the roof intersection, install a "kickout" as required by IRC code R905.2.8.3 : "...flashing shall be a min. of 4" high and 4" wide." James Hardie recommends the kickout be angled between 100° - 110° to maximize water deflection.

† The illustration (figure 10) was reprinted with permission of THE JOURNAL OF LIGHT CONSTRUCTION. For subscription information, visit www.jlconline.com.

TRIM APPLICATION FOR WINDOWS, DOORS & OTHER OPENINGS

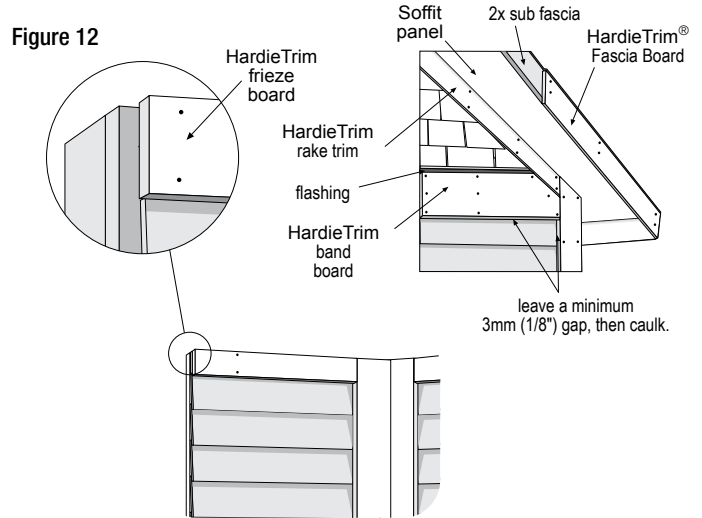
Trim the opening prior to the installation of the siding (fig. 11)

NOTE: Follow your window/door manufacturers installation instructions.



BAND BOARDS, FRIEZE BOARDS, & RAKE TRIM DO NOT USE AS FASCIA

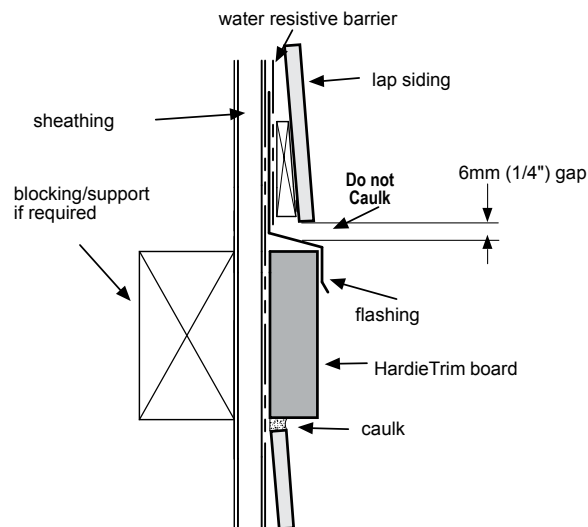
HardieTrim® 4/4 and 5/4 Trim may also be used as band boards, frieze boards, or rake trim (fig. 12). For fascia, use HardieTrim® Fascia Boards.



BAND BOARD

A flashing is required over the trim (fig. 13).

Figure 13



CONCEALED FASTENING TABS

For Corners, Band Boards, Windows, and Door Applications:

HardieTrim® boards can be installed with Flat Tabs (JH sku no. 280154) and Corner Tabs (JH sku no. 280155) which provide concealed fastening. Only Flat and Corner Tabs can be used with HardieTrim® boards to create a concealed fastening. Additional framing may be required to ensure the Flat and Corner Tabs are fastened properly to the structure. Special attention should be paid to the framing when using a sheathing that does not have fastener holding equivalent to OSB or Plywood sheathing.

Step 1: Attach Flat Tabs to the back side of the trim with 4 18 ga. 1/2"L x 1/4"W narrow crown corrosion resistant staples, equally spaced in one row, positioned no closer than 1/2" from trim edges, using a pneumatic staple gun. (Figure 19)

Step 2: For wood frame construction, attach the trim to the building using 2, 6d siding nails fastened through the Flat Tabs. ET&F or equivalent fasteners may be used to attach the Flat Tabs to steel frame construction. (Figures 20)

Fastener spacing will vary based on application. Refer to specific sections in these instructions for required fastener spacing by application (window, band board, etc.) Refer to fastener table on page 6

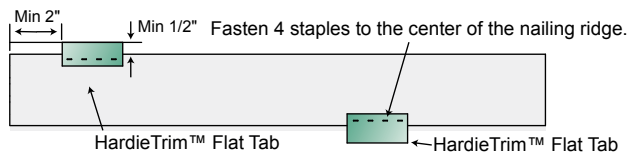


Figure 19

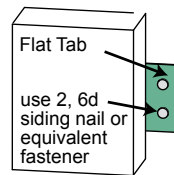


Figure 20

Installation of HardieTrim tabs in Coastal Regions:

James Hardie requires that stainless steel staples & fasteners be used when installing HardieTrim™ Tabs in coastal regions.

Installation of HardieTrim Tabs over Pressure Treated Lumber:

HardieTrim™ tabs shall not come in direct contact with ACQ or CA preservative-treated wood. Refer to the General Fastening section of this document for further information.

HardieTrim® NT3™ boards with ColorPlus® Technology

Remove the laminate sheet as soon as possible after attaching the trim to the building.

TRIMMING CORNERS

HardieTrim® boards are installed around corners by pre-building the corner off the wall with the Corner Tabs (JH sku no. 280155).

- Attach Corner Tabs to the back side of the trim with 8 18 ga. 1/2"L x 1/4"W narrow crown galvanized staples using a pneumatic staple gun. Ensure the Corner Tabs are fastened tight and straight to the trim boards. (Figure 21)
- For wood frame construction, attach the trim to the building with 2, 6d siding nails fastened through the Corner Tabs. ET&F or equivalent fasteners may be used to attach the Corner Tabs to steel frame construction. (Figure 22)
- Attach a Corner Tab 1" from each edge and every 20" o.c.
- TIP: Creating a jig for the work station is recommended to ensure the corners are fastened securely and straight. (Figure 24)

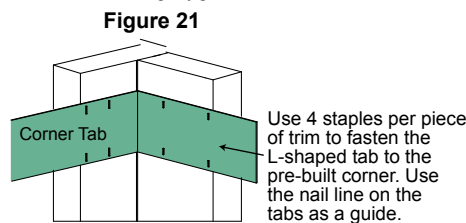


Figure 21

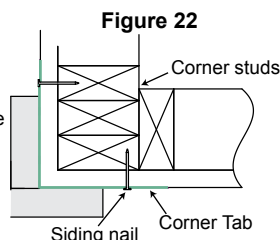


Figure 22

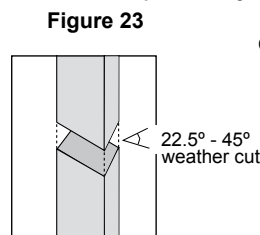


Figure 23

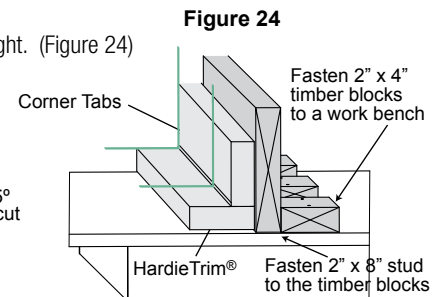


Figure 24

TRIM APPLICATION FOR WINDOWS, DOORS & OTHER OPENINGS

Trim the opening prior to the installation of the siding (Figure 26). Place a Flat Tab at the end of each trim board and one tab every 16" OC. Attach the trim boards and Flat Tabs around the opening as shown in Figures 26 and 27. Use 16 ga. galvanized 2" long finish nails to ensure proper fastening if needed.

NOTE: Follow your window/door manufacturers installation instructions.

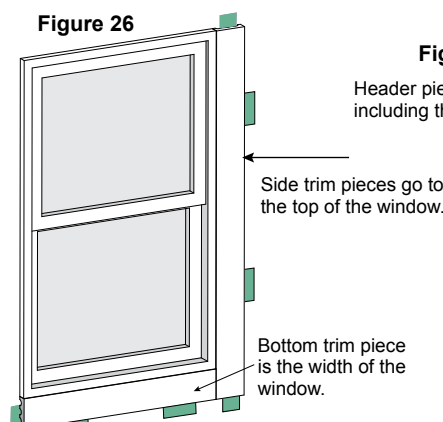


Figure 26

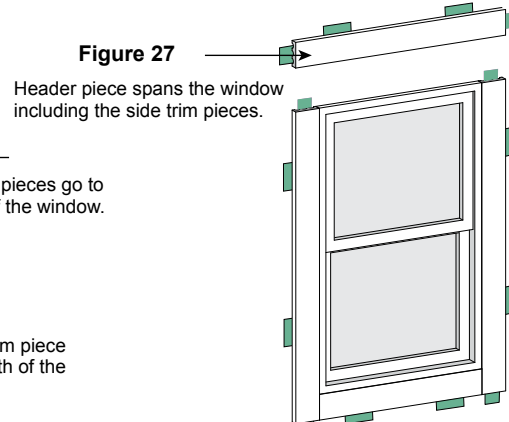


Figure 27

BAND BOARD

A flashing is required over the trim and Flat Tabs. (Figure 29) Terminate ends of the Band Board into Trim or Siding or miter cut the edges of the trim at the corners of the building. Place a Flat Tab at the end of each trim board and one tab every stud at a maximum of 16" o.c. The Flat Tabs should be attached to the trim in an alternating pattern to the top and bottom of the band board (Figure 30 and 31).

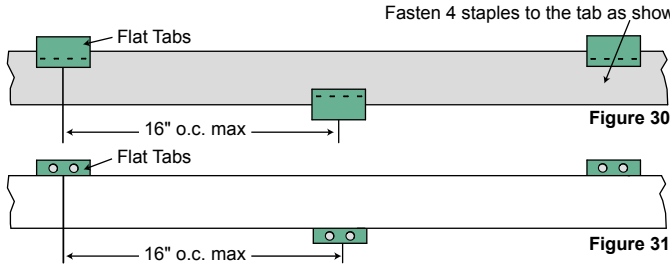
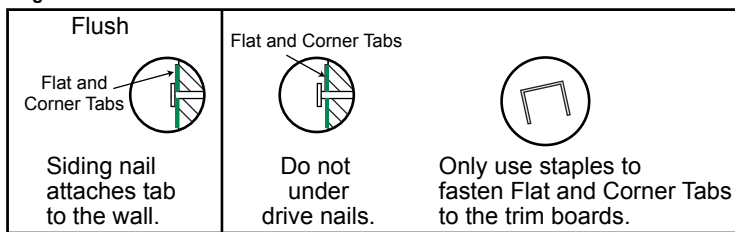


Figure 32



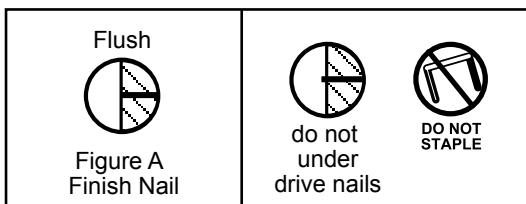
* Refer to your paint manufacturer for washing and recoating requirements related to paint performance.

GENERAL FASTENING REQUIREMENTS

Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable but may exhibit premature corrosion. James Hardie recommends the use of quality, hot-dipped galvanized nails. James Hardie is not responsible for the corrosion resistance of fasteners. James Hardie recommends using stainless steel fasteners when installing James Hardie® products near the ocean, large bodies of water, or in humid climates.

Manufacturers of ACQ and CA preservative-treated wood recommend spacer materials or other physical barriers to prevent direct contact of ACQ or CA preservative-treated wood and aluminum products. Fasteners used to attach HardieTrim Tabs to preservative-treated wood shall be of hot dipped zinc-coated galvanized steel or stainless steel and in accordance to 2009 IRC R317.3 or 2009 IBC 2304.9.5."

- Drive fasteners perpendicular to the trim and framing.
- Do not drive nails at an angle.
- For wood framing, under driven nails should be hit flush to the trim with a hammer (for steel framing, remove and replace nail).
- **Do not use aluminum fasteners, staples, or clipped head nails.**



PNEUMATIC FASTENING:

HardieTrim® boards can be hand nailed or fastened with a pneumatic tool. Pneumatic fastening is highly recommended. Finish nails should be driven flush to the trim (fig. A). A flush mount attachment on the pneumatic tool is recommended. This will help control the depth the nail is driven. If setting the nail depth proves difficult, choose a setting that under drives the nail. (Drive under driven nails snug with a smooth faced hammer - Does not apply for installation to steel framing).

Flashing needs to be tucked under the water resistive barrier and over the Flat Tabs.

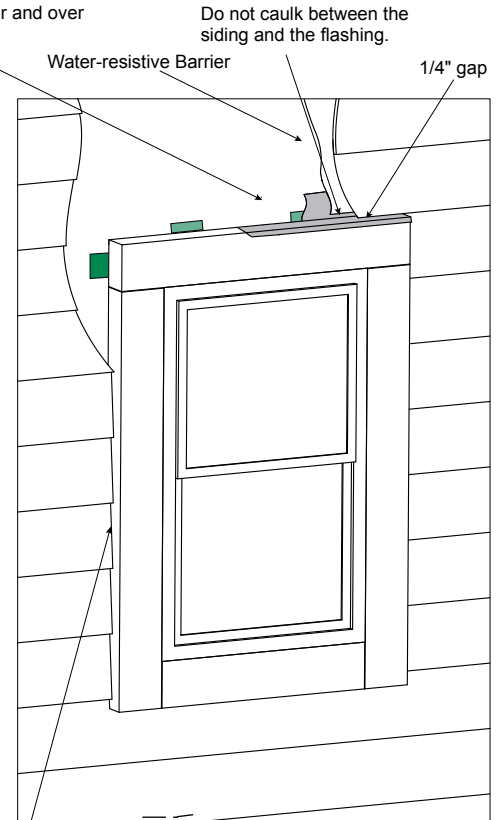
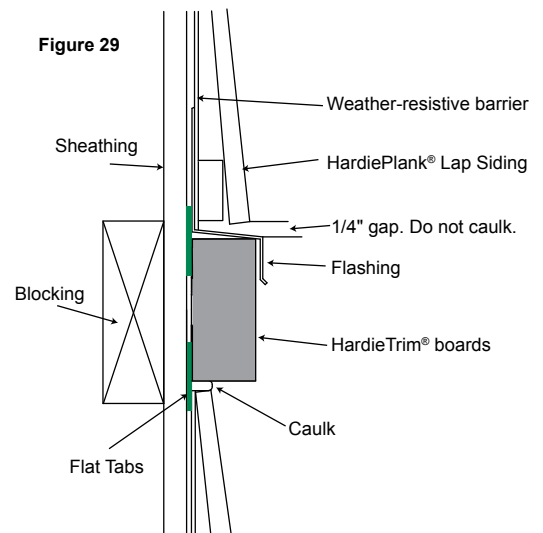


Figure 28



CUT EDGE TREATMENT

Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

CAULKING

Elastomeric Joint Sealant is required in accordance with Part 9.27.4 of the NBC, complying with ASTM C920 Grade NS, Class 25 or higher or a Latex Joint Sealant complying with ASTM C834. Caulking/Sealant must be applied in accordance with the caulking/sealant manufacturer's written instructions. **Note: OSI Quad as well as some other caulking manufacturers do not allow tooling.**

DO NOT caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section

PAINTING

DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products. James Hardie products must be painted within 180 days for primed product and 90 days for unprimed. 100% acrylic topcoats are recommended. Do not paint when wet. For application rates refer to paint manufacturers specifications. Back-rolling is recommended if the siding is sprayed.

COLORPLUS® TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Care should be taken when handling and cutting James Hardie ColorPlus products. During installation use a wet soft cloth or soft brush to gently wipe off any residue or construction dust left on the product, then rinse with a garden hose.
- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up should be used sparingly. If large areas require touch-up, replace the damaged area with new HardieTrim® board with ColorPlus Technology.
- Laminate sheet must be removed immediately after installation of each trim board.
- Terminate non-factory cut edges into trim where possible, and caulk. Color matched caulks are available from your ColorPlus® product dealer.
- Treat all other non-factory cut edges using the ColorPlus Technology edge coat, available from your ColorPlus product dealer.

Note: James Hardie does not warrant the usage of third party touch-up or paints used as touch-up on James Hardie ColorPlus products.

Problems with appearance or performance arising from use of third party touch-up paints or paints used as touch-up that are not James Hardie touch-up, will not be covered under the James Hardie ColorPlus Limited Finish Warranty.

PAINTING JAMES HARDIE® SIDING AND TRIM PRODUCTS WITH COLORPLUS® TECHNOLOGY

When repainting ColorPlus® products, James Hardie recommends the following regarding surface preparation and topcoat application:


- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature
- DO NOT caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section

FASTENER TABLE

Application	Framing Material Tab is nailed into	Fastener (tab to framing)	Fastener (tab to NT3 trim)	Max Tab Spacing (inches on center)
Flat Tab	Wood Stud (minimum G=0.42)	One 6d corrosion resistant siding nail installed through center of flange into framing	Four 18 ga. X 1/2" long X 1/4" wide corrosion resistant crown staples, equally spaced in one row	16
	Minimum APA rated 7/16" OSB	Two 4d ring shank corrosion resistant siding nails equally spaced installed through flange into framing		
	Minimum 20 gauge steel	One No. 8 X 1" long X 0.323" head diameter screw (corrosion resistant) installed through flange into framing		
Corner Tab	Wood Stud (minimum G=0.42)	On each flange, Install one 6d corrosion resistant siding nail through flange into framing	For each piece of trim, install Four 18 ga. X 1/2" long X 1/4" wide corrosion resistant crown staples, equally space in two rows	20
	Minimum APA rated 7/16" OSB	On each flange, Install two 4d ring shank corrosion resistant siding nails through flange into framing		
	Minimum 20 gauge steel	On each flange, Install one No. 8 X 1" long X 0.323" head diameter screw (corrosion resistant) through flange into framing		

Wind-Borne Debris Region: "Supplemental fasteners may be necessary when installing tabs in a Wind-Borne Debris Region, please call Technical Services 800-942-7343 with any questions."

RECOGNITION: HardieTrim boards may be installed as an equal alternative to conventional trim permitted for use in; 2006, 2009, & 2012 International Building Code, Section 1402.1, and the 2006, 2009, & 2012 International Residence Code for One - and Two - Family - Dwellings, Section R703.1.

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Additional Installation Information, Warranties, and Warnings are available at www.jameshardie.com



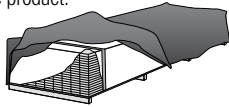


These instructions are to be used for **HardieTrim® HZ5®** Boards ONLY and are NOT valid in British Columbia.

IMPORTANT: FAILURE TO INSTALL AND FINISH THIS PRODUCT IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND JAMES HARDIE WRITTEN APPLICATION INSTRUCTIONS MAY LEAD TO PERSONAL INJURY, AFFECT SYSTEM PERFORMANCE, VIOLATE LOCAL BUILDING CODES, AND VOID THE PRODUCT ONLY WARRANTY. BEFORE INSTALLATION, CONFIRM THAT YOU ARE USING THE CORRECT HARDIEZONE INSTRUCTIONS. TO DETERMINE WHICH HARDIEZONE APPLIES TO YOUR LOCATION, VISIT WWW.HARDIEZONE.COM OR CALL 1-866-942-7343 (866 9HARDIE)

STORAGE & HANDLING:

Store flat and keep dry and covered prior to installation. Installing product wet or saturated may result in shrinkage at butt joints. Carry product on edge. Protect edges and corners from breakage. James Hardie is not responsible for damage caused by improper storage and handling of the product.



CUTTING INSTRUCTIONS

OUTDOORS

1. Position cutting station so that wind will blow dust away from user and others in working area.
2. Use one of the following methods:
 - a. Better:
 - i. Dust reducing circular saw equipped with a HardieBlade® saw blade and HEPA vacuum extraction
 - b. Good:
 - i. Dust reducing circular saw with a HardieBlade saw blade (only use for low to moderate cutting)

INDOORS

- NEVER use a power saw indoors
- NEVER use a circular saw blade that does not carry the HardieBlade saw blade trademark
- NEVER dry sweep – Use wet suppression or HEPA Vacuum

Important Note: For maximum protection (lowest respirable dust production), James Hardie recommends always using "Best"-level cutting methods where feasible.

NIOSH-approved respirators can be used in conjunction with above cutting practices to further reduce dust exposures. Additional exposure information is available at www.jameshardie.com to help you determine the most appropriate cutting method for your job requirements. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information.

SD083105

HardieTrim Batten is a decorative non-load bearing vertical trim product.

GENERAL REQUIREMENTS:

- References to the 2005 National Building Code (NBC) of Canada are made throughout this document. Local building code requirements may supersede the NBC in some locations.
- Wood or steel backing must be provided for attaching HardieTrim® Battens.
- A water-resistive barrier is required in accordance with Part 9.27.3.2 of the NBC. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with Part 9.27.3 of the NBC. **Flashing is required over horizontal protruding and exposed trim. James Hardie will assume no responsibility for water infiltration.**
- When installing James Hardie products all clearance details in figs. 2, 3, 4, 5, 6, 7 & 8 must be followed.
- Adjacent finished grade must slope away from the building in accordance with local building codes
- DO NOT install HardieTrim® Battens, such that they may remain in contact with standing water.
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.

INSTALLATION

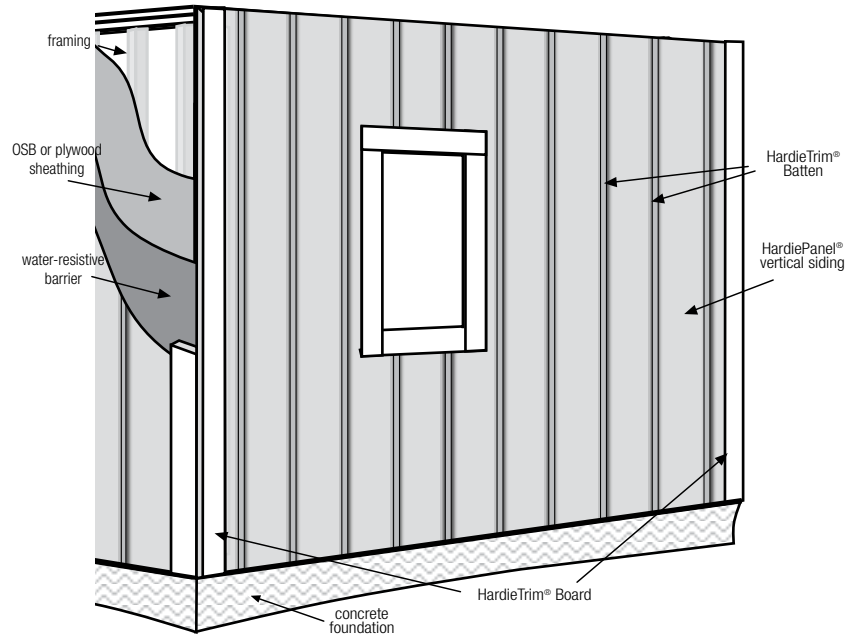
Fastener Requirements

A finish nail is required for installing HardieTrim Battens with ColorPlus® Technology. 50mm (2") minimum 16 ga. finish nails or smooth shank siding nails may be used to attach HardieTrim Battens to wood frame construction. ET&F or equivalent fasteners or screws may be used to attach HardieTrim Battens to steel frame construction.

James Hardie recommends using stainless steel finish nails when installing HardieTrim (trim, battens, fascia, etc.) products.

Fastening instructions are similar for all applications. Position nails no closer than 19mm (3/4") from the edges of the HardieTrim Battens. Fasteners must be no closer than 25mm (1") from ends of HardieTrim Battens and spaced a maximum of 406mm (16") o.c. (fig 1). Ensure HardieTrim Batten is adequately fastened.

Figure 1



WARNING: AVOID BREATHING SILICA DUST

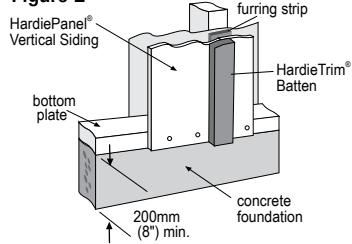
James Hardie® products contain respirable crystalline silica, which is known to the State of California to cause cancer and is considered by IARC and NIOSH to be a cause of cancer from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling: (1) work in outdoor areas with ample ventilation; (2) use fiber cement shears for cutting or, where not feasible, use a HardieBlade® saw blade and dust-reducing circular saw attached to a HEPA vacuum; (3) warn others in the immediate area; (4) wear a properly-fitted, NIOSH-approved dust mask or respirator (e.g. N-95) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. During clean-up, use HEPA vacuums or wet cleanup methods - never dry sweep. For further information, refer to our installation instructions and Material Safety Data Sheet available at www.jameshardie.com or by calling 1-800-9HARDIE (1-800-942-7343). FAILURE TO ADHERE TO OUR WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.

SD050905

CLEARANCES

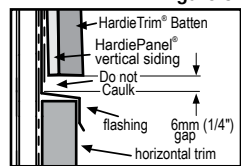
Install siding and trim products in compliance of Part 9.27.2.4 of the NBC which requires a minimum 200mm (8") for clearance between the bottom edge of the siding and the adjacent finished grade.

Figure 2



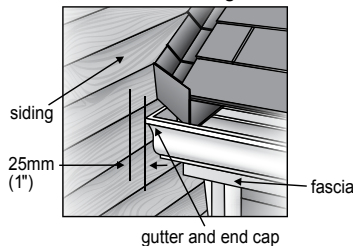
Maintain a 6mm (1/4") clearance between the bottom of James Hardie products and horizontal flashing. Do not caulk gap.

Figure 6



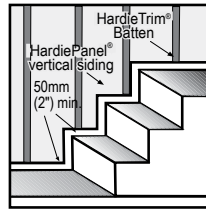
Maintain a minimum 25mm (1") gap between gutter end caps and siding & trim.

Figure 7



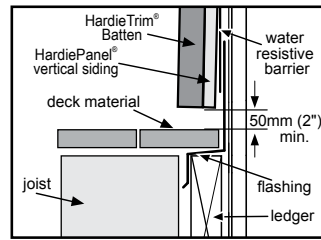
Maintain a 50mm (2") minimum clearance between James Hardie® products and paths, steps and driveways.

Figure 3



Maintain a 50mm (2") minimum clearance between James Hardie products and decking material.

Figure 4



At the juncture of the roof and vertical surfaces, flashing and counterflashing shall be installed per the roofing manufacturer's instructions. Part 9.27.2.4 requires a minimum 50mm (2") clearance between the roofing and the bottom edge of the siding and trim.

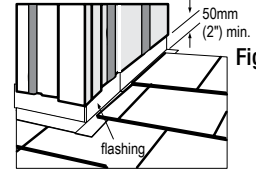
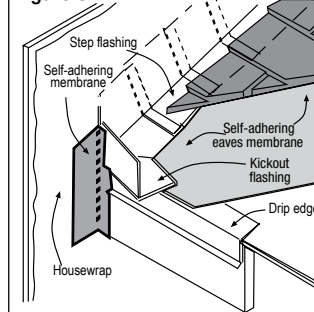


Figure 5

Figure 8



KICKOUT FLASHING

Because of the volume of water that can pour down a sloped roof, one of the most critical flashing details occurs where a roof intersects a sidewall. The roof must be flashed with step flashing. Where the roof terminates, install a kickout to deflect water away from the siding.

It is best to install a self-adhering membrane on the wall before the subsfascia and trim boards are nailed in place, and then come back to install the kickout.

Figure 8, Kickout Flashing[‡] To prevent water from dumping behind the siding and the end of the roof intersection, install a "kickout" of sufficient length and angle to direct the water running down the roof away from the siding.

Horizontal Panel Joints - At horizontal panel joints HardieTrim® battens must be installed according to option 1 or 2 below. When installing HardieTrim Battens horizontally, they must be installed as a panel joint according to option 2.

Option 1

Figure 9 - **No horizontal band board** - Make a 22.5- 45 degree weather cut, in the HardieTrim® batten, just above the 6mm (1/4") clearance between panels.

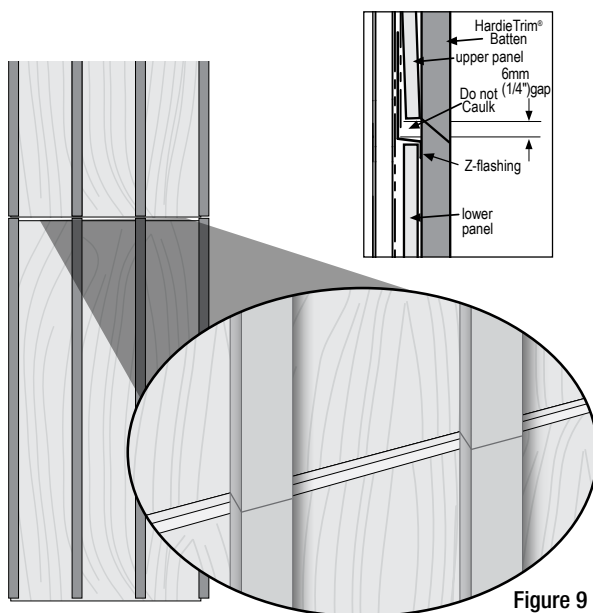


Figure 9

Option 2

Figure 10 - **Horizontal Band Board** - Install a horizontal band board at the top of the bottom panel. Butt the lower batten to the band board and start the top batten at the bottom edge of the top panel. Maintain a 6mm (1/4") clearance above horizontal flashing

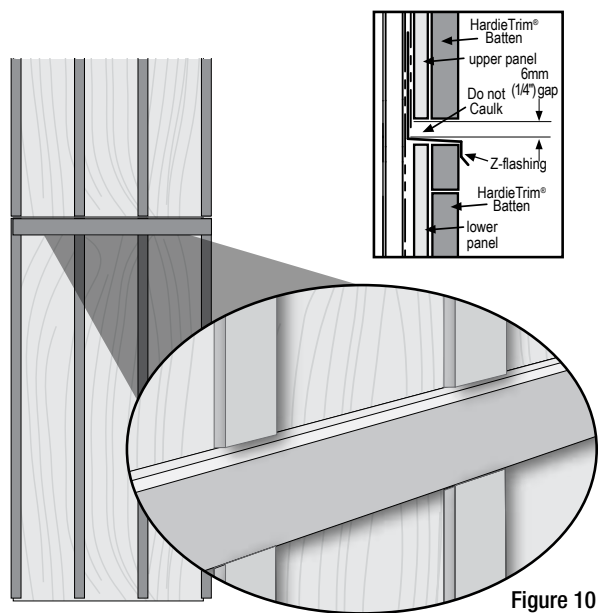


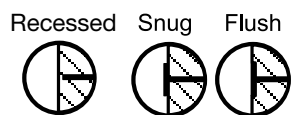
Figure 10

* The illustration (figure 8) was reprinted with permission of THE JOURNAL OF LIGHT CONSTRUCTION. For subscription information, visit www.jlconline.com.

GENERAL FASTENING REQUIREMENTS

Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable but may exhibit premature corrosion. James Hardie recommends the use of quality, hot-dipped galvanized nails. James Hardie is not responsible for the corrosion resistance of fasteners. Stainless steel fasteners are recommended when installing James Hardie® products near the ocean, large bodies of water, or in very humid climates.

- Drive fasteners perpendicular to siding and framing.
- Fastener heads should fit snug against siding (no air space). (fig. A)
- Do not over-drive nail heads or drive nails at an angle.
- If nail is countersunk, fill nail hole and add a nail.
- For wood framing, under driven nails should be hit flush to the trim with a hammer (For steel framing, remove and replace nail).
- **Do not use aluminum fasteners, staples, or clipped head nails.**



Finish Nail

Figure A



PNEUMATIC FASTENING

James Hardie products can be hand nailed or fastened with a pneumatic tool. Pneumatic fastening is highly recommended. Set air pressure so that the fastener is driven snug with the surface of the siding. A flush mount attachment on the pneumatic tool is recommended. This will help control the depth the nail is driven. If setting the nail depth proves difficult, choose a setting that under drives the nail. (Drive under driven nails snug with a smooth faced hammer - Does not apply for installation to steel framing).

CUT EDGE TREATMENT

Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

CAULKING

Elastomeric Joint Sealant is required in accordance with Part 9.27.4 of the NBC, complying with ASTM C920 Grade NS, Class 25 or higher or a Latex Joint Sealant complying with ASTM C834. Caulking/Sealant must be applied in accordance with the caulking/sealant manufacturer's written instructions.

Note: OSI Quad as well as some other caulking manufacturers do not allow tooling.

PAINTING

DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products. James Hardie products must be painted within 180 days for primed product and 90 days for unprimed. 100% acrylic topcoats are recommended. Do not paint when wet. For application rates refer to paint manufacturers specifications. Back-rolling is recommended if the siding is sprayed.

COLORPLUS® TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Care should be taken when handling and cutting James Hardie ColorPlus products. During installation use a wet soft cloth or soft brush to gently wipe off any residue or construction dust left on the product, then rinse with a garden hose.
- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up should be used sparingly. If large areas require touch-up, replace the damaged area with new HardieTrim® batten boards with ColorPlus Technology.
- Laminate sheet must be removed immediately after installation.
- Terminate non-factory cut edges into trim where possible, and caulk. Color matched caulks are available from your ColorPlus® product dealer.
- Treat all other non-factory cut edges using the ColorPlus Technology edge coaters, available from your ColorPlus product dealer.

Note: James Hardie does not warrant the usage of third party touch-up or paints used as touch-up on James Hardie ColorPlus products.

Problems with appearance or performance arising from use of third party touch-up paints or paints used as touch-up that are not James Hardie touch-up, will not be covered under the James Hardie ColorPlus Limited Finish Warranty.

PAINTING JAMES HARDIE® SIDING AND TRIM PRODUCTS WITH COLORPLUS® TECHNOLOGY

When repainting ColorPlus products, James Hardie recommends the following regarding surface preparation and topcoat application:

- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- **DO NOT** use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature
- **DO NOT** caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section

RECOGNITION: HardieTrim boards may be installed as an equal alternative to conventional trim permitted for use in; 2006, 2009, & 2012 International Building Code, Section 1402.1, and the 2006, 2009, & 2012 International Residence Code for One - and Two - Family - Dwellings, Section R703.1.

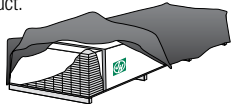


These instructions are to be used for HardieTrim® HZ™ Boards ONLY and are ONLY VALID in the following Province: British Columbia.

IMPORTANT: FAILURE TO INSTALL AND FINISH THIS PRODUCT IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND JAMES HARDIE WRITTEN APPLICATION INSTRUCTIONS MAY LEAD TO PERSONAL INJURY, AFFECT SYSTEM PERFORMANCE, VIOLATE LOCAL BUILDING CODES, AND VOID THE PRODUCT ONLY WARRANTY. BEFORE INSTALLATION, CONFIRM THAT YOU ARE USING THE CORRECT HARDIEZONE INSTRUCTIONS. TO DETERMINE WHICH HARDIEZONE APPLIES TO YOUR LOCATION, VISIT WWW.HARDIEZONE.COM OR CALL 1-866-942-7343 (866 9HARDIE)

STORAGE & HANDLING:

Store flat and keep dry and covered prior to installation. Installing product wet or saturated may result in shrinkage at butt joints. Carry product on edge. Protect edges and corners from breakage. James Hardie is not responsible for damage caused by improper storage and handling of the product.



CUTTING INSTRUCTIONS

OUTDOORS

1. Position cutting station so that wind will blow dust away from user and others in working area.
2. Use one of the following methods:
 - b. Better:
 - i. Dust reducing circular saw equipped with a HardieBlade® saw blade and HEPA vacuum extraction
 - c. Good:
 - i. Dust reducing circular saw with a HardieBlade saw blade (only use for low to moderate cutting)

INDOORS

- NEVER use a power saw indoors
- NEVER use a circular saw blade that does not carry the HardieBlade saw blade trademark
- NEVER dry sweep – Use wet suppression or HEPA Vacuum

Important Note: For maximum protection (lowest respirable dust production), James Hardie recommends always using "Best"-level cutting methods where feasible.

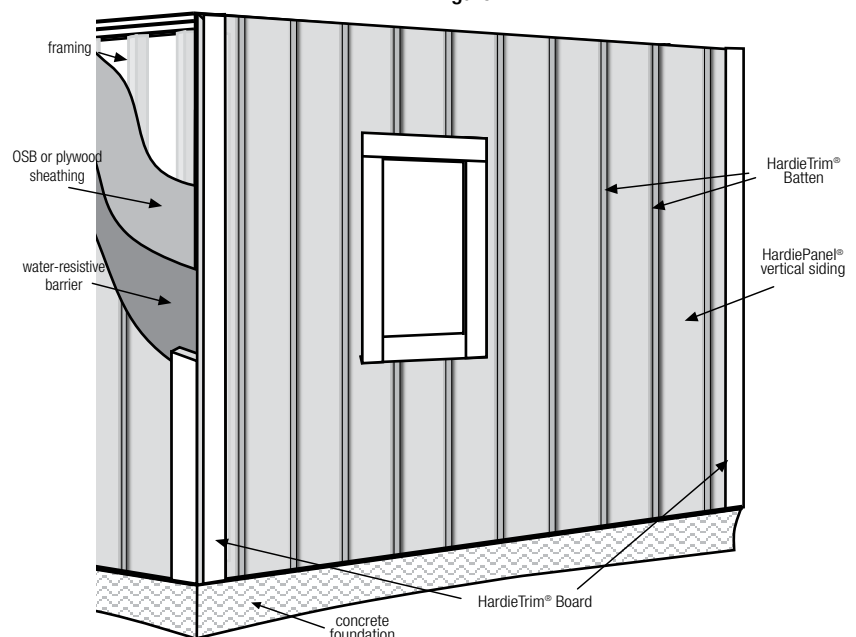
NIOSH-approved respirators can be used in conjunction with above cutting practices to further reduce dust exposures. Additional exposure information is available at www.jameshardie.com to help you determine the most appropriate cutting method for your job requirements. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information. SD083105

HardieTrim Batten is a decorative non-load bearing vertical trim product.

GENERAL REQUIREMENTS:

- References to the 2005 National Building Code (NBC) of Canada are made throughout this document. Local building code requirements may supersede the NBC in some locations.
- Wood or steel backing must be provided for attaching HardieTrim® Battens.
- A water-resistive barrier is required in accordance with Part 9.27.3.2 of the NBC. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with Part 9.27.3 of the NBC. **Flashing is required over horizontal protruding and exposed trim. James Hardie will assume no responsibility for water infiltration.**
- When installing James Hardie products all clearance details in figs. 2, 3, 4, 5, 6, 7 & 8 must be followed.
- Adjacent finished grade must slope away from the building in accordance with local building codes
- DO NOT install HardieTrim® Battens, such that they may remain in contact with standing water.
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.

Figure 1



INSTALLATION

Fastener Requirements

A finish nail is required for installing HardieTrim Battens with ColorPlus® Technology. 50mm (2") minimum 16 ga. finish nails or smooth shank siding nails may be used to attach HardieTrim Battens to wood frame construction. ET&F or equivalent fasteners or screws may be used to attach HardieTrim Battens to steel frame construction.

James Hardie recommends using stainless steel finish nails when installing HardieTrim (trim, battens, fascia, etc.) products.

Fastening instructions are similar for all applications. Position nails no closer than 19mm (3/4") from the edges of the HardieTrim Battens. Fasteners must be no closer than 25mm (1") from ends of HardieTrim Battens and spaced a maximum of 406mm (16") o.c. (fig 1). Ensure HardieTrim Batten is adequately fastened.

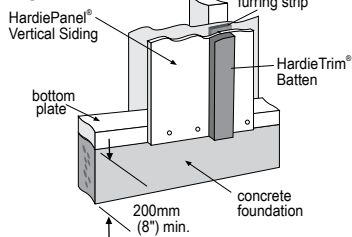
WARNING: AVOID BREATHING SILICA DUST

James Hardie® products contain respirable crystalline silica, which is known to the State of California to cause cancer and is considered by IARC and NIOSH to be a cause of cancer from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling: (1) work in outdoor areas with ample ventilation; (2) use fiber cement shears for cutting or, where not feasible, use a HardieBlade® saw blade and dust-reducing circular saw attached to a HEPA vacuum; (3) warn others in the immediate area; (4) wear a properly-fitted, NIOSH-approved dust mask or respirator (e.g. N-95) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. During clean-up, use HEPA vacuums or wet cleanup methods - never dry sweep. For further information, refer to our installation instructions and Material Safety Data Sheet available at www.jameshardie.com or by calling 1-800-9HARDIE (1-800-942-7343). FAILURE TO ADHERE TO OUR WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH. SD050905

CLEARANCES

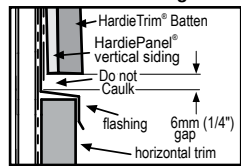
Install siding and trim products in compliance of Part 9.27.2.4 of the NBC which requires a minimum 200mm (8") for clearance between the bottom edge of the siding and the adjacent finished grade.

Figure 2



Maintain a 6mm (1/4") clearance between the bottom of James Hardie products and horizontal flashing. Do not caulk gap.

Figure 6



Maintain a minimum 25mm (1") gap between gutter end caps and siding & trim.

Figure 7

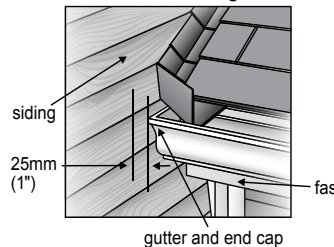
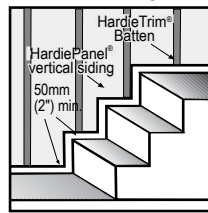
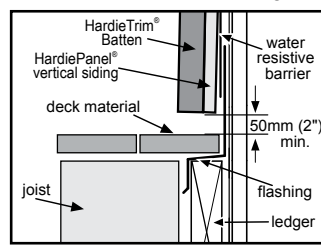


Figure 3



Maintain a 50mm (2") minimum clearance between James Hardie products and decking material.

Figure 4



At the juncture of the roof and vertical surfaces, flashing and counterflashing shall be installed per the roofing manufacturer's instructions. Part 9.27.2.4 requires a minimum 50mm (2") clearance between the roofing and the bottom edge of the siding and trim.

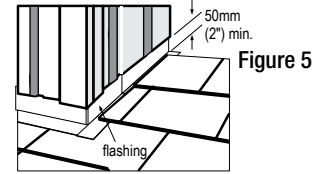


Figure 8

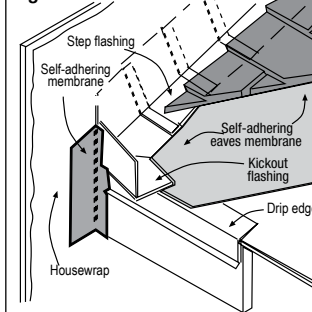


Figure 8, Kickout Flashing[‡] To prevent water from dumping behind the siding and the end of the roof intersection, install a "kickout" of sufficient length and angle to direct the water running down the roof away from the siding.

KICKOUT FLASHING

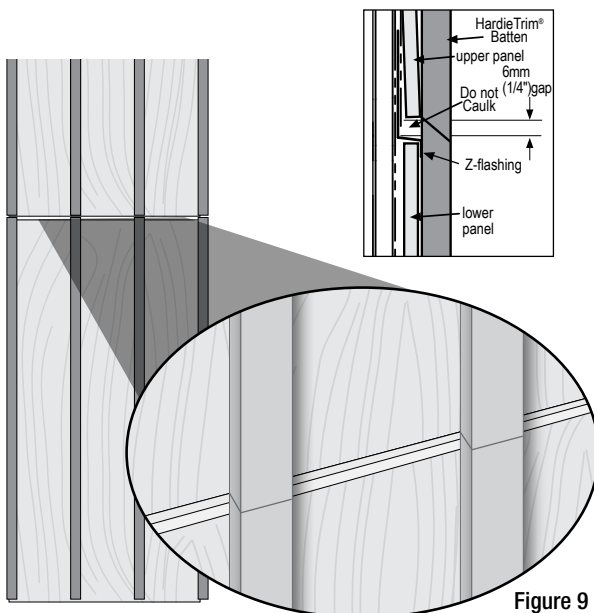
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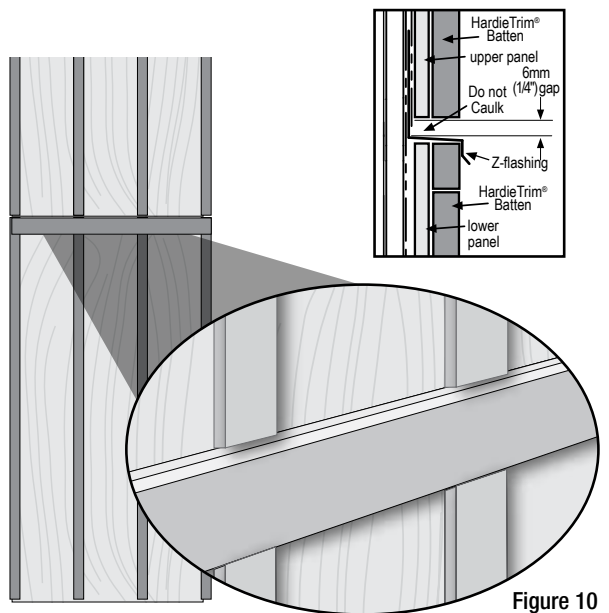
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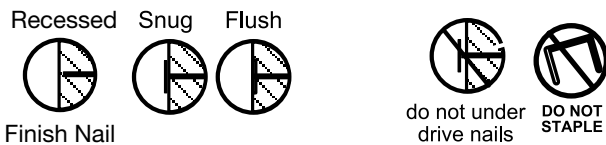


Figure A

PNEUMATIC FASTENING

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Additional Installation Information, Warranties, and Warnings are available at www.jameshardie.com



JamesHardie