

HardieTrim® NT3® H75 Boards

INSTALLATION REQUIREMENTS - 4/4, 5/4, BATTENS, PRIMED & COLORPLUS® PRODUCTS



EFFECTIVE MAY 2015

Visit www.jameshardie.com for the most recent version.

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. INSTALLATION OF HZ5 PRODUCTS OUTSIDE AN HZ5 LOCATION WILL VOID YOUR WARRANTY. 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 James Hardie siding 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

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.

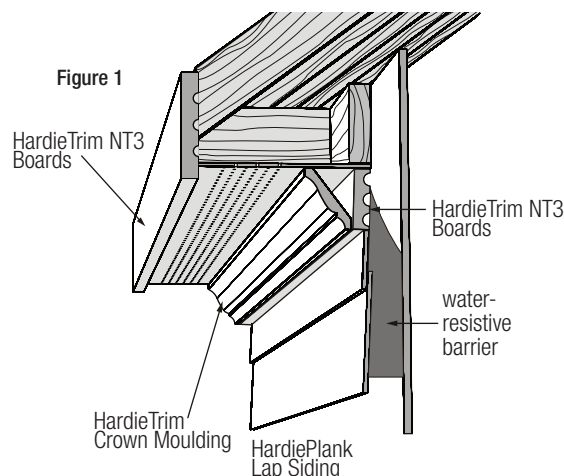
SD083105

HardieTrim® NT3™ boards are decorative non-load bearing trim products.

Do not use HardieTrim NT3 boards to replace any structural component.

TABLE OF CONTENTS:

GENERAL REQUIREMENTS	Page 1
FLASHING/CLEARANCE REQUIREMENTS	Page 2
FASTENING	Page 3
Face Nailing Requirements	Page 3
INSTALLATION	Page 4-8
Trimming Corners	Page 4
Openings	Page 4
Band Boards	Page 4
Frieze	Page 4
Batten Boards	Page 5
Fascia	Page 6
HardieTrim™ Tabs	Page 7-8
FINISHING	Page 9



GENERAL REQUIREMENTS

- Wood or steel must be provided for attaching HardieTrim boards.
- Follow all applicable codes when installing HardieTrim boards.
- DO NOT install HardieTrim boards, 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.

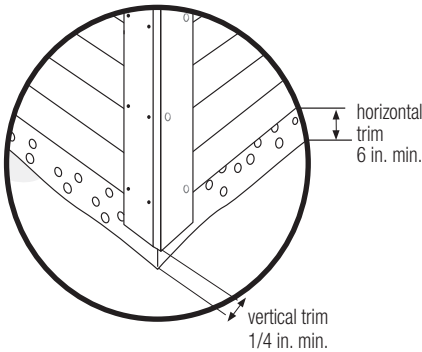
WARNING: AVOID BREATHING SILICA DUST

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.

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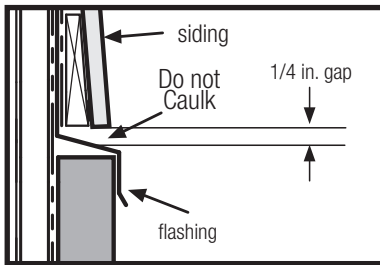
HardieTrim may be installed with a minimum 1/4 in. clearance when installed vertically to grade, decks, paths, steps, and driveways

Figure 2



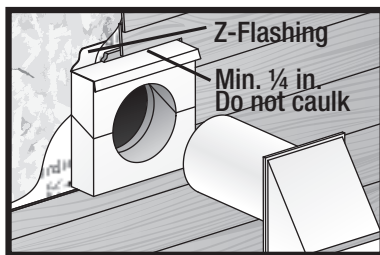
Maintain a 1/4 in. clearance between the bottom of James Hardie products and horizontal flashing. Do not caulk gap.

Figure 5



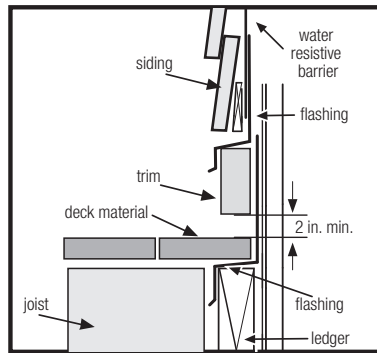
Block Penetration

Figure 8



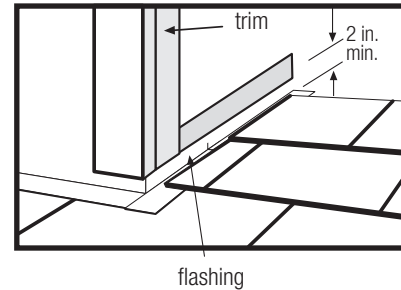
Maintain a minimum 2 in. horizontal clearance between James Hardie trim products and decks, paths, steps and driveways.

Figure 3



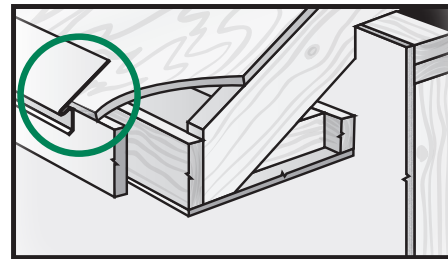
At the juncture of the roof and vertical surfaces, flashing and counter flashing shall be installed per the roofing manufacturer's instructions. Provide a 2 in. clearance between the roofing and the bottom edge of the trim.

Figure 4



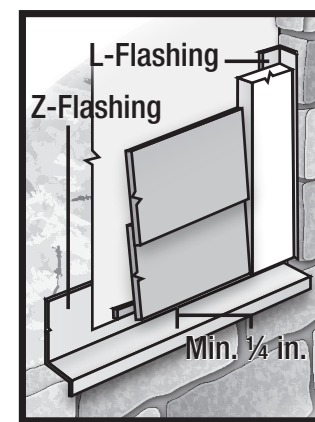
Drip Edge

Figure 6 for fascia installation see page 6



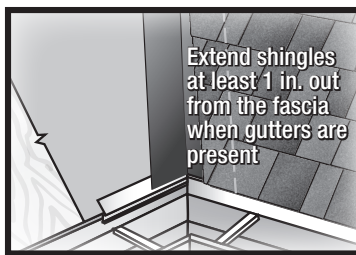
Mortar/Masonry

Figure 7



Valley/Shingle Extension

Figure 9

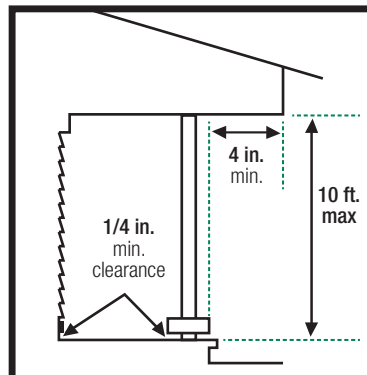


CLEARANCE REQUIREMENTS UNDER-COVER

Maintain a 1/4 in. clearance for HardieTrim boards installed under cover. Under cover is defined as:

- Not more than 10 feet below a roof overhang, and
- Not less than 4 inches horizontally from the edge of the roof overhang

Figure 10



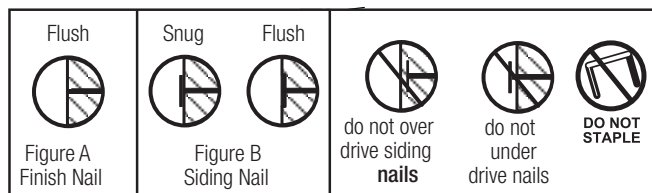
General Fastening Requirements

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.

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."

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 trim. 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).



Face Nailing Requirements

Use 2 in. minimum 16 ga. finish nails to attach HardieTrim NT3 boards to wood frame construction. ET&F or equivalent fasteners or screws may be used to attach HardieTrim NT3 boards to steel frame construction.

Fastening instructions are similar for all applications. When using finish nails, position nails no closer than 1/2 in. from the edges of the trim and for all other fasteners no closer than 3/4 in. Fasteners must be no closer than 1 in. from ends of trim and spaced a maximum of 16 in. O.C. Ensure trim is adequately fastened.

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

Minimum fastener guide for finish nailing:

	Pre-built corner	Site Built Corners	Other areas (e.g. window trim, and band boards)
4 in.	1 nail every 16 in. to attach boards together + 1 nail every 16 in. each board	2 nails every 16 in.	2 nails every 16 in.
6 in.	1 nail every 16 in. to attach boards together + 2 nails every 16 in. each board		
8 in.	-	3 nails every 16 in.	3 nails every 16 in.
12 in.	-	4 nails every 16 in.	3 nails every 16 in.

Use a 2 in. finish nail to fasten trim together. Longer finish nails may bend.

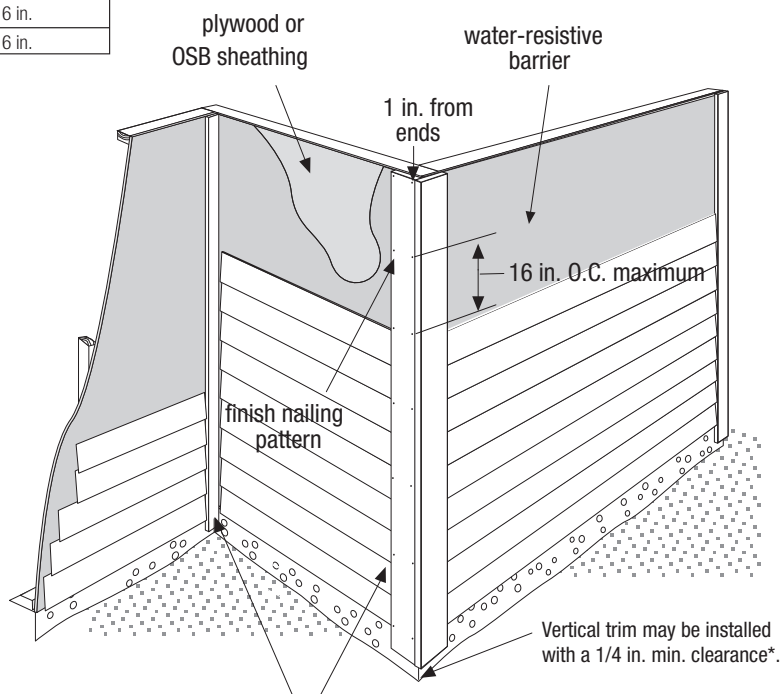


Figure 11

Leave a minimum 1/8 in. gap between the siding and trim, then caulk.

*Follow all applicable codes when installing HardieTrim boards

Trimming Corners

When installing corners or other vertical trim, position boards on the wall and attach (figure 12).

Pre-Built Corners

Alternatively, corners can be pre-built off the wall using 2 in. finishing nails. Each side of the pre-built corner must be secured to the wall (figure 13).

Figure 12

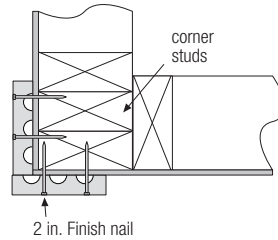
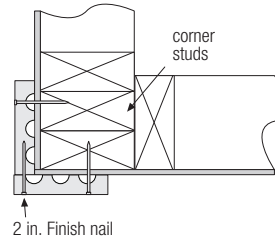


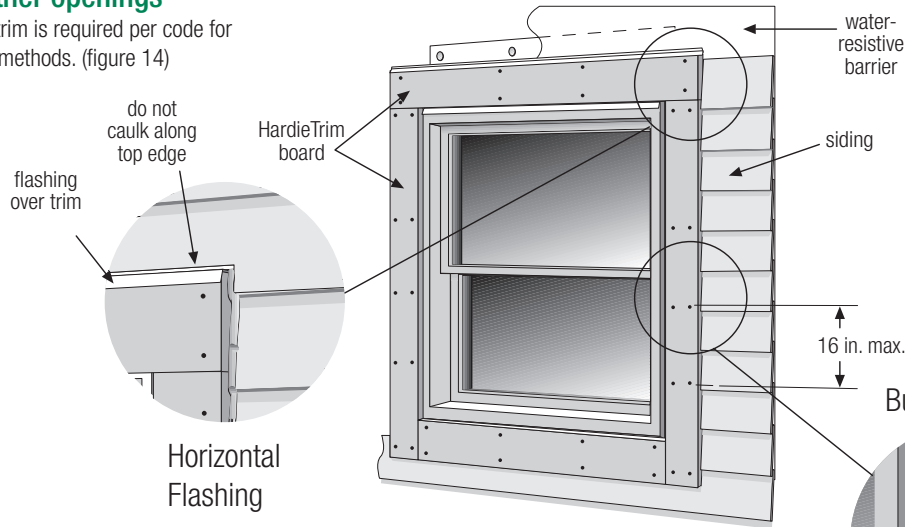
Figure 13



Trim application for windows, doors & other openings

Flashing over trim is required per code for all installation methods. (figure 14)

Figure 14



Butt to Siding

Trim the opening prior to the installation of the siding. Position trim boards on the wall and secure. Allow proper fastener spacing at edges and ends.

Butt to Siding

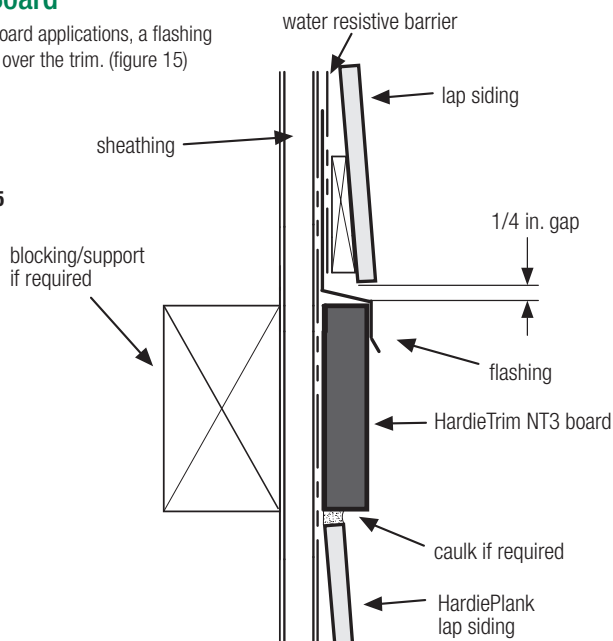
leave a minimum 1/8 in. gap between siding and trim, then caulk.

NOTE: Follow your window/door manufacturer's installation instructions for caulking guidance between window and trim.

Band Board

For band board applications, a flashing is required over the trim. (figure 15)

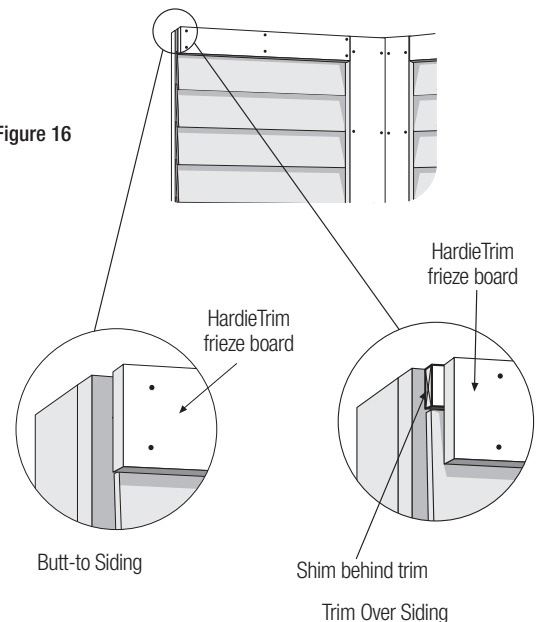
Figure 15



Frieze Boards

HardieTrim boards can be used as frieze board. (figure 16)

Figure 16



Batten Boards

Horizontal Panel Joints

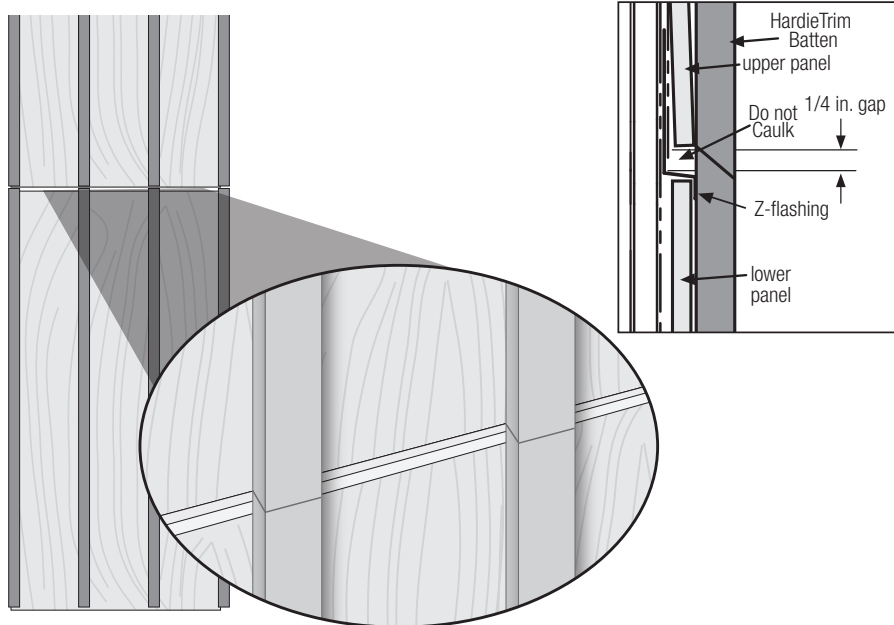
At horizontal panel joints HardieTrim battens must be installed according to option 1 or 2 below.

When installing HardieTrim Battens horizontally, they must be installed as a panel joint according to option 2.

Option 1

Figure 17 - No horizontal band board - Make a 22.5- 45 degree weather cut, in the HardieTrim batten, just above the 1/4 in. clearance between panels.

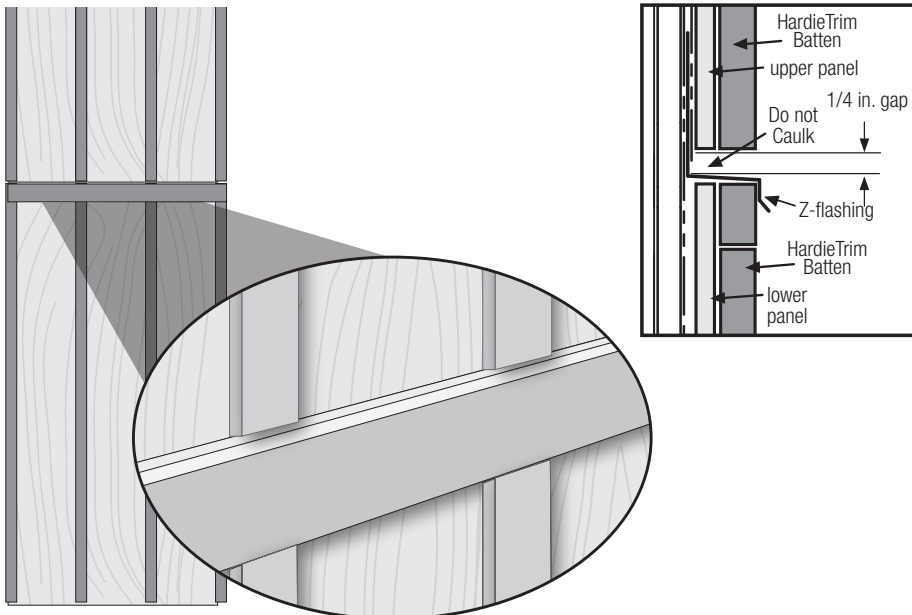
Figure 17



Option 2

Figure 18 - 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 1/4 in. clearance above horizontal flashing.

Figure 18



■ Fascia

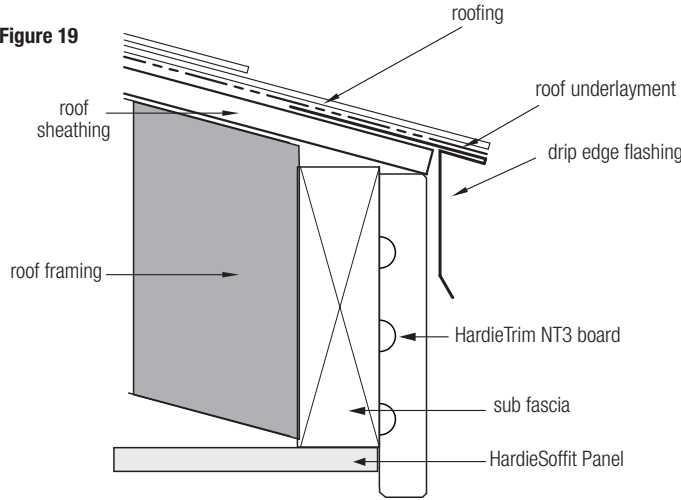
HardieTrim board is a decorative non-load bearing trim product.
Do not use HardieTrim to replace any structural component

HardieTrim boards can be fastened directly over a 2x sub-fascia or directly to rafter tails. Check local building code for relevant codes.

Option 1

Over sub-fascia: (figure 19)

When installing HardieTrim boards over solid 2x sub-fascia use minimum 2 in., 16 gauge corrosion resistant finish nails. (see fastener guide below)



Gutters:

James Hardie recommends the use of rain gutters whenever possible.

Do not attach gutters directly to HardieTrim

Use gutter hangers that attach through the roof sheathing into a rafter tail or other structural member.

Soffit

When installing HardieSoffit additional framing/blocking may be needed depending on application. Refer to HardieSoffit installation instructions for guidance.

Option 2

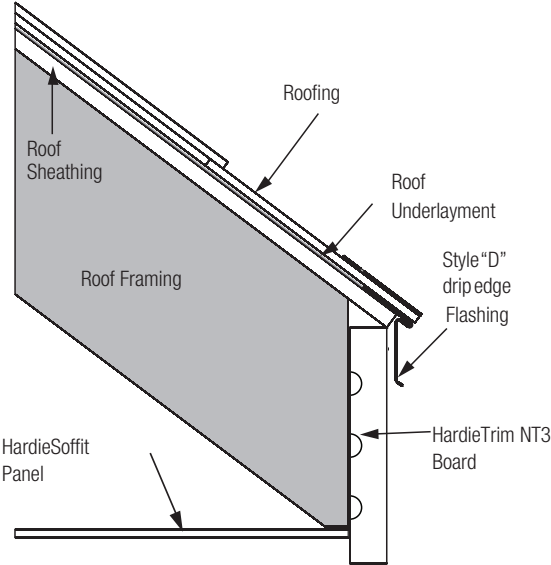
Direct to rafter tails: (figure 20)

When installing HardieTrim NT3 boards without the presence of a 2x sub-fascia, a minimum 8d siding corrosion resistant nails must be used to attach HardieTrim NT3 boards DO NOT use finish nails. (refer to fastener guide below).

Fascia Fastener Guide

FASTENER SPACING		
HardieTrim Board	Direct to Rafter (min 8d siding)	Over 2x Sub-fascia (Minimum 2 in. 16 ga. Finish nails)
6 in.	2 nails every rafter spaced max 24 in. O.C.	2 nails spaced maximum 16 in. O.C.
8 in.	3 nails every rafter spaced max 24 in. O.C.	3 nails spaced maximum 16 in. O.C.
10 in.		4 nails spaced maximum 16 in. O.C.

Figure 20



■ HardieTrim™ Tabs

Fastener Requirements

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

HardieTrim NT3 boards may be installed with HardieTrim™ Flat Tabs and HardieTrim™ Corner Tabs 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, 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. (figures 21 & 22)

Step 2: For wood frame construction, attach the trim to the building with minimum 2, 6d siding nails fastened through the HardieTrim Flat Tabs (figure23). ET&F or equivalent fasteners may be used to attach the HardieTrim Flat Tabs to steel frame construction.

Fastener spacing will vary based on application. Refer to fastener table on page 8. Refer to specific sections in these instructions for required fastener spacing by application (window, band board, etc.)

For Fascia, Rake, and Frieze board Applications:

HardieTrim tabs cannot be used in fascia, rake, or frieze board applications. Follow Face nailing fastening specifications.

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

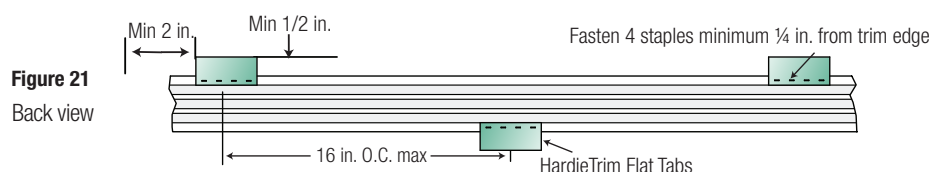


Figure 21
Back view

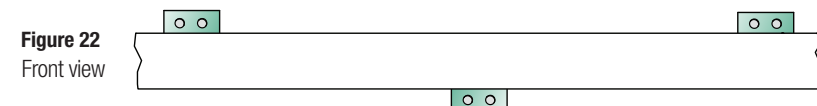


Figure 22
Front view

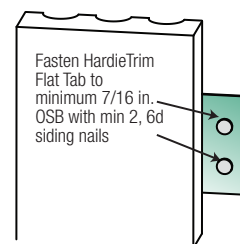
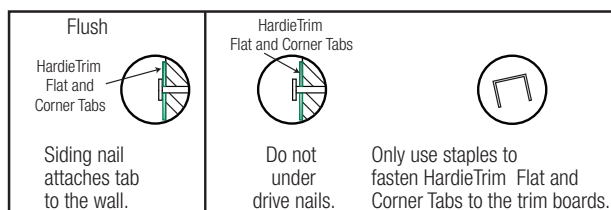
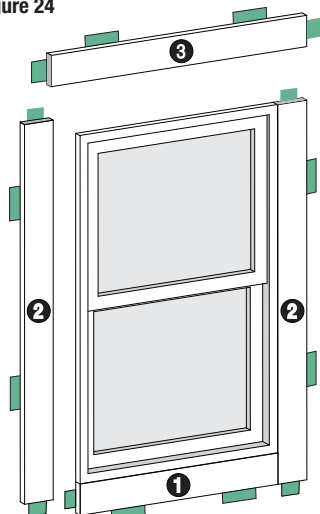


Figure 23

Trim Application for Windows, Doors & Other Openings

Trim the opening prior to the installation of the siding. 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 figure 24. Use 16 ga. galvanized 2 in. long finish nails to ensure proper fastening if needed.

Figure 24



NOTE: Follow your window/door manufacturers installation instructions for caulking guidance between window and trim.

Trimming Corners

When using HardieTrim tabs prebuild outside corners off the wall.

- Attach HardieTrim Corner Tabs to the back side of the trim using eight(8) - 18 ga. 1/2 in. L x 1/4 in. 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 25)
- For wood frame construction, attach trim to building using min. 6d siding nails fastened through the HardieTrim Corner Tabs attached to minimum 7/16 in. OSB *. (figure 26)
- Attach a HardieTrim Corner Tab 1 in. from each ends and every 20 in. O.C.
- TIP: Creating a jig for the work station is recommended to ensure corners are fastened securely and straight. (figure 27)

Figure 25

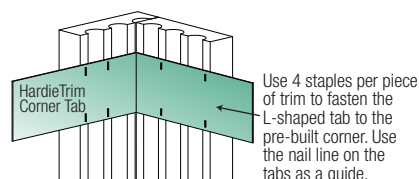


Figure 25

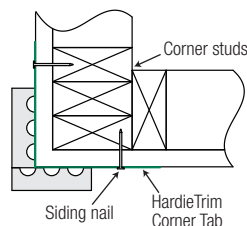
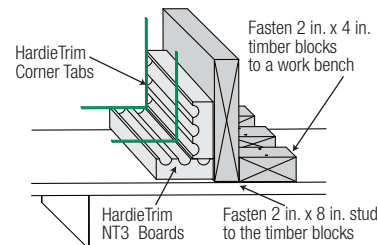


Figure 19



Band Board

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 16 in. 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 (figures 21, 22). Use 16 ga. galvanized 2 in. long finish nails to ensure proper fastening if needed.

Trim Tab Fastener Table

Application	Framing Material Tab is nailed into	Fastener (tab to framing)	Fastener (tab to 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 tab into framing	Four 18 ga. X 1/2 in. long X 1/4 in. wide corrosion resistant crown staples, equally spaced in one row	16
	Minimum APA rated 7/16 in. OSB	Two 4d ring shank corrosion resistant siding nails equally spaced installed through tab into framing		
	Minimum 20 gauge steel	One No. 8 X 1 in. long X 0.323 in. 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 tab into framing	For each piece of trim, install Four 18 ga. X 1/2 in. long X 1/4 in. wide corrosion resistant crown staples, equally space in two rows	20
	Minimum APA rated 7/16 in. OSB	On each flange, install two 4d ring shank corrosion resistant siding nails through tab into framing		
	Minimum 20 gauge steel	On each flange, install one No. 8 X 1 in. long X 0.323 in. head diameter screw (corrosion resistant) through tab into 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

For best results use an Elastomeric Joint Sealant 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. For best results use an Elastomeric Joint Sealant 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.

■ 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. 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.
- 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



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