4/4, 5/4 HardieTrim® HZ10™ Boards

INSTALLATION REQUIREMENTS - PRIMED & COLORPLUS® PRODUCTS

JamesHardie

EFFECTIVE JULY 2011

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

These instructions are to be used for **Hardie**Trim® HZ10™ Boards **ONLY** and are **NOT VALID** in the following states: AK, HI, UT, ID, CO, WY, MT. These instructions are also NOT valid in portions of WA, OR, CA, NV, AZ, NM. Enter your zip code at www.hardiezone.com to find out what zone applies to your location.

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 HZ10™ PRODUCTS OUTSIDE AN HZ10™ 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 siding wet or saturated may result in shrinkage at butt joints. Carry boards 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® 4/4,5/4 boards are decorative non-load bearing trim products.

GENERAL REQUIREMENTS:

- Wood or steel backing must be provided for attaching HardieTrim® boards.
- A water-resistive barrier is required in accordance with local building code requirements. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements. James Hardie will assume no responsibility for water infiltration. James Hardie does manufacture HardieWrap™ Weather Barrier, a non-woven non-perforated housewrap[1], which complies with building code requirements.
- When installing James Hardie products all clearance details in figs. 5, 6, 7, 8, & 9 must be followed.
- Flashing is required over all horizontal protruding and exposed trim.
- Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6" in the first 10'.
- DO NOT install HardieTrim boards, such that they may remain in contact with standing water.
- DO NOT use stain on James Hardie® products.

INSTALLATION

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

Traditional Fastener Requirements

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

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

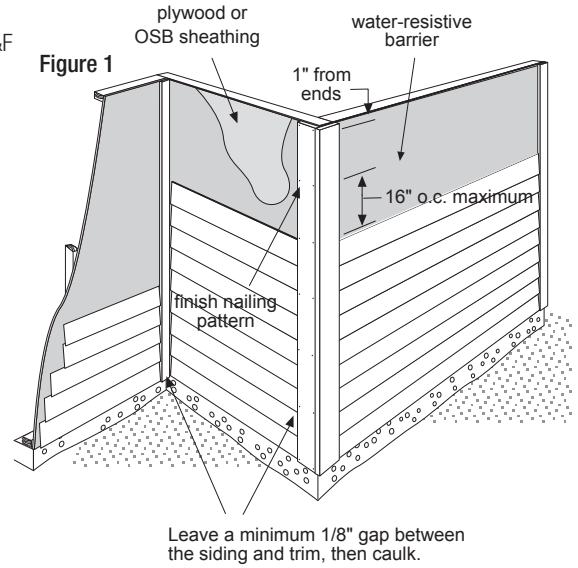
James Hardie recommends using stainless steel finish nails when installing HardieTrim (Trim, Battens, Fascia, etc.) products.

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 16" to attach boards together + 1 nail every 16" each board	2 nails every 16"	2 nails every 16"
6"	1 nail every 16" to attach boards together + 2 nails every 16" each board		
8"	-	3 nails every 16"	3 nails every 16"
12"	-	4 nails every 16"	3 nails every 16"

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

Figure 1



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.

[1] For additional information on HardieWrap™ Weather Barrier, consult James Hardie at 1-866-4Hardie or www.hardiewrap.com

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. 2). Use weather cuts sloped away from the wall to join (fig. 4). Alternatively corners can be pre-built (fig. 3).

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. 2).

Figure 2

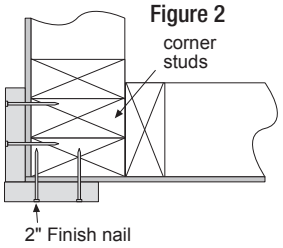


Figure 3

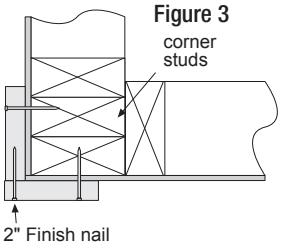
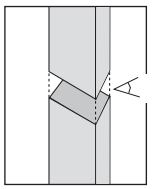


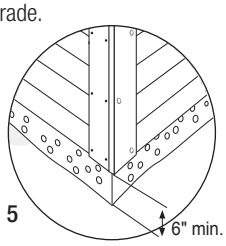
Figure 4



CLEARANCES

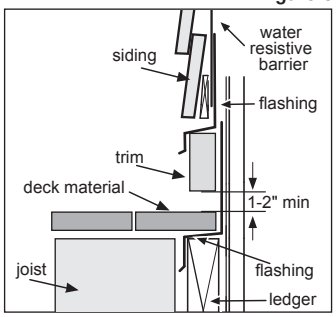
Install siding and trim products in compliance with local building code requirements for clearance between the bottom edge of the siding and the adjacent finished grade.

Figure 5



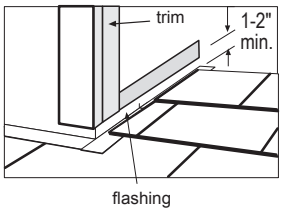
Maintain a minimum 1-2" clearance between James Hardie® trim products and decks, paths, steps and driveways.

Figure 6



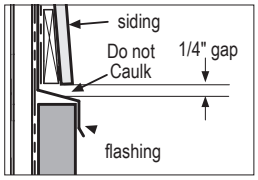
At the juncture of the roof and vertical surfaces, flashing and counterflashing shall be installed per the roofing manufacturer's instructions. Provide a 1-2" clearance between the roofing and the bottom edge of the trim.

Figure 7



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

Figure 8



Maintain a minimum 1" gap between gutter end caps and siding & trim.

Figure 9

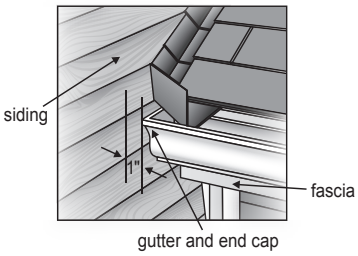
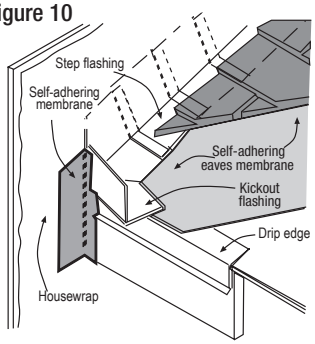


Figure 10



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.

TRIM APPLICATION FOR WINDOWS, DOORS & OTHER OPENINGS

Flashing over trim is required for all installation methods. (fig. 11)

Butt Joint to Siding

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

Figure 12

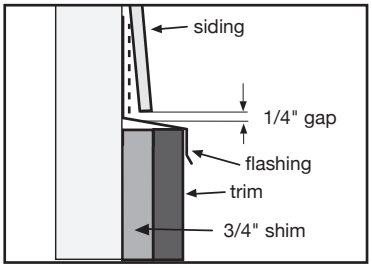
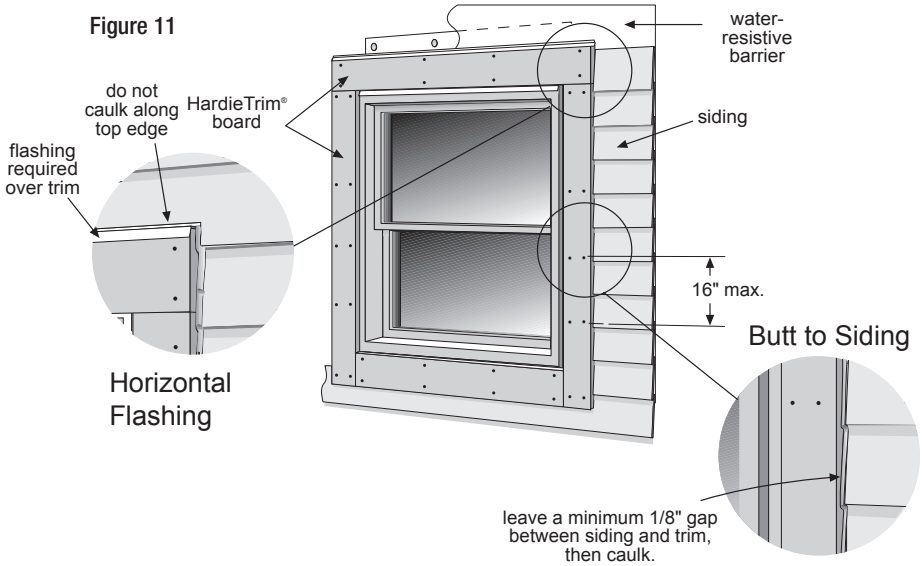


Figure 11



NOTE: Follow your window/door manufacturer's installation instructions.

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

BAND BOARDS, FRIEZE BOARDS, RAKE TRIM & FASCIA

HardieTrim® boards may also be used as band boards, frieze boards, rake trim or fascia (fig. 13 & 14).

Figure 13

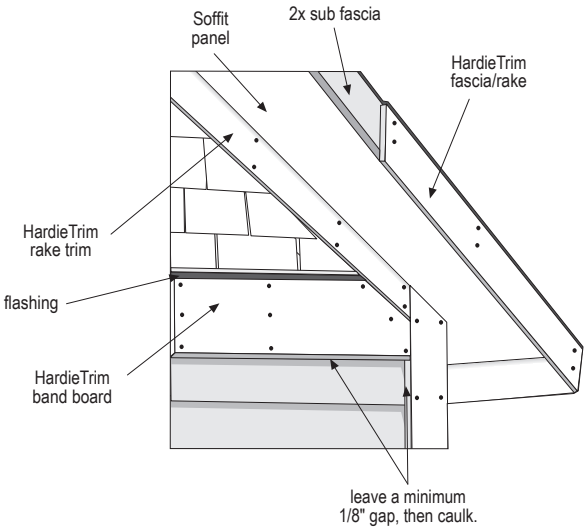
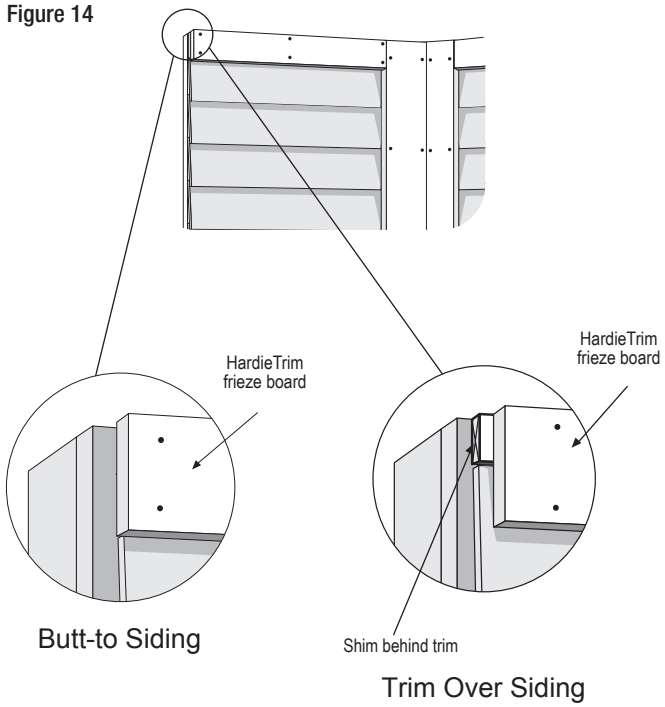


Figure 14



FASCIA

For fascia applications, a flashing is required over top of the fascia (fig. 15).

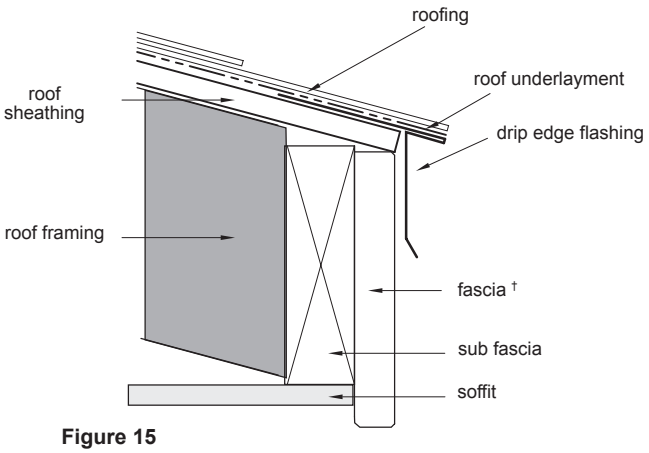


Figure 15

† Ensure adequate fastening of fascia

BAND BOARD

For band board applications, a flashing is required over the trim (fig. 16).

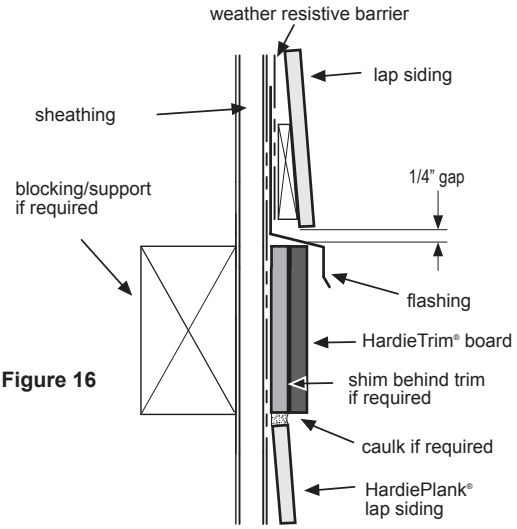


Figure 16

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

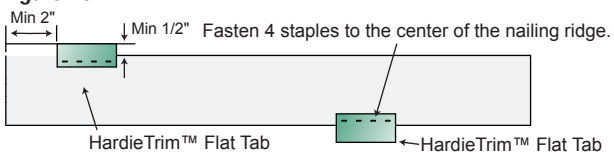
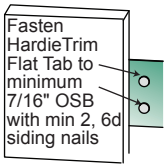


Figure 20



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 corrosion resistant 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)

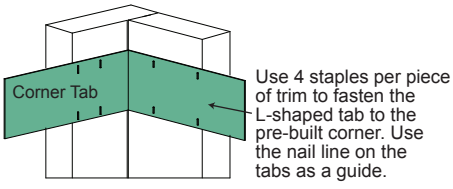


Figure 21

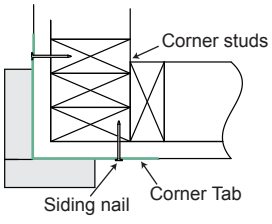


Figure 22

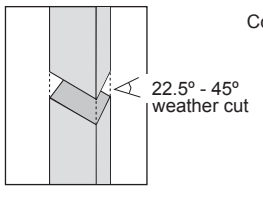


Figure 23

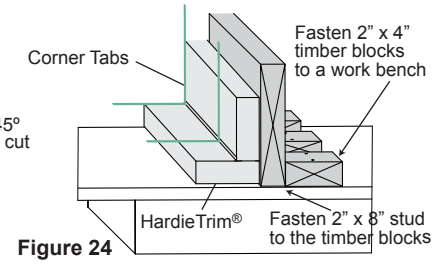


Figure 24

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.

Figure 26

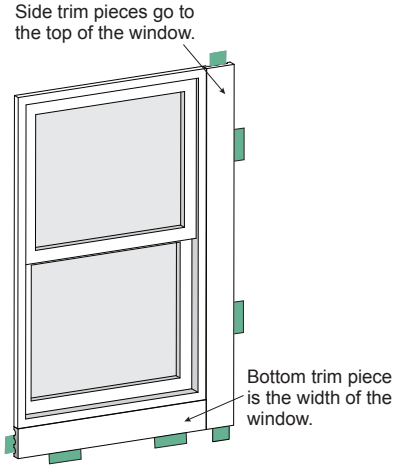
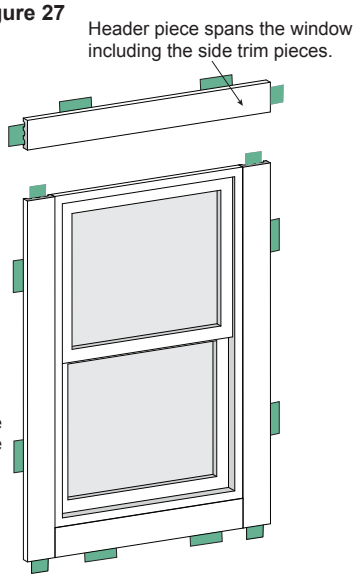


Figure 27



NOTE: Follow your window/door manufacturers installation instructions.

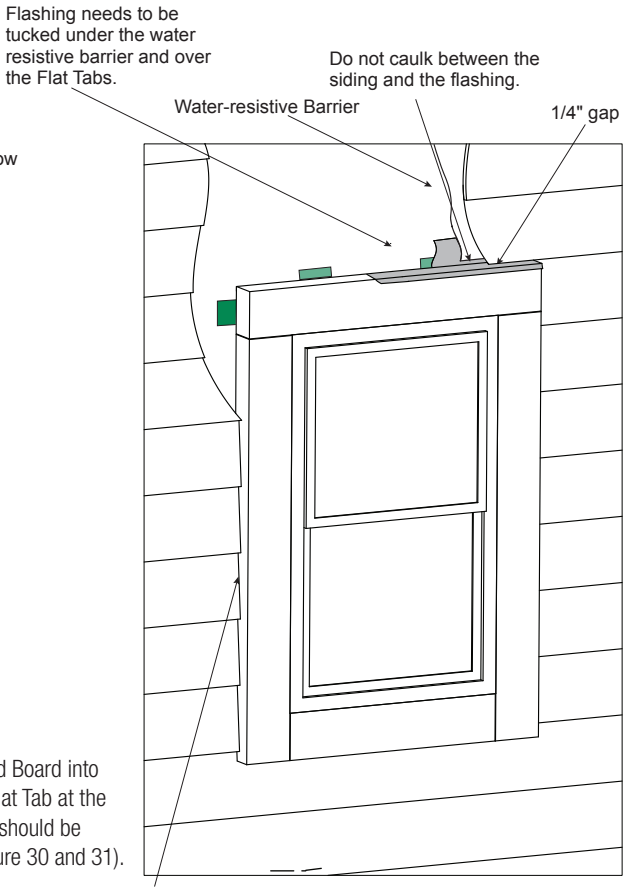


Figure 28

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).

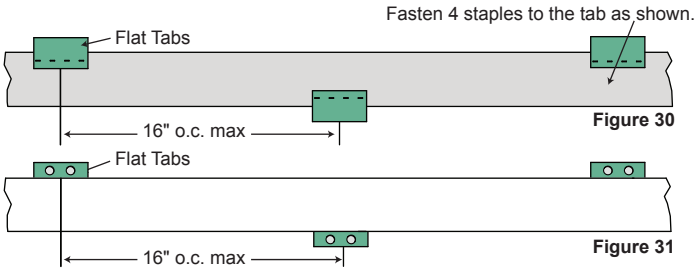
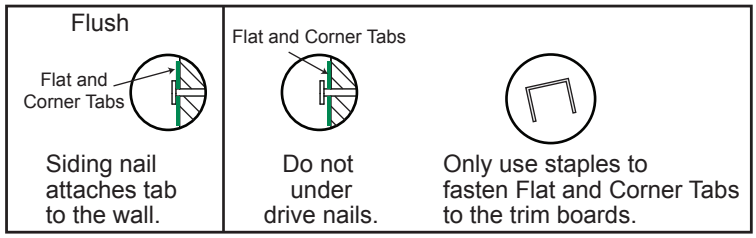


Figure 30

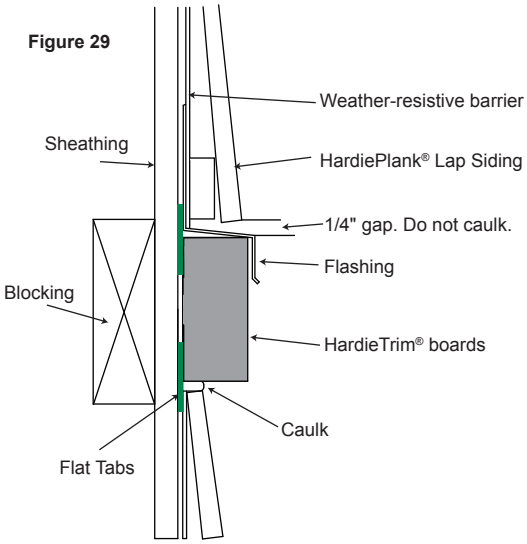
Figure 31

Figure 32



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

Figure 29



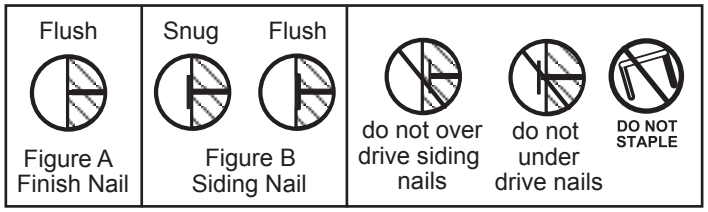
GENERAL FASTENING REQUIREMENTS

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."

- Drive fasteners perpendicular to trim and framing.
- Fastener heads should fit snug against siding (no air space). (fig. B)
- Do not over-drive nail heads or drive nails at an angle.
- If nail is countersunk, caulk 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.**

PNEUMATIC FASTENING

HardieTrim® Trim 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). When using siding nails set air pressure so that the fastener is driven snug with the surface of the siding (fig. B). 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).



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.

PAINTING

DO NOT use stain 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

- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up paint should be used sparingly. If large areas require touch-up, replace the damaged area with new HardieTrim® boards 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.

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 or oil/alkyd based paints
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature

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 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.

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