HardieShingle® Siding Product Description

HardieShingle® siding is fiber-cement shingle siding for sidewall applications. HardieShingle siding is available as straight-edge panels or staggered-edge panels 48 in. long by 16 in. high. HardieShingle panels also come as decorative half-round shingles. For smaller coverage areas, individual shingles are also available in 4.2 in., 5.5 in, 6.75 in, 7.25 in & 10 in widths. Please see your James Hardie dealer for local availability of these products.

HardieShingle siding is available as a prefinished James Hardie product 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.

Half-Round

Staggered Edge Panel

Straight Edge Panel

Individual Shingles

Installation of HardieShingle® Siding

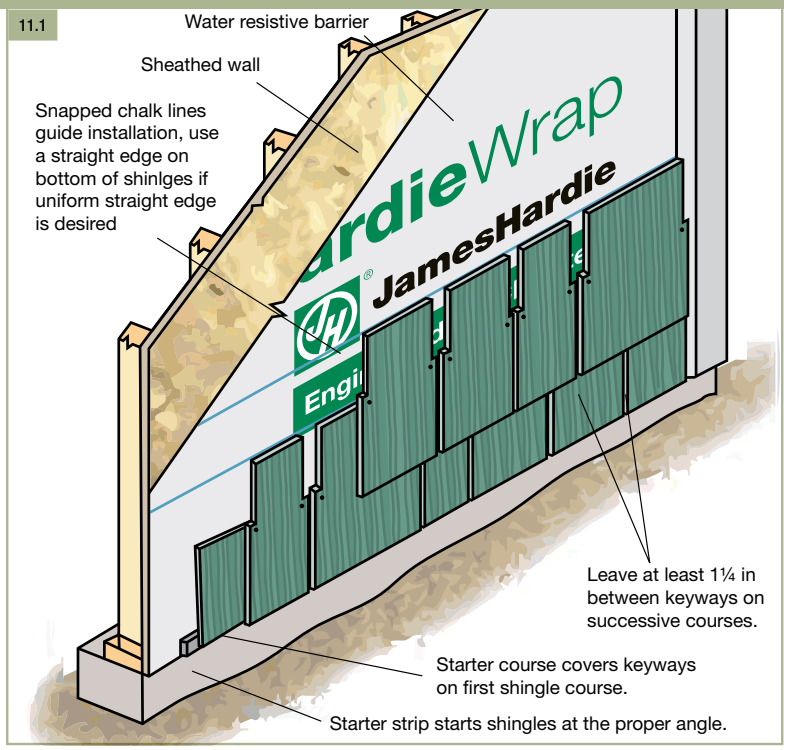
INDIVIDUAL SHINGLES

Like conventional wood-shingle siding, HardieShingle® siding requires the use of a starter strip and a starter course before installing the first full course of shingle panels or individual shingles. The starter strip sets the initial shingles at the proper angle and the starter course provides solid backing and keyway coverage for the first shingle course.

1. The starter strip should be installed over the water-resistive barrier. Starter strips can be made by ripping 11/4 in. lengths from full or partial planks of HardiePlank® siding.
2. Use HardiePlank 8¼ in. lap siding for the starter course.
3. Snap a level chalk line 8¼ in up from the bottom edge of the starter strip.
4. Position the top of the starter course along the chalk line, use a straight edge on bottom of shingles if uniform straight edge is desired
5. The first course of shingle siding is then installed even with bottom edge of the starter course.

When installing individual HardieShingles®, be sure to space shingles no more than ¼ in apart. Spaces between shingles should not be within 1½ in. of the spaces in the courses above and below.

11.1



TIP: For the best appearance, apply shingle widths in a random manner to avoid creating a repeat pattern. Pre-planning of each course is recommended to aid appearance and to avoid stacked seams.

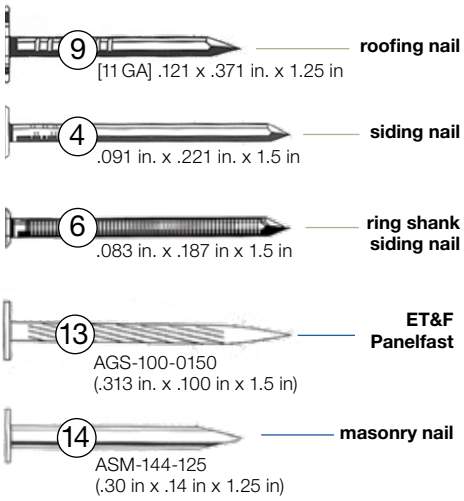
TIP: Stainless steel fasteners are recommended when installing James Hardie products.

HARDIESHINGLE SIDING FASTENER SPECIFICATIONS

The Fastener Specifications table shows fastener options for a variety of different nailing substrates. Please refer to the applicable ESR report online (see back page) to determine which fastener meets your wind load design criteria.

Fastening Substrate		Approved Fastener
Individual Shingles	Minimum 15/32 in. thick plywood	9
	Minimum 7/16 in OSB Sheathing	4
HardieShingle Panels	16 in or 24 in O.C. wood studs	6
	Directly to minimum 7/16 in thick OSB	
Individual and Shingle Panels	16 in or 24 in O.C. steel studs	13
Direct to Masonary		14

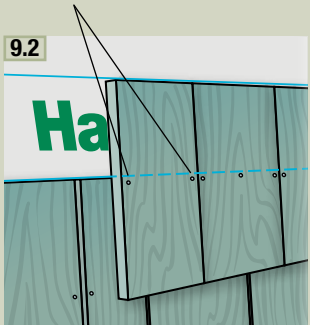
Fastening Types



Corrosion-resistant siding nails 1¼ in. long should be used to apply individual HardieShingles® to minimum 7/16 in. OSB rated sheathing. Position nails ½ in. to 1 in. from the side edges of the shingles and 8 ½ in. to 9 in up from the bottom edge of the shingle.

2 nails per shingle on 4.2 in., 5.5 in., 6.75 in., 7.25 in., and 10 in. shingles

9.2



Installation of HardieShingle® Siding (cont.)

HARDIESHINGLE® PANELS

For HardieShingle® panels start at one end and work across the wall.

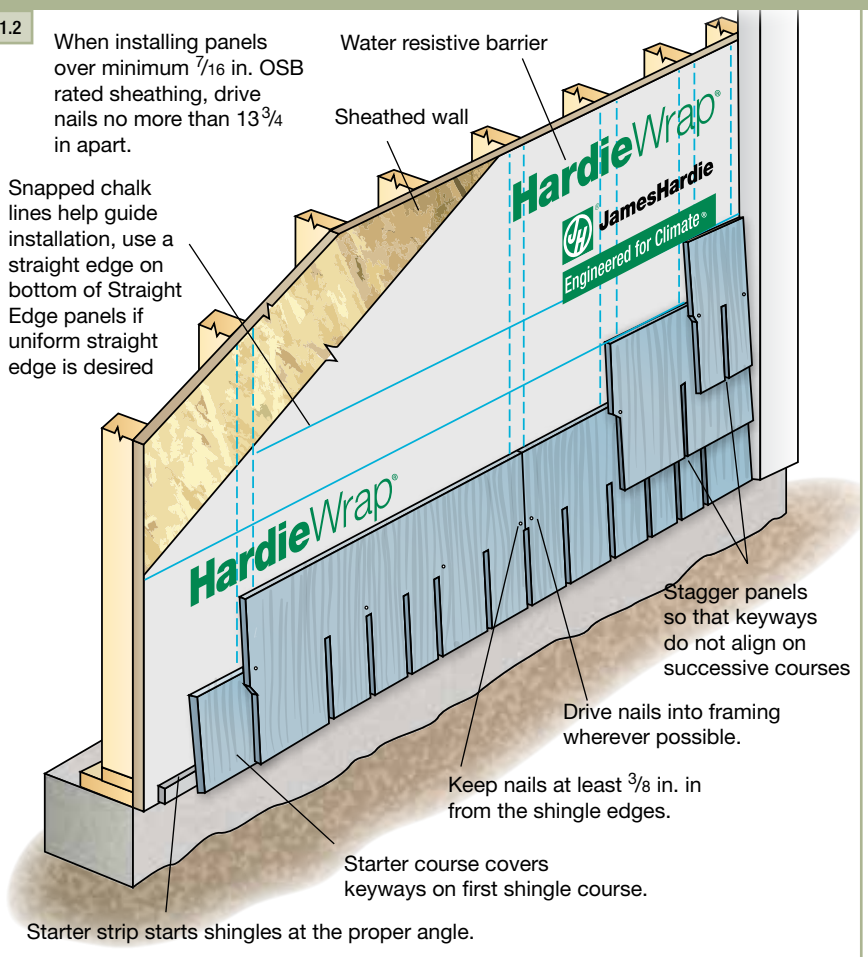
1. Measure and trim the first panel to make sure the end of the panel falls over framing.

2. Using the chalk line as a guide along the panel top edge. For straight edge panels align bottom panel edges to maintain a uniform straight line carefully position the panels and secure with suitable fasteners and spacing for your particular application as noted in the ESR 1844 & 2290 Report.

3. Align the bottom edges of the trim and the siding for the best appearance. Where the panel begins at a corner board or at door or window casings, cut the upper portion of the panel back even with the edge of the keyway.

4. Where the siding meets the HardieTrim® board, leave a 1/8 in. gap between the siding and trim. Install HardieShingle panels with joints in moderate contact.

11.2

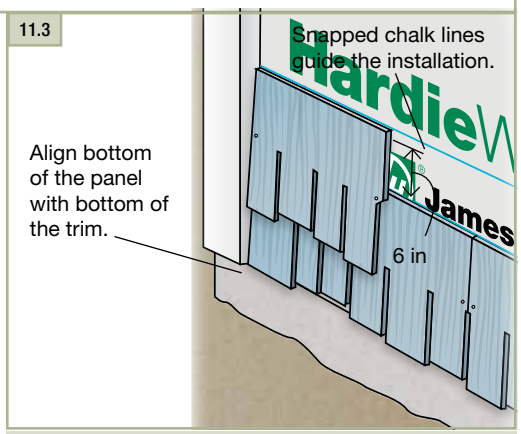


5. Measure and cut the first panel for the second course of HardieShingle panel so that it lands on the stud before the panel on the first course. Use the cut end to abut the trim.

6. Start the third course with the end of the panel landing on the stud before the second course. Save the cut pieces to use on the other end of the wall.

7. Continue alternating these three lengths up the wall to establish proper positioning of the shingle keyways.

11.3



TIP: A straight edge panel can be used on the bottom course if desired

When installing HardieShingle Staggered Edge panel, measure up 6 in. from the top of the installed panel and make a mark. Make another mark at an equal height on the opposite end of the wall and snap a chalk line between the marks. Align the top of the next course of panel with the chalk line to maintain proper exposures.

Keep the bottom of the siding even with the bottom of the trim. If desired, the trim may extend below the bottom of the siding, but the siding should not hang below the trim. Make sure that clearances above the ground, roof lines and hard surfaces are in accordance with the General Requirements on pages 13-26.

WARNING

James Hardie recommends installing HardieShingle panel over rated wood sheathing.

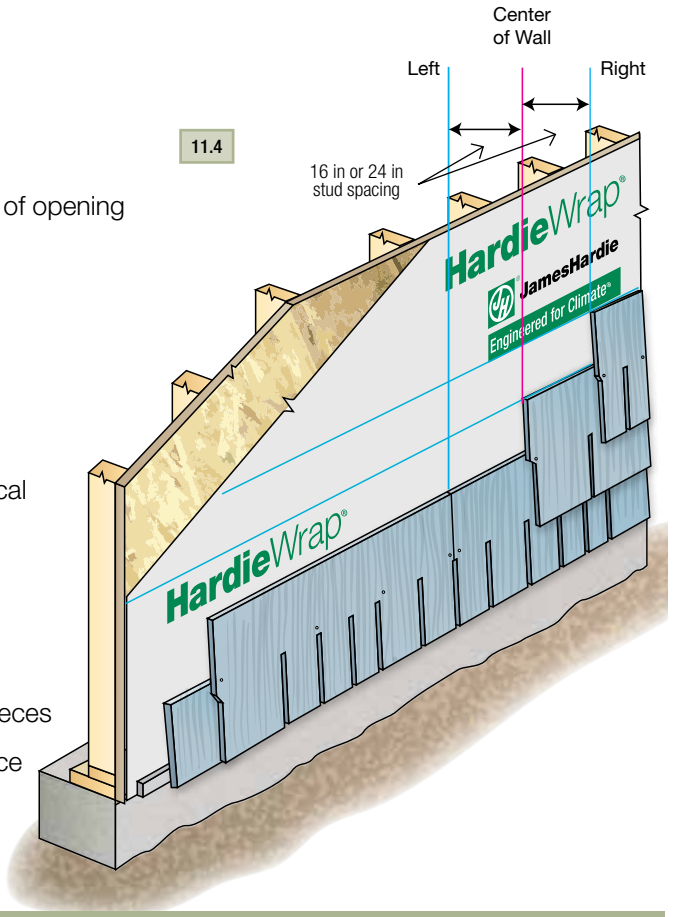
INSTALLING HARDIESHINGLE® PANEL DIRECT TO 7/16 IN SHEATHING

Refer to ESR-2290 for allowable wind loads.

Panel and Individuals may be mixed together to reduce waste and save time.

Straight Wall

1. Always work from center of wall to outside corner trim
2. Make all shingle length cuts at trim, not mid wall
3. Start first panel to left of center
4. If openings exist on wall, locate offset layout on each side of opening
5. Start second row of shingle on centerline of offset layout
6. Start third row of shingle on right line of offset layout
7. Repeat starting panel on remaining rows using Left, Middle, Right layout lines



Gable

1. Layout offset on gable similar to straight wall, except vertical layout lines should be made across the gable face at the offset dimension
2. Utilize three center lines for starting row
3. Start first piece on the left vertical line, left of center
4. Use the additional vertical lines to pre measure finishing pieces
5. Start Second row on the vertical centerline of the gable face
6. Start third row on vertical line to the right of center
7. Repeat starters Left, Middle, Right for remaining courses

HALF-ROUND DECORATIVE SHINGLE PANELS

Half-round shingles are often used for a decorative note above regular shingles, especially in gables.

1. Start the first course from the middle of the run so that half round sections at either end are cut equally.
2. Then start the second course from the trim at one end and cut it so that it lands on the framing one stud away from the course below.
3. Cut the panel to abut the trim at the other end of the course. Make sure keyways are located over the midpoints of the half rounds in the lower course for correct alignment.
4. At the top of the wall, install a frieze board and install shingles up to the bottom edge of the frieze.
5. Top rows of shingles may have to be cut to an appropriate height to maintain consistent exposure top to bottom.

All HardieShingle® siding products can be applied to the gable end of a building following their specific installation instructions. But special care should be taken when installing half-round panels due to their symmetrical nature.

Installation of HardieShingle® Siding (cont.)

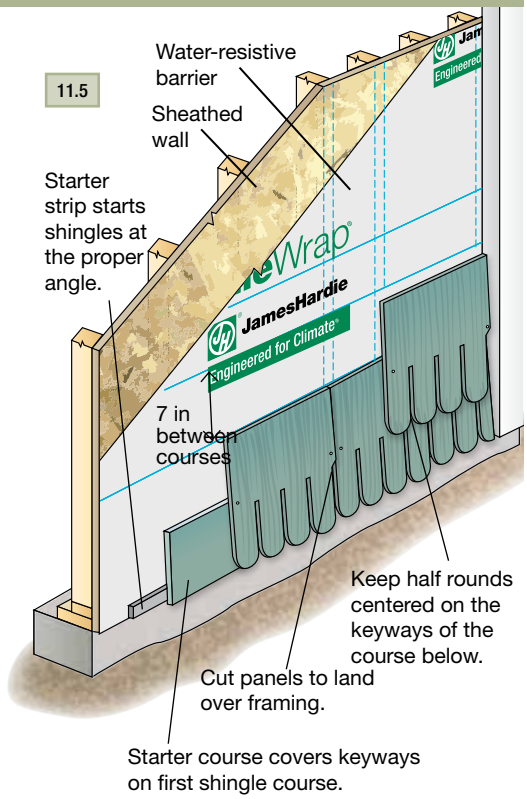
HALF-ROUND DECORATIVE SHINGLE PANELS (CONTINUED)

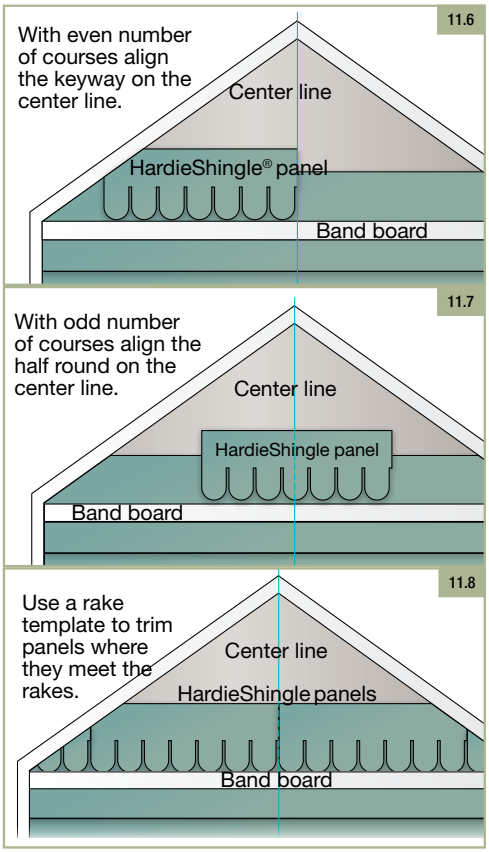
For best appearance, half-round shingle panel installations on gable ends should end with a single round shingle at the gable peak. To make this happen, calculation of the actual number of courses is necessary. Follow the simple steps below to achieve this effect.

1. Measure the horizontal width of the gable being sided and locate the center of the gable. Using a level or chalk line, draw a line from the gable peak to the center mark.
2. Measure the entire height of the gable area to be sided above the band board.
3. Divide the total height of the gable by 7. (Half round shingles have an exposure of 7 in. and this figure is the number of courses to be installed.
4. If the answer is an even number (example: 70 in divided by 7 = 10 courses), center the first panel course on a keyway on the vertical center line (fig. 9.7). If the answer is an odd number, (example: 77 in. divided by 7 = 11 courses) center the first course on the center of a half-round shingle (fig. 9.8).
5. Using this planning method, the final piece at the peak should be a centered shingle.

To install the first course of half-round panel in a gable:

1. position the first piece of panel on the gable centerline marked earlier. The panel may be moved left or right to make the edge lands on a stud as long as the shingle face or keyway is centered (depending on the number of courses needed as discussed above).
2. Drive nails approximately ¼ in. above the top of every other keyway. Avoid driving nails between the keyways because the heads may be visible through the keyways of subsequent courses.
3. Complete the installation on the left and right sides using the rake-angle template to cut the proper rake angle. Leave a 1/8 in. gap between the siding and trim boards.
4. Use the rake angle template to trim back the start panel for the 2nd course. Install the 2nd and following courses the same way. At the peak of the gable, face nail the final piece with a finish nailer.





HardieShingle® Siding

SINGLE FAMILY INSTALLATION REQUIREMENTS

EFFECTIVE DECEMBER 2019

IMPORTANT: FAILURE TO FOLLOW JAMES HARDIE WRITTEN INSTALLATION INSTRUCTIONS AND COMPLY WITH APPLICABLE BUILDING CODES MAY VIOLATE LOCAL LAWS, AFFECT BUILDING ENVELOPE PERFORMANCE AND MAY AFFECT WARRANTY COVERAGE. FAILURE TO COMPLY WITH ALL HEALTH AND SAFETY REGULATIONS WHEN CUTTING AND INSTALLING THIS PRODUCT MAY RESULT IN PERSONAL INJURY. BEFORE INSTALLATION, CONFIRM YOU ARE USING THE CORRECT HARDIEZONE® PRODUCT INSTRUCTIONS BY VISITING HARDIEZONE.COM OR CALL 1-866-942-7343 (866-9-HARDIE)

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 planks 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 airflow blows dust away from the user and others near the cutting area.
2. Cut using one of the following methods:
   - a. Best: Circular saw equipped with a HardieBlade® saw blade and attached vacuum dust collection system. Shears (manual, pneumatic or electric) may also be used, not recommended for products thicker than 7/16 in.
   - b. Better: Circular saw equipped with a dust collection feature (e.g. Roan® saw) and a HardieBlade saw blade.
   - c. Good: Circular saw equipped with a HardieBlade saw blade.

INDOORS

DO NOT grind or cut with a power saw indoors. Cut using shears (manual, pneumatic or electric) or the score and snap method, not recommended for products thicker than 7/16 in.

- DO NOT dry sweep dust; use wet dust suppression or vacuum to collect dust.
- For maximum dust reduction, James Hardie recommends using the "Best" cutting practices. Always follow the equipment manufacturer's instructions for proper operation.
- For best performance when cutting with a circular saw, James Hardie recommends using HardieBlade® saw blades.
- Go to jameshardiepros.com for additional cutting and dust control recommendations.

IMPORTANT: The Occupational Safety and Health Administration (OSHA) regulates workplace exposure to silica dust. For construction sites, OSHA has deemed that cutting fiber cement with a circular saw having a blade diameter less than 8 inches and connected to a commercially available dust collection system per manufacturer's instructions results in exposures below the OSHA Permissible Exposure Limit (PEL) for respirable crystalline silica, without the need for additional respiratory protection.

If you are unsure about how to comply with OSHA silica dust regulations, consult a qualified industrial hygienist or safety professional, or contact your James Hardie technical sales representative for assistance. James Hardie makes no representation or warranty that adopting a particular cutting practice will assure your compliance with OSHA rules or other applicable laws and safety requirements.

GENERAL REQUIREMENTS:

- HardieShingle panels can be installed over braced wood or steel studs, 20 gauge (33 mils) minimum to 16 gauge (54 mils) maximum, spaced a maximum of 24 in o.c. or directly to minimum 7/16 in thick OSB sheathing. See General Fastening Requirements. Irregularities in framing and sheathing can mirror through the finished application. Correct irregularities before installing siding.
- Information on installing James Hardie products over non-nailable substrates such as gypsum, foam, etc. can be located in JH Tech Bulletin 19 at www. jamehardie.com
- 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. 1 thru 14 must be followed.
- Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6in in the first 10ft.
- Do not install James Hardie products, such that they may remain in contact with standing water.
- HardieShingle panels may be installed on vertical wall applications only.
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- James Hardie Building Products provides installation/wind load information for buildings with a maximum mean roof height of 85 feet. For information on installations above 60 feet, please contact JH technical support.

JamesHardie™

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

CLEARANCE AND FLASHING REQUIREMENTS

Figure 1
Roof to Wall

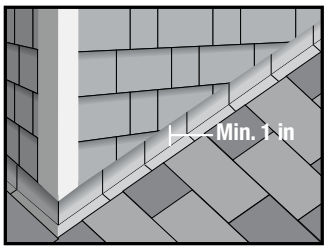


Figure 2
Horizontal Flashing

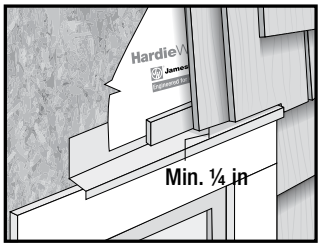


Figure 3
Kickout Flashing

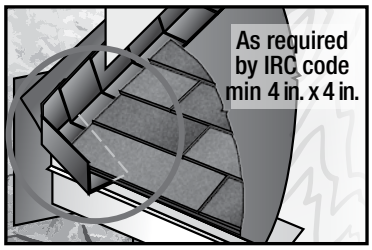


Figure 4
Slabs, Paths, Steps to Siding

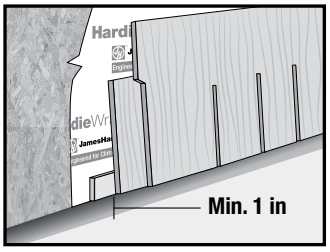


Figure 7
Deck to Wall

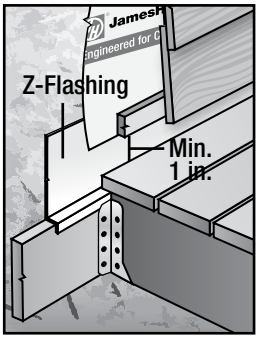


Figure 8
Ground to Siding

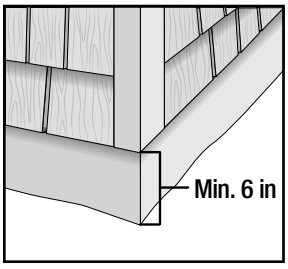


Figure 9
Gutter to Siding

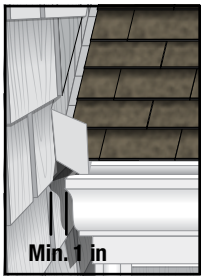


Figure 10
Sheltered Areas

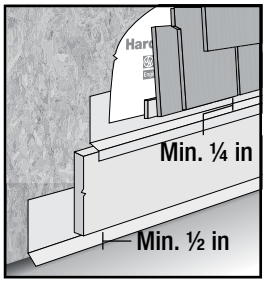


Figure 11
Mortar/Masonry

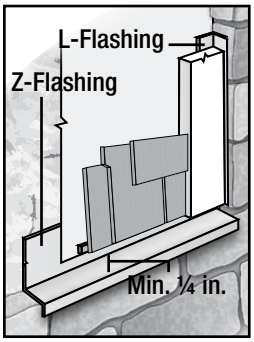


Figure 12
Drip Edge

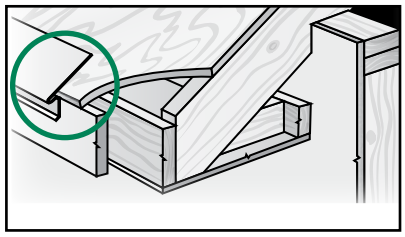


Figure 13
Block Penetration
(recommended for HZ10)

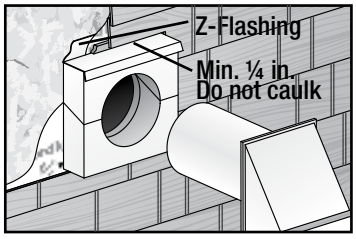
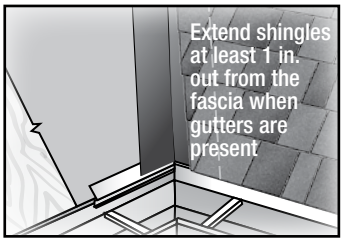


Figure 14
Valley/Shingle Extension



TRIM CONSIDERATION:

Minimum 1 in trim thickness is needed as Panels stack at a depth of roughly 15/16 in for the 7 in reveal. If additional trim depth is desired, you can place a spacer under the trim (Fig. 15C & 15D).

Figure 15A

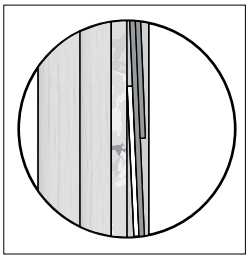


Figure 15B

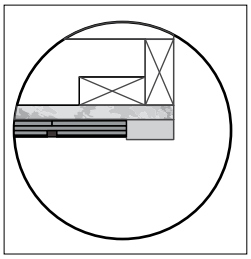


Figure 15C

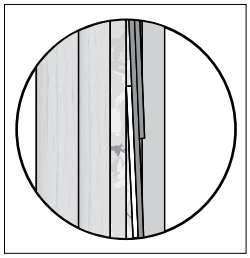
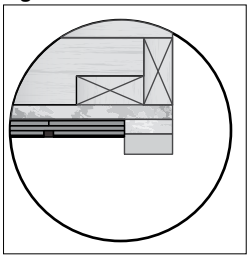


Figure 15D



GABLE INSTALLATION:

Installation over sheathing is recommended (Required for Individuals) for gables.*

1) Find the center stud of your of your Gable and snap a caulk line down
2) Measure out 16 in* to both the left and the right of the center line and snap a caulk line
3) Measure up 2 in if you are off a roof line or ¼ in if you are starting above a band board
4) Set the bottom of your 1 ¼ in starter strip at that line
5) Place your 8 ¼ in Starter Course -bottom level with the bottom of the starter strip
6) Set your first row of Shingle - starting the first piece at the vertical line left of center
   (If you are using staggered edged shingles Trim down the first row to the shortest shingle length)
7) Drive nails approximately ¼ in above Key ways 5 per full panel Center Nail can be either one of the keyways.
   (Stay by keyway to avoid shiners) (EX1) Blue Dots show nail placement
8) Measure up 7 in with straight and 6 in with Staggered edge and snap a caulk line to get your proper exposure
9) The second row will start at the center line
10) The Third row will start at the line right of center
11) As you work your way up the gable make sure you Keep your Cut Pieces you will use the pieces on the edges of the gable (EX2)
12) Edges Gable butting into trim leave a 1/8 in Gap (for house movement and Caulking)
13) Make sure to sure siding nails on the small pieces on the edges (Do not use a trim nail to install!)

Figure 16

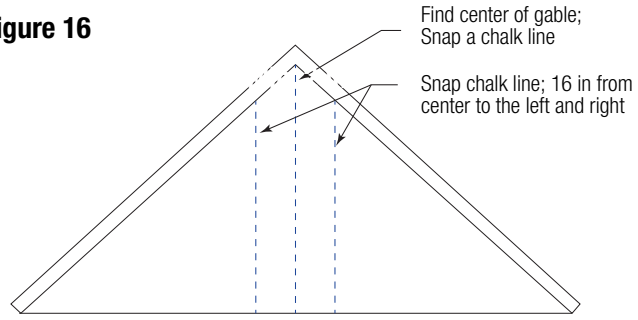


Figure 17

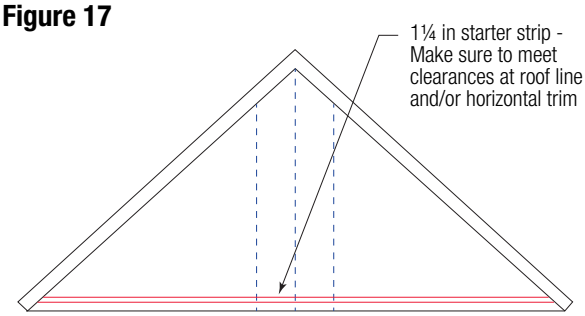


Figure 18

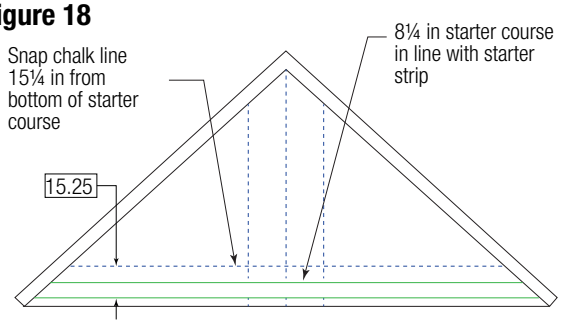


Figure 19

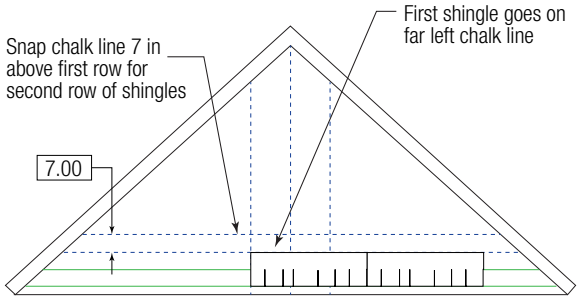


Figure 20

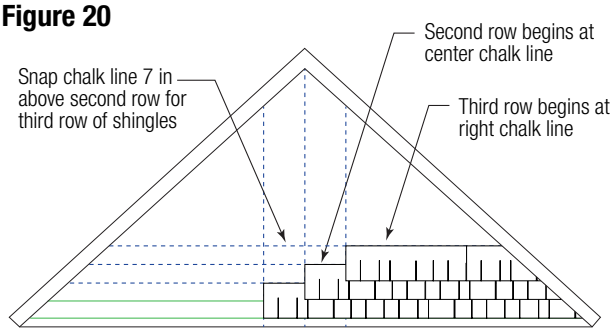
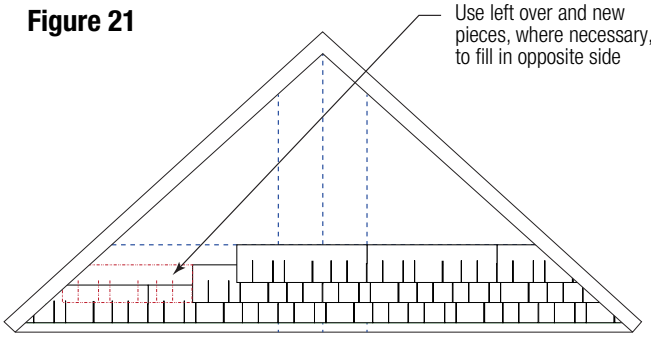


Figure 21



*Panels can also be installed direct to stud up to 24 in OC.

Note: Snapped chalk lines help guide installation, when installing straight edge panels or Individual shingles use a straight edge on bottom edges if uniform straight edge is desired.

HARDIESHINGLE STAGGERED EDGE PANELS INSTALLATION

Fastener Requirements

0.083 in x 0.187 in HD x 1 1/2 in long ringshank nails are used for fastening HardieShingle® Staggered Edge Panels to both framing and to 7/16 in thick APA rated sheathing.

HardieShingle® Staggered Edge Panel Installation

Install HardieShingle® panels with joints butted in moderate contact. Due to overlapping of the joints, caulk is not required except where panels abut trim boards. (fig. 22 & 24). Ensure keyways do not line up on subsequent courses.

1) Install a 1-1/4 in starter strip, then install a 8-1/4 in wide HardiePlank® lap siding starter course.

2) Place first panel so that panel end centers over stud. Trim panel as needed. Butt the cut end into trim as shown (figs 22 & 24). When installing over a band board or any horizontal surface, leave 1/4 in gap between bottom of siding and flashing.

3) Secure panel, leaving 1/8 in gap for caulk at trim and continue the course along the wall.

4) Start the second course, by removing the equivalent of one full stud cavity (16 in or 24 in OC), again abutting the cut end into the trim (figs 22 & 24). This is to prevent pattern repetition. Repeat step 3.

5) Start the third course, by removing the equivalent of two full stud cavities (figs 22 & 24) and repeat step 3.

6) Continue up the wall repeating steps 2 through 6 until desired height is reached.

Note: For aesthetic purposes you may trim the bottom of the panel to create a straight edge. If doing so, ensure all cuts ends are properly sealed and painted (fig 23)

Figure 23

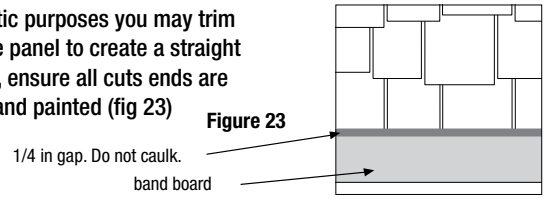
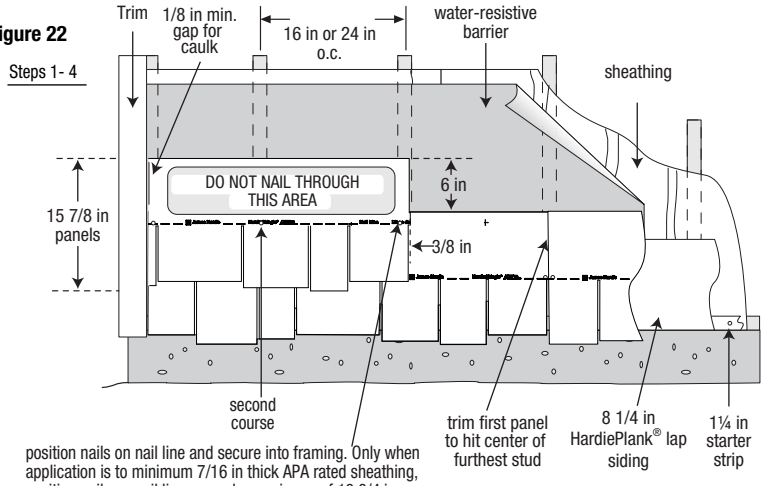


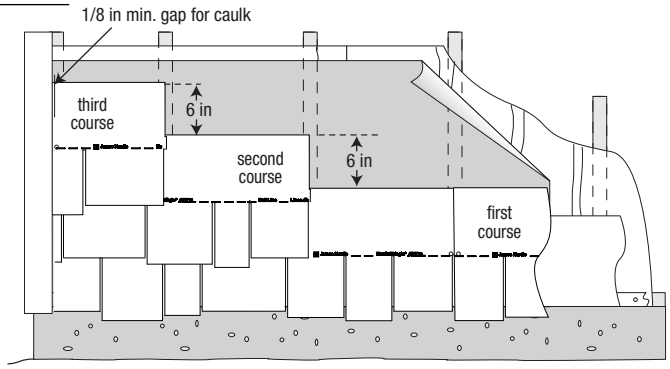
Figure 22

Steps 1- 4



position nails on nail line and secure into framing. Only when application is to minimum 7/16 in thick APA rated sheathing, position nails on nail line spaced a maximum of 13 3/4 in o.c. Allow 3/8 in from panel edges.

Steps 5 & 6



HARDIESHINGLE STAGGERED EDGE PANEL COVERAGE

Panels for sidewall applications are available in 48 in lengths. Pieces needed for one square (100sq.ft.) of product coverage = approximately 50, based on a maximum 6 in exposure from the top edge of HardieShingle panels in subsequent courses (refer to Figure 13).

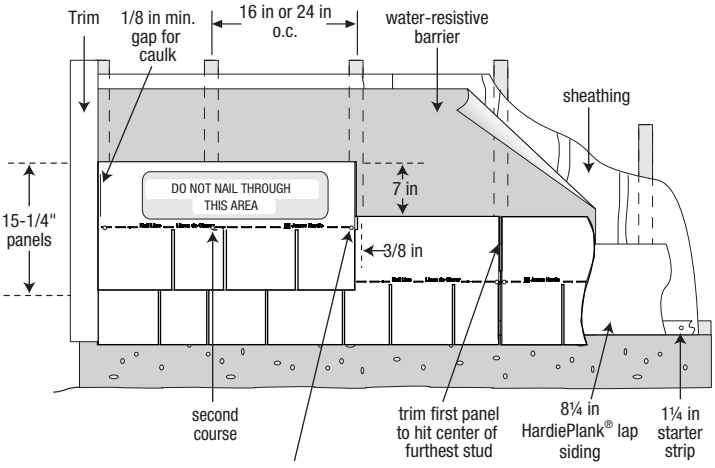
7 IN EXPOSURE HARDIESHINGLE STRAIGHT EDGE PANELS INSTALLATION (For 5 in exposure product please go to page 7)

Maximum Exposure of 7 in

REFER TO STAGGERED EDGE INSTRUCTIONS ABOVE

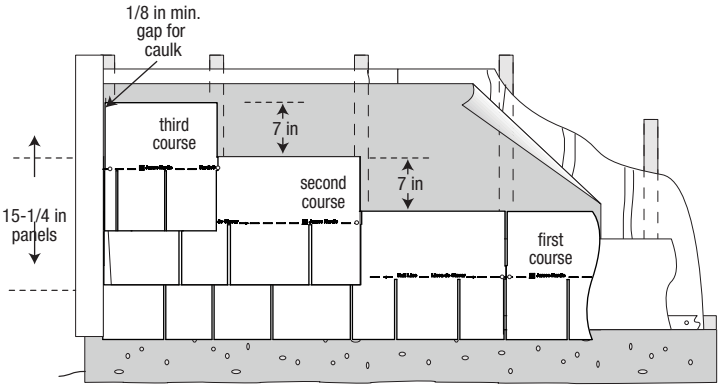
Steps 1 - 4

Figure 24



position nails on nail line and secure into framing. Only when application is to minimum 7/16 in thick APA rated sheathing, position nails on nail line spaced a maximum of 13 3/4 in o.c. Allow 3/8 in from panel edges.

Steps 5 & 6



HARDIESHINGLE STRAIGHT EDGE PANEL COVERAGE

Panels for sidewall applications are available in 48 in lengths. Pieces needed for one square (100sq.ft.) of product coverage = approximately 43, based on maximum 7 in exposure.

HARDIESHINGLE INDIVIDUAL SHINGLE INSTALLATION

HardieShingle Individual Shingles must be installed with the widest part of the shingle placed downwards and directly to minimum 7/16 in thick sheathing.

Fastener Requirements

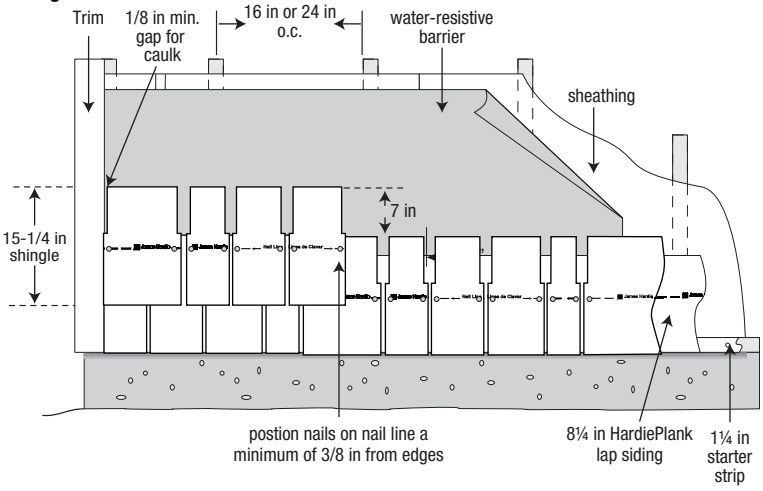
0.091 in x 0.221 in HD x 1 1/2 in or 0.121 in x 0.371 in HD x 1 1/4 in long corrosion resistant siding nails are used for fixing HardieShingle siding to 7/16 in thick APA rated sheathing.

HardieShingle Individual Shingle Installation

Due to overlapping of the joints, caulk is not required except where panels butt trim boards. Space shingles a maximum 1/4 in apart and leave a minimum lap of 1 1/2 in between successive courses (fig. 26).

1) Install 1 1/4 in starter strip and a 8 1/4 in wide HardiePlank siding starter course.
2) Install first shingle from the end abutting trim. Install widest part of shingle placed downwards. (fig. 25).
3) Secure shingle, leaving a 1/8 in gap for caulk at trim and continue the course along the wall.
4) Start the second course, leaving a minimum lap of 1 1/2 in between successive courses, again from the end abutting the trim. Repeat step 3.
5) Continue up the wall repeating steps 2 through 5 until desired height is reached.

Figure 25

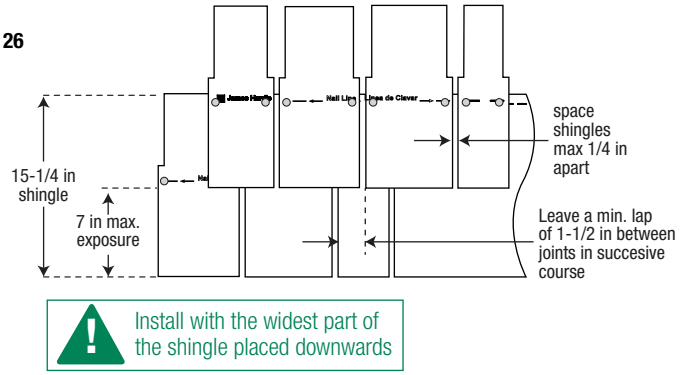


HARDIESHINGLE INDIVIDUAL SHINGLE COVERAGE

Individual Shingles for sidewall applications are available in assorted widths as listed below. Bundles needed for one square (100 sq. ft.) of product coverage:

Shingle Width	Number of Bundles	Pieces per Bundle
4-3/16 in	3	15
5-1/2 in	6	15
6-3/4 in	3	15
7-1/4 in	6	15
10 in	3	15

Figure 26



HARDIESHINGLE HALF-ROUND PANELS INSTALLATION

Fastener Requirements

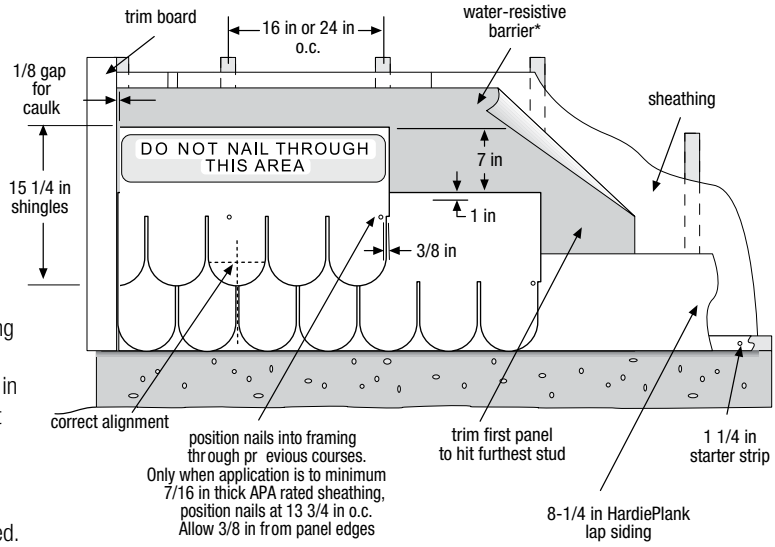
0.083 in x 0.187 in HD x 1 1/2 in long ringshank nails are used for fastening HardieShingle Half-Round Panels to both framing and to 7/16 in thick APA rated sheathing.

HardieShingle Half-Round Panel Installation

Install HardieShingle panels with joints butted in moderate contact. Due to overlapping of the joints, caulk is not required except where panels abutt trim boards. (fig. 27). Ensure keyways do not line up on subsequent courses.

1) Install a 1-1/4 in starter strip, then install a 8-1/4 in wide HardiePlank lap siding starter course.
2) Place first panel so that panel end centers over stud. Trim panel as needed. Butt the cut end into trim as shown (figs 18). When installing over a band board or any horizontal surface, leave 1/4 in gap between bottom of siding and flashing.
3) Secure panel, leaving 1/8 in gap for caulk at trim and continue the course along the wall.
4) Start the second course, by removing the equivalent of one full stud cavity (16 in or 24 in OC), again abutting the cut end into the trim (fig 27). This is to prevent pattern repetition. Repeat step 3.
5) Start the third course, by removing the equivalent of two full stud cavities (figs 28 & 30) and repeat step 3.
6) Continue up the wall repeating steps 2 through 6 until desired height is reached.

Figure 27



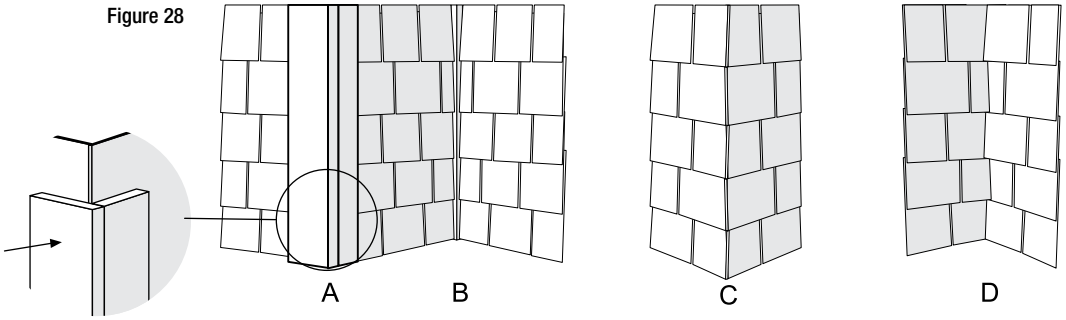
HARDIESHINGLE HALF-ROUND PANEL COVERAGE

Panels for sidewall applications are available in 48 in lengths. Pieces needed for one square (100 sq. ft.) of product coverage=43 pieces with 7 in exposure.

CORNER DETAILS

A. Panels butted against corner boards.
B. Panels butted against square wood strip on inside corner, flashing behind.
C. Laced outside corner.
D. Laced inside corner.

Figure 28



WINDOWS AND DOORS

Building wall components such as windows, doors and other exterior wall penetrations shall be installed in accordance with the component manufacturer's written installation instructions and local building codes. Where windows or doors are installed, continue the application of siding as if the wall is complete. Triming for the opening and using the resulting piece may throw off the spacing above the break.

GENERAL FASTENING REQUIREMENTS

Refer to the applicable ESR report online to determine which fastener meets your wind load design criteria

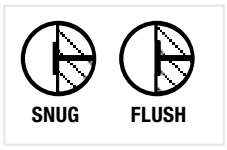
Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable but may exhibit premature corrosion. James Hardie recommends the use of quality, hot-dipped galvanized nails. James Hardie is not responsible for the corrosion resistance of fasteners. Stainless steel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

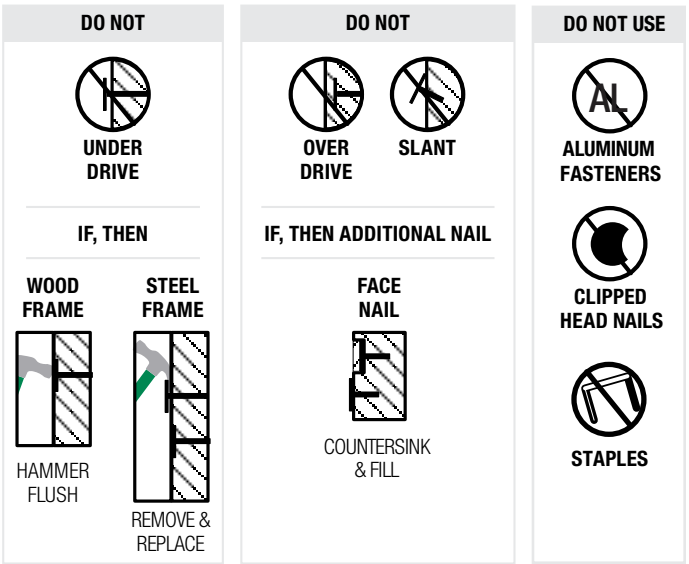
Manufacturers of ACQ and CA preservative-treated wood recommend spacer materials or other physical barriers to prevent direct contact of ACQ or CA preservative-treated wood and aluminum products. Fasteners used to attach HardieTrim Tabs to preservative-treated wood shall be of hot dipped zinc-coated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

- Consult applicable product evaluation or listing for correct fasteners type and placement to achieve specified design wind loads.
- NOTE: Published wind loads may not be applicable to all areas where Local Building Codes have specific jurisdiction. Consult James Hardie Technical Services if you are unsure of applicable compliance documentation.
- Drive fasteners perpendicular to siding and framing.
- Fastener heads should fit snug against siding (no air space).
- NOTE: Whenever a structural member is present, HardiePlank should be fastened with even spacing to the structural member. The tables allowing direct to OSB or plywood should only be used when traditional framing is not available.

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

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.
Note: some caulking manufacturers do not allow "tooling".

PAINTING

DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products. Factory-primed James Hardie products must be painted within 180 days of installation. 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 HardiePlank® lap siding with ColorPlus® Technology.
- Laminate sheet must be removed immediately after installation of each course.
- 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:

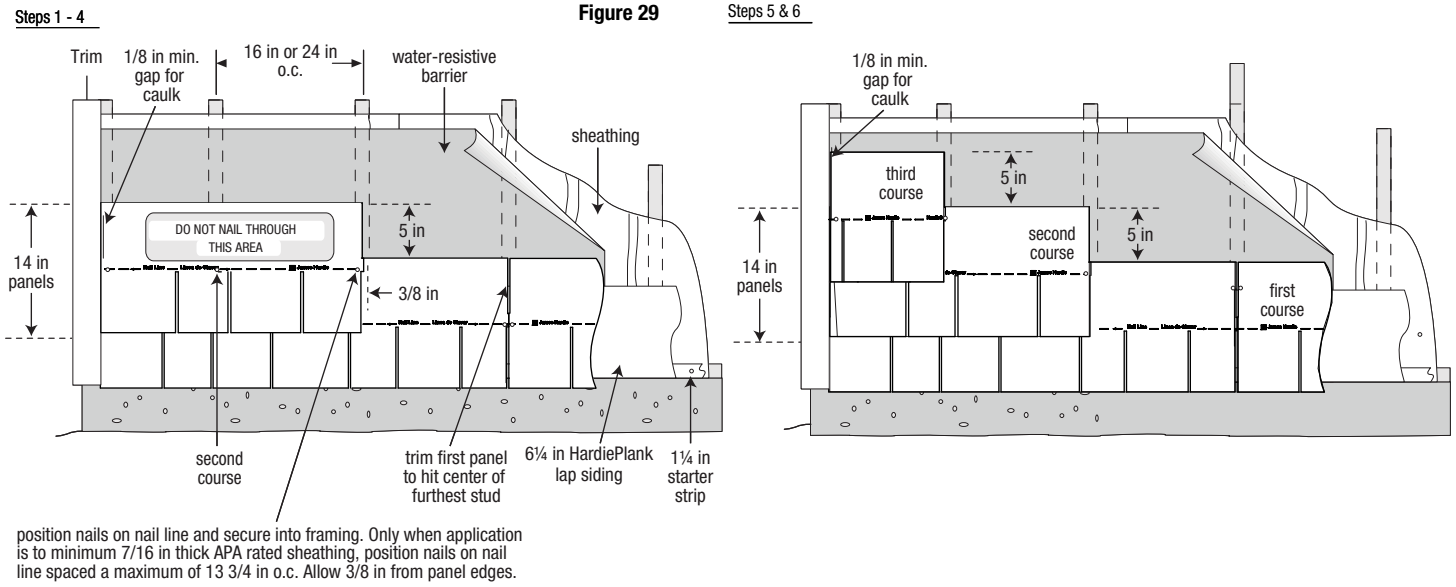
- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written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

5 IN EXPOSURE HARDIESHINGLE® STRAIGHT EDGE PANELS INSTALLATION (For 7 in exposure product please go to page 4)

Maximum Exposure of 5 in

REFER TO STAGGERED EDGE INSTRUCTIONS ON PAGE 3

Figure 29



HARDIESHINGLE® STRAIGHT EDGE PANEL COVERAGE

Panels for sidewall applications are available in 48 in lengths. Pieces needed for one square (100sq.ft.) of product coverage = approximately 60, based on maximum 5 in exposure.

HARDIESHINGLE® INDIVIDUAL SHINGLE INSTALLATION

HardieShingle Individual Shingles must be installed with the widest part of the shingle placed downwards and directly to minimum 7/16 in thick sheathing.

Fastener Requirements

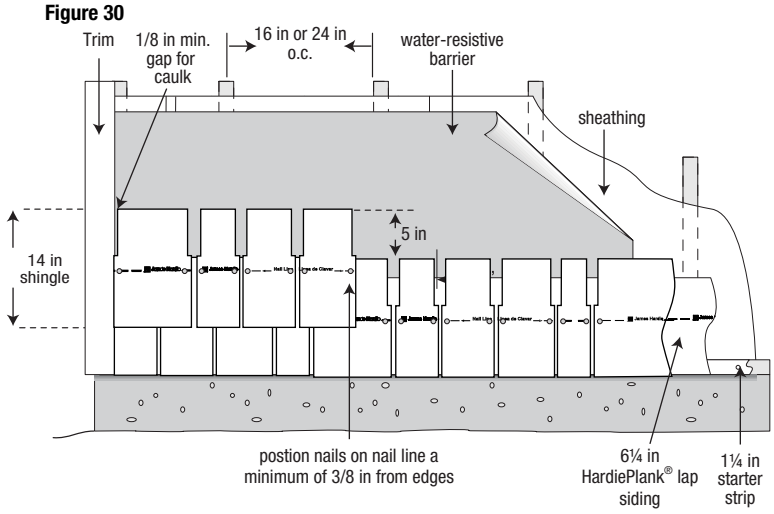
0.091 in x 0.221 in HD x 1 1/2 in or 0.121 in x 0.371 in HD x 1 1/4 in long corrosion resistant siding nails are used for fixing HardieShingle siding to 7/16 in thick APA rated sheathing.

HardieShingle Individual Shingle Installation

Due to overlapping of the joints, caulk is not required except where panels butt trim boards. Space shingles a maximum 1/4 in apart and leave a min. lap of 1 1/2 in between successive courses (fig. 31).

1) Install 1 1/4 in starter strip and a 6 1/4 in wide HardiePlank siding starter course.
2) Install first shingle from the end abutting trim. Install widest part of shingle placed downwards. (fig. 30).
3) Secure shingle, leaving a 1/8 in gap for caulk at trim and continue the course along the wall.
4) Start the second course, leaving a minimum lap of 1 1/2 in between successive courses, again from the end abutting the trim. Repeat step 3.
5) Continue up the wall repeating steps 2 through 5 until desired height is reached.

Figure 30

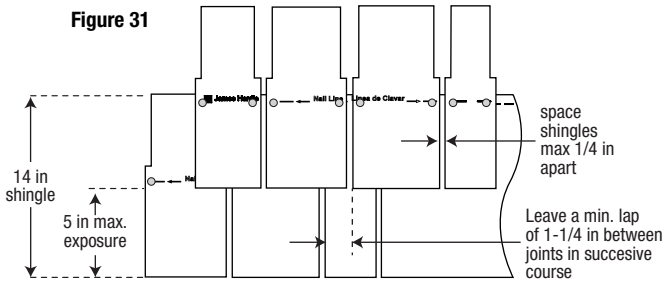


5 IN EXPOSURE HARDIESHINGLE® INDIVIDUAL SHINGLE COVERAGE

Individual Shingles for sidewall applications are available in assorted widths as listed below. Bundles needed for one square (100 sq. ft.) of product coverage:

Shingle Width	Number of Bundles	Pieces per Bundle
3-1/2 in	3	20
4-1/2 in	6	20
5-1/2 in	6	20
7 in	6	20
8-3/4 in	3	20

Figure 31



Install with the widest part of the shingle placed downwards

SILICA WARNING

DANGER: May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product. Refer to the current product Safety Data Sheet before use. The hazard associated with fiber cement arises from crystalline silica present in the dust generated by activities such as cutting, machining, drilling, routing, sawing, crushing, or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust. When doing any of these activities in a manner that generates dust you must (1) comply with the OSHA standard for silica dust and/or other applicable law, (2) follow James Hardie cutting instructions to reduce or limit the release of dust; (3) warn others in the area to avoid breathing the dust; (4) when using mechanical saw or high speed cutting tools, work outdoors and use dust collection equipment; and (5) if no other dust controls are available, wear a dust mask or respirator that meets NIOSH requirements (e.g. N-95 dust mask). During clean-up, use a well maintained vacuum and filter appropriate for capturing fine (respirable) dust or use wet clean-up methods - never dry sweep.

WARNING: This product can expose you to chemicals including respirable crystalline silica, which is known to the State of California to cause cancer. For more information go to P65Warnings.ca.gov.

RECOGNITION: In accordance with ICC-ES Evaluation Report ESR-2290, HardieShingle® lap siding is recognized as a suitable alternate to that specified in the 2006, 2009, 2012 & 2015 International Residential Code for One and Two-Family Dwellings, and the 2006, 2009, 2012 & 2015 International Building Code. HardieShingle lap siding is also recognized for application in the following: City of Los Angeles Research Report No. 24862, State of Florida Product Approval FL#13192, U.S. Dept. of HUD Materials Release 1263f, Texas Department of Insurance Product Evaluation EC-23. These documents should also be consulted for additional information concerning the suitability of this product for specific applications.