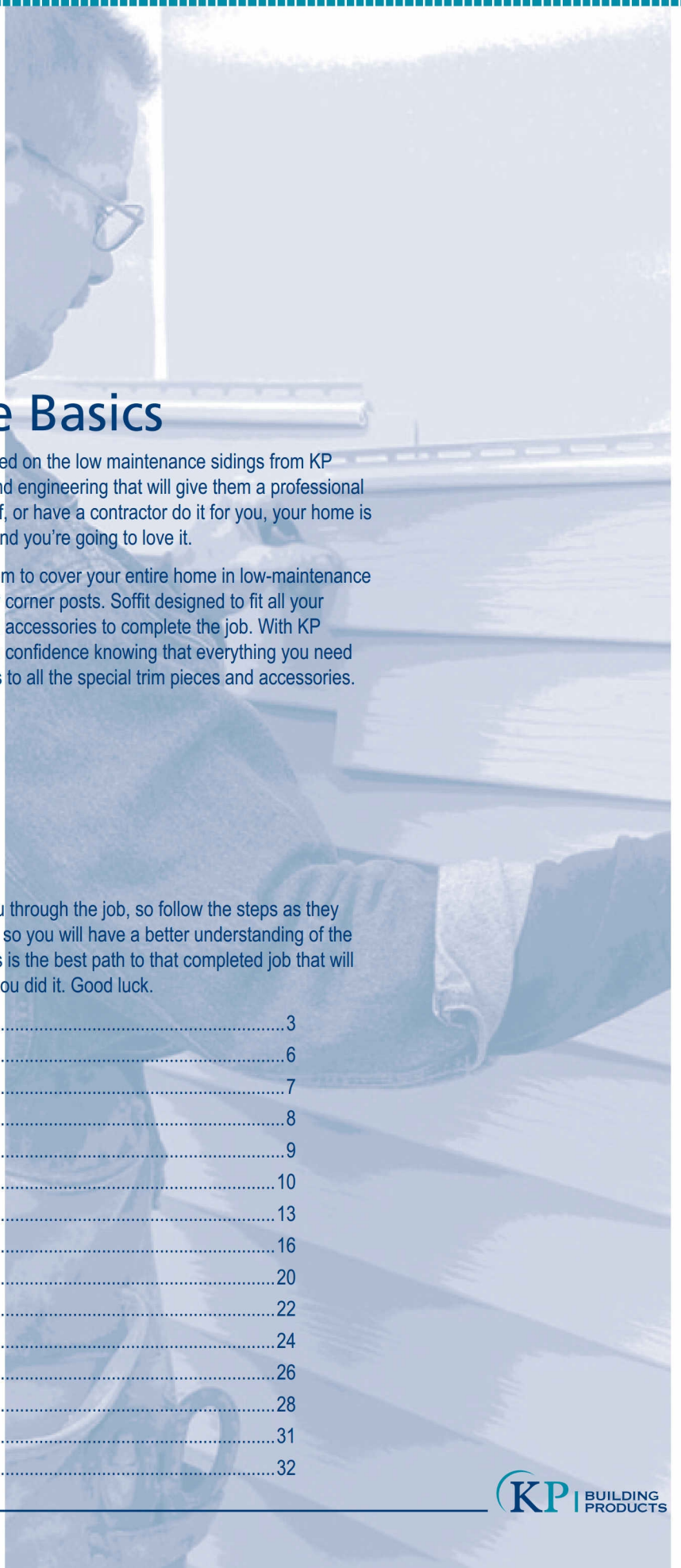




Vinyl Siding Estimating and Installation Guide

KP | BUILDING PRODUCTS



Understanding the Basics

Contractors and homeowners alike have depended on the low maintenance sidings from KP Building Products for the best product designs and engineering that will give them a professional installation every time. Whether you do it yourself, or have a contractor do it for you, your home is going to go through an amazing transformation and you're going to love it.

At KP Building Products there's a complete system to cover your entire home in low-maintenance vinyl around doors and windows. Plain and fancy corner posts. Soffit designed to fit all your overhangs and porches as well as the fascia and accessories to complete the job. With KP Building Products, you can enter into the job with confidence knowing that everything you need will be there from installation instructions and tips to all the special trim pieces and accessories.

Table of content

The installation manual was designed to walk you through the job, so follow the steps as they are laid out. It is best to read ahead as you work, so you will have a better understanding of the directions and the order in which to proceed. This is the best path to that completed job that will have the neighbors and friends asking you how you did it. Good luck.

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KP BUILDING PRODUCTS

General estimating tips

Estimating for siding

Most homes' surface areas are made up of a series of rectangles or triangles.
When estimating vinyl siding, estimate each rectangular or triangular section separately and add the totals together. Rather than trying to multiply feet and inches together, simply round to the next highest three-inch (or .25') increment and use the decimal equivalent.

For example: 10' - 1" would become 10' - 3" or 10.25'
10' - 5" would become 10' - 6" or 10.50'
10' - 7" would become 10' - 9" or 10.75'
10' - 10" would become 11'

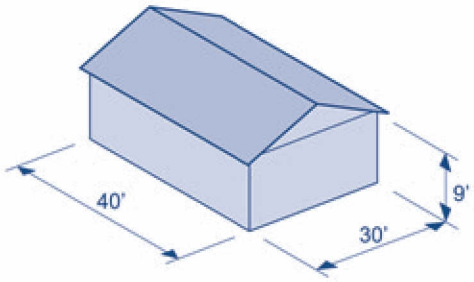
Multiplication then becomes simple: 10.25' x 10.75' = 110.19 sq. ft.
When all the individual sections are added together, the total is divided by 100 for the total number of squares. This will be rounded up to the next whole square.

Example house

A house is 40' x 30' x 9' feet high at the eaves.

Front is 40' x 9' or..... 360 sq. ft.
Back is the same or..... 360 sq. ft.
Right end is 30' x 9' to the eave line or ..... 270 sq. ft.
Left end is the same or..... 270 sq. ft.

Total..... 1260 sq. ft.



Calculating gable area

Width of the house is 30' with a 12" or 1' overhang, front and rear. This totals a gable width of 32'. The roof pitch of this house is 5 in 12, which means for every foot of run, the gable rises 5". The run is always half of the total width, in this case 32', so the run is half of that, or 16'.

To convert the 5" to feet, divide it by 12. (5 divided by 12 = .42 ft.)

To figure the height of the gable, multiply the run of 16' by the rise per foot or .42'. 16' x .42' = 6.72'. This is the gable's height at the center.

Multiply the width by the height: 32' x 6.72' = 215 sq. ft.

Multiply this by .75 to allow for waste in cutting along the rake. 215 sq. ft. x .75 = 161.2 sq. ft. in one gable. You have two gables, so multiply 161.2 x 2 which = 322.4 sq. ft. of total gable area.

Add this to the 1260 sq. ft. figured for the walls, above.

1260 sq. ft. + 322.4 sq. ft. = 1582.4 square feet of total siding.

1582.4 sq. ft. divided by 100 sq. ft (1 square) = 15.82 squares. **Round this up to 16 squares**.

You notice that we did not deduct for openings and always rounded up, so there is no need to add back to the estimate for cutting waste.

16 squares will do this job.

General estimating tips

Estimating for soffit

Soffit material will be used on the front and rear eaves, the gable overhangs, the dormer overhangs and any porch ceilings.

Calculating the eaves

For the front and rear eaves, add the total length of each section and multiply by the width. The width is a straight-line distance from the wall to the tails of the rafters. This would also be done on the ends of the home on a hip roof.
Our sample home in GENERAL ESTIMATING TIPS was 40' long with a 12" overhang on each of its two gables. Total length of the home then, would be 42'. If the overhang is 12" on both the front and the rear eave, then the square footage of soffit needed is 42' x 1' = 42 sq. ft.

The back is a duplicate of the front so the total is 42 sq. ft. + 42 sq. ft. = 84 sq. ft.
These low eaves will require vented soffit for attic ventilation, so we will order 1 square of vented soffit for this job.
Use the same process of rounding up to the next highest 3" increment as described in general estimating tips . Do the same for any dormer eaves.

Calculating the gable overhangs

For the gable or dormer overhangs (rakes), you must determine the length of each section. These will be angled and the length will be dependent upon the pitch of the roof. The easiest way is to scale them off of the building plan. If you don't have access to the plan, here is the process.

Let's use the same home we used in general estimating tips. The width of this home was 30' with a 12" overhang, front and rear, making the gable width 32'. The run is half this width or 16'.
The height as we calculated earlier was 6.72'. To figure the diagonal, which is the measurement we want, we do the following:

Multiply 16' x 16' and record the answer. (16' x 16' = 256')
Multiply 6.72' x 6.72' and record the answer. (6.72' x 6.72' = 45.16')
Add the two answers. (256' + 45.16' = 301.16')
Put this number into your calculator and hit the square root button.
The answer is 17.35'.

This is the length of one side of the gable or soffit overhang.
As there are always two pitched sides to a gable or dormer, multiply the result by 2.

17.35' x 2 = 34.7 linear feet. Round it up to 35 linear feet.
Multiply this by the width of the overhang. Let's assume 12" or 1 ft.
35 linear feet x 1 foot = 35 square feet. Enter this into your worksheet.

The other gable is the same, so enter 35 square feet for it into the worksheet.

Total soffit material required for both gables is 35 + 35 = 70 sq. ft. This does not have to be vented, so solid soffit is ordered for this section. We will order 1 square of solid (non-vented) soffit for this portion. Continue this same process for all gables and pitched dormers.

Soffits

Measure the width of the eave to be covered. Measure the length of the eave.
Do this for each eave, including the rakes of the gables and dormer eaves.

Eave 1: _____(width) x _____(length) = _____sq. ft. vented soffit
Eave 2: _____(width) x _____(length) = _____sq. ft. vented soffit
Eave 3: _____(width) x _____(length) = _____sq. ft. vented soffit
Eave 4: _____(width) x _____(length) = _____sq. ft. vented soffit
Eave 5: _____(width) x _____(length) = _____sq. ft. solid soffit
Eave 6: _____(width) x _____(length) = _____sq. ft. solid soffit
Eave 7: _____(width) x _____(length) = _____sq. ft. solid soffit
Eave 8: _____(width) x _____(length) = _____sq. ft. solid soffit

Total Vented Soffit: _____sq. ft.
Total Non-Vented (solid) Soffit: _____sq. ft.

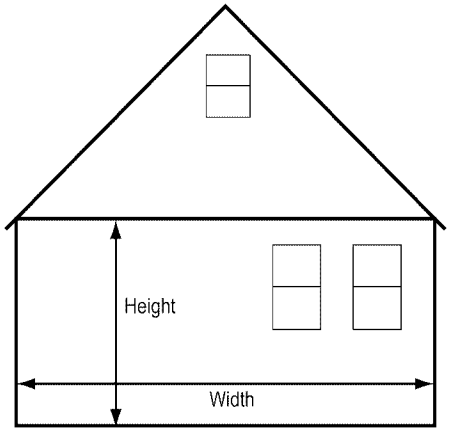
General estimating tips

Wall surfaces

Measure the height (excluding gables). Measure the width.
Do not deduct for doors and windows. Do this for each wall section, including any surface to receive siding.

Wall 1: _____(h x w) = _____sq. ft.
Wall 2: _____(h x w) = _____sq. ft.
Wall 3: _____(h x w) = _____sq. ft.
Wall 4: _____(h x w) = _____sq. ft.
Wall 5: _____(h x w) = _____sq. ft.
Wall 6: _____(h x w) = _____sq. ft.
Wall 7: _____(h x w) = _____sq. ft.
Wall 8: _____(h x w) = _____sq. ft.
Wall 9: _____(h x w) = _____sq. ft.
Wall 10:_____(h x w) = _____sq. ft.

Total: _____sq. ft.

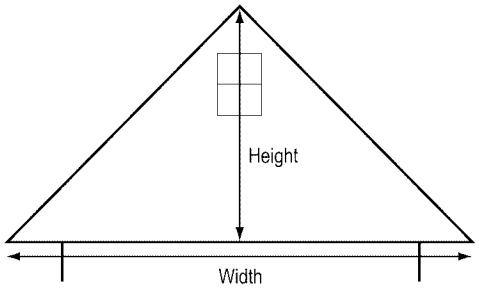


Gable surfaces

Measure the height at the center. Measure the width.
Do not deduct for doors and windows. Do this for each gable to receive siding. Multiply the results by .75 (75%).

Gable 1: _____(width) x _____(height) x .75 = _____sq. ft.
Gable 2: _____(width) x _____(height) x .75 = _____sq. ft.
Gable 3: _____(width) x _____(height) x .75 = _____sq. ft.
Gable 4: _____(width) x _____(height) x .75 = _____sq. ft.
Gable 5: _____(width) x _____(height) x .75 = _____sq. ft.
Gable 6: _____(width) x _____(height) x .75 = _____sq. ft.

Total: _____sq. ft.

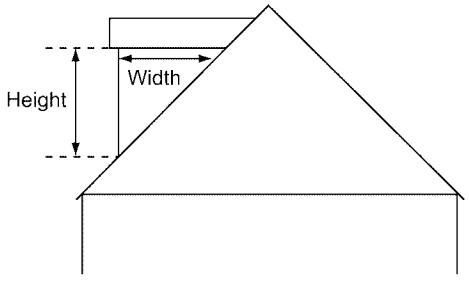


Dormer surfaces

Measure the height of the dormer. Measure the width.
Multiply the results by .75 (75%). Multiply the results by 2 to take off both sides of each dormer. Do this for each dormer.

Dormer 1: _____(h x w) = _____x .75 (x 2) = _____sq. ft.
Dormer 2: _____(h x w) = _____x .75 (x 2) = _____sq. ft.
Dormer 3: _____(h x w) = _____x .75 (x 2) = _____sq. ft.
Dormer 4: _____(h x w) = _____x .75 (x 2) = _____sq. ft.
Dormer 5: _____(h x w) = _____x .75 (x 2) = _____sq. ft.
Dormer 6: _____(h x w) = _____x .75 (x 2) = _____sq. ft.

Total: _____sq. ft.



Porch ceilings

Multiply the width of each rectangular area by the length; add totals of each rectangular area.

_____(width) x _____(length) of area 1 = _____sq. ft.
_____(width) x _____(length) of area 2 = _____sq. ft.

Total Non-Vented (solid) Soffit: = _____sq. ft.

Terms to know

Backerboard — a flat material used on the face of the house, applied between the studs and the siding (or over existing wall surface), to provide an even surface for installing vinyl siding.

Buttlock — the bottom edge of a siding or soffit panel, or accessory piece, opposite the nailing slots, which locks onto to the preceding panel.

Channel — the area of the accessory trim or corner post where siding or soffit panels are inserted. Channels also refer to the trim itself, and are named for the letters of the alphabet they resemble (e.g., J-channel, F-channel, etc.).

Course — a row of panels, one panel wide, running the length of the house from one side to the other, or, in the case of vertical siding, from top to bottom.

H-channel — a siding accessory that joins two soffit panels, or used as transition between two siding sections.

Face — refers to the side of a siding or soffit panel that is showing once the panel has been installed.

Face-nailing—the action of fastening directly onto the "face" side of a panel (instead of using the nail hem slot). This practice is generally not used in siding installation.

Fascia — the trim covering the ends of roof rafters and gables.

Fascia board — a board attached to the ends of the rafters and gables between the roofing material and the soffit overhang. Fascia cap is the covering around that board.

Flashing — a thin, flat material, usually aluminum, positioned under or behind J-channels, corner posts, windows, etc., to keep draining water from penetrating the home. Flashing is also used around the windows and doors.

Furring/Furring strip — usually a 1" x 2" wood strip used to even a surface in preparation for installing vinyl siding. To "fur" a surface means to apply these strips.

Lap — to overlap the ends of two siding panels or accessory pieces to allow for expansion and contraction.

Tab — the raised "ears" on a siding panel, created by a snap lock punch, which can be used to lock a siding panel into place when the nailing hem has been removed.

Miter — to make a diagonal cut, beveled to a specific angle (usually 45°). Sometimes miter cuts are made into an overlapping siding or soffit panel surface, to provide a neater appearance.

Nailing hem — the section of siding or accessories where the nailing slots are located.

Plumb — a position or measurement that is truly and exactly vertical, 90° from a level surface.

Rake (roof) — the inclined, usually projecting edge of a sloping roof. **Rake (wall)**—the board or molding placed along the sloping sides of a gable to cover the ends of the siding.

Scoring — running a utility knife blade, a sharpened awl, scoring tool, or other sharp implement across a soffit or siding panel face without cutting all the way through the panel. This weakens the vinyl surface in a specific area and allows the panel to be bent and broken off cleanly.

Sealant — any of a variety of compounds used to fill or seal joints in wood, metal, masonry, vinyl, and other materials.

Shim — a building material used to even a surface prior to installing vinyl siding.

Soffit — material used to enclose the horizontal underside of an eave, cornice, or overhang. Soffit is designed to be installed lengthwise from wall to fascia.

Starter trim — an accessory applied directly to the surface of the building and used to secure the first course of siding to the home.

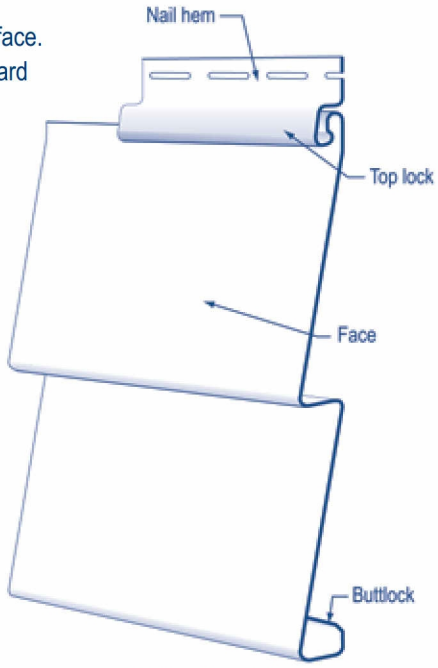
Square — a square represents an area of 10' by 10' (100 sq. ft.) and is generally the term used in the industry v when referring to the quantity of siding. Vinyl siding is measured in squares, i.e.: this house requires 20 squares of siding.

Underlayment/Underlayment board — weather resistant material placed under vinyl siding panels.

Undersill trim — a piece of trim used any time the top lock has been removed from the siding, to secure a siding panel.

Weep holes — openings cut into siding or accessories to allow for water runoff.

Window/door drip cap — an accessory installed with vertical siding to ensure that water drips away from panels and does not infiltrate them.



Siding description

Outside and inside corner posts — Corner posts are used to provide a finished edge at an inside or outside corner. The siding from adjoining walls fits neatly into the inside or outside corner post channels. Appropriate widths of channel openings are available to accommodate various configurations of siding.

Fasteners

Fastener choices

Use aluminum, galvanized steel, or other corrosion-resistant nails, staples, or screws when installing vinyl siding. Aluminum trim pieces require aluminum or stainless steel fasteners. All fasteners must be able to penetrate not less than 3/4" into framing or furring. Review your local building codes for variations that may apply to specific geographic areas

Nails

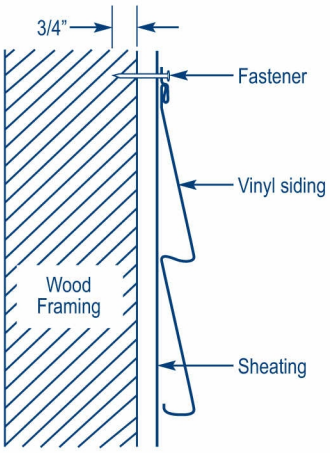
Nail heads should be 5/16" minimum in diameter. Shank should be 1/8" in diameter.



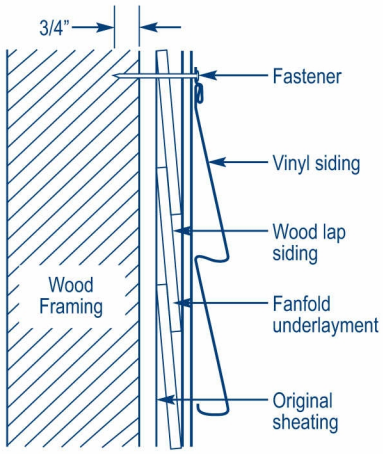
Screw fasteners

Screw fasteners can be used if the screws do not restrict the normal expansion and contraction movement of the vinyl siding panel on the wall. Screws must be centered in the slot with a minimum 1/32" space between the screw head and the vinyl. Screws must be able to penetrate not less than 3/4" into framing or furring and should be:

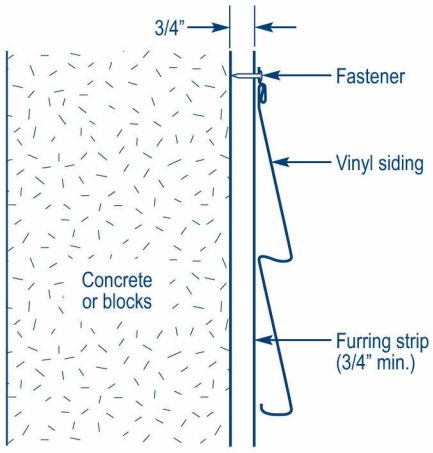
- Size #8, truss head or pan head.
- Corrosion-resistant, self-tapping sheet metal type.



New construction



Residing

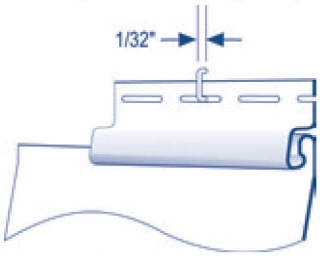


Over concrete or blocs

Staples

If staples are being used instead of nails or screws, they must:

- Not be less than 16-gauge semi-flattened to an elliptical cross-section.
- Penetrate not less than 3/4" into framing or furring.
- Be wide enough in the crown to allow free movement of the siding (1/32" away from the nailing hem).

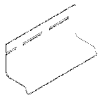


Use of staples when installing siding

Accessories



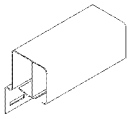
Starter trim 10’



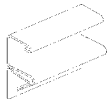
Window/door drip cap 10’



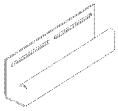
Undersill trim 12’ 6”



Dual undersill trim 12’ 6”



F-channel 12’ 6”



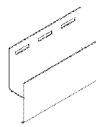
J-channel 12’ 6”



Outside corner post 10’



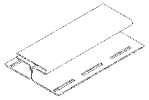
Inside corner post 10’



Vertical base flashing 10’



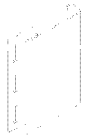
Vinyl fascia 12’ 6”



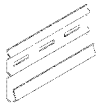
H-channel 12’ 6”



3-1/2” lineal trim 12’



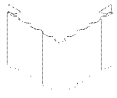
5” lineal trim 12’



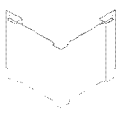
Lineal starter trim 12’



Quarter round cormer starter 12’



6” Fluted corner 10’



6” Traditional corner 10’

How to determine the number of pieces required:

Measure structure perimeter.
Convert to decimal, divide by 10 and round up.
of pieces needed: _____

Measure tops of all window and door cap openings.
Convert to decimal, divide by 10 and round up.
of pieces needed: _____

Measure bottom of all areas where siding must be cut horizontally
(at the top of wall and under all door and window openings).
Convert to decimal, divide by 12.5 and round up.
of pieces needed: _____

Measure bottom of all areas where siding must be cut horizontally
(at the top of wall and under all door and window openings).
Convert to decimal, divide by 12.5 and round up.
of pieces needed: _____

Measure span where all soffits return to wall.
Convert to decimal, divide by 12.5, and round up.
of pieces needed: _____
For open eaves, multiply the pieces calculated above by 2: _____

Measure around all openings (doors, windows and gable ends).
Convert to decimal, divide by 12.5 and round up.
of pieces needed: _____

Measure length on all outside corners.
Convert to decimal, divide by 10 and round up.
of pieces needed: _____

Measure length of all inside corners.
Convert to decimal, divide by 10 and round up.
of pieces needed: _____

Measure bottom of sidewall where vertical siding is being installed.
Convert to decimal, divide total by 10 and round up.
of pieces needed: _____

Measure span of all roof lines to determine total footage of fascia required.
Convert to decimal, divide by 12.5 and round up.
of pieces needed: _____

Measure span from inside wall to end of roof line (typically 45°).
Convert to decimal, divide by 12.5 and round up.
of pieces needed: _____

Measure around all openings (doors, windows and corners) where
the lineal is to be installed. Convert to decimal, divide by 12 and round up
of pieces needed: _____

Measure around all openings (doors, windows and corners) where
the lineal is to be installed. Convert to decimal, divide by 12 and round up.
of pieces needed: _____

Equal quantity of Lineal starter is required
for the amount of lineal ordered.
of pieces needed: _____

Measure all quarter round corner starter where the corner bead is
to be installed. Convert to decimal, divide by 12 and round up
of pieces needed: _____

Measure all corners where the piece is to be installed.
Convert to decimal, divide by 10 and round up .
of pieces needed: _____

Measure all corners where the piece is to be installed.
Convert to decimal, divide by 10 and round up.
of pieces needed: _____

Summary sheet

Siding

Total from horizontal wall area _____sq. ft.
Total from gable area _____sq. ft.
Total from dormer area _____sq. ft.
Total siding _____sq. ft.

Type of siding

Norman Rockwell	Color:_____	Profile:	☐ D4	☐ D4.5DL				
Cedar Creek	Color:_____	Profile:	☐ D4	☐ D4DL	☐ D5	☐ D5DL		
Dakota	Color:_____	Profile:	☐ D4	☐ D4DL	☐ D5	☐ D5DL	☐ T3	
Northern Star Rustic	Color:_____	Profile:	☐ D4	☐ D5DL				
Northern Star	Color:_____	Profile:	☐ D4	☐ D4DL				
Maxim	Color:_____	Profile:	☐ D4	☐ D4.5DL				
Maxim I/S underlayment		Profile:	☐ D4	☐ D4.5DL				
Adirondack	Color:_____		☐					

Trims

Starter trim 10’	Color: :_____# of pieces needed: _____
Window/door drip cap 10’	Color: :_____# of pieces needed: _____
Undersill trim 12’ 6”	Color: :_____# of pieces needed: _____
Dual undersill trim 12’ 6”	Color: :_____# of pieces needed: _____
F-channel 12’ 6”	Color: :_____# of pieces needed: _____
J-channel 12’ 6”	Color: :_____# of pieces needed: _____
Outside corner post 10’	Color: :_____# of pieces needed: _____
Inside corner post 10’	Color: :_____# of pieces needed: _____
Vertical base flashing 10’	Color: :_____# of pieces needed: _____
Vinyl fascia 12’ 6”	Color: :_____# of pieces needed: _____
H-channel 12’ 6”	Color: :_____# of pieces needed: _____
Adirondack 1 1/4” J-channel 12’6”	Color: :_____# of pieces needed: _____
Adirondack 4” Outside Corner post 1 1/4” 12’	Color: :_____# of pieces needed: _____

Trim*FX*™

5” Lineal trim 12’	Color: :_____	# of pieces needed: _____
3 1/2” Lineal trim 12’	Color: :_____	# of pieces needed: _____
Lineal Starter trim 12’	Color: :_____	# of pieces needed: _____
Quarter round corner starter 12’	Color: :_____	# of pieces needed: _____
6” Fluted corner 10’	Color: :_____	# of pieces needed: _____
6” Traditional corner 10’	Color: :_____	# of pieces needed: _____

Soffit

Total from soffit _____sq. ft.
Total from porch ceiling _____sq. ft.
Total soffit:
Vented _____sq. ft.
Non-Vented _____sq. ft.
Color: ☐ White ☐ Match Siding

Add a factor of 10 percent to all material estimates to allow for waste.

General installation tips

Before you begin

These instructions have been specially written to provide you with a simple, straightforward, step-by-step guide for installing your KP Building Products vinyl siding. In fact, the best installation advice we can give is that you read through these instructions carefully before beginning your project. Because proper preparation is the key to a smooth installation job.

Remember to always exercise caution when on a construction site.

Tool checklist:

Tool Checklist:

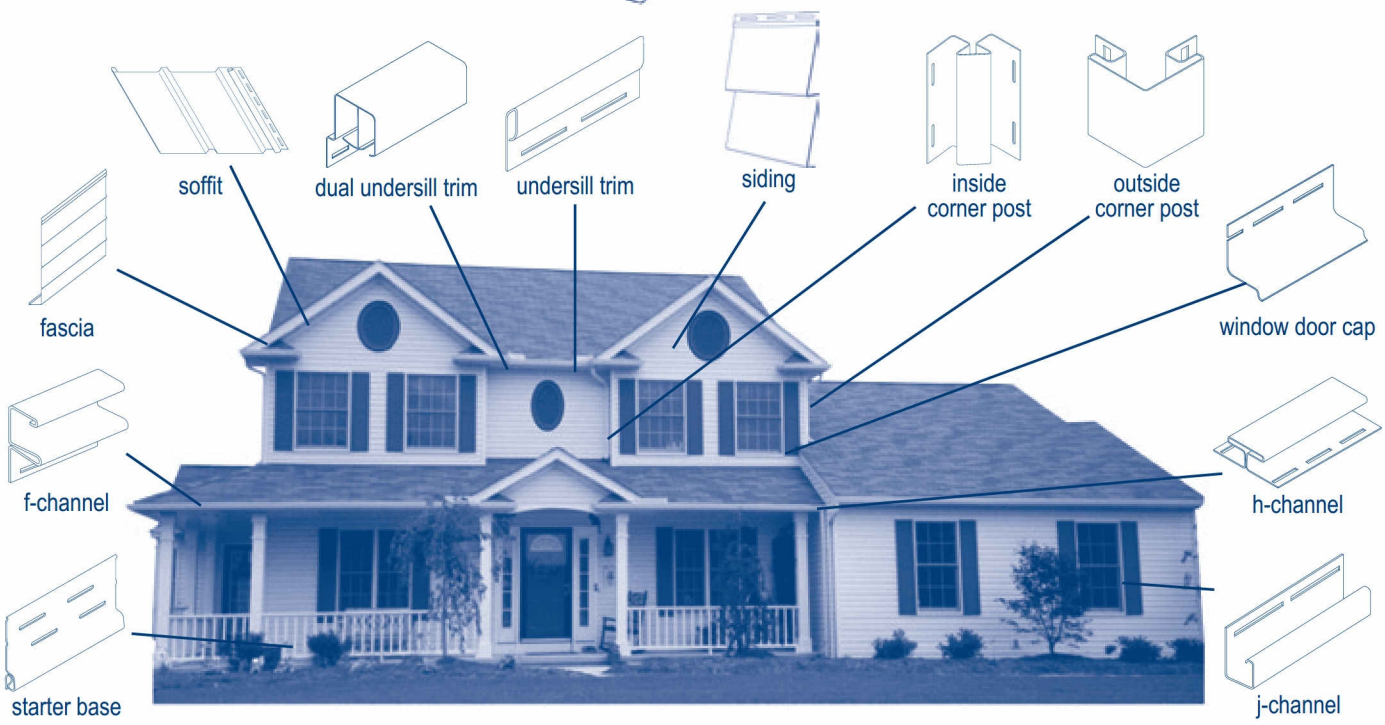
- work table
- tape measure
- hammer
- utility knife
- chalk line
- square
- tin snips
- level
- safety glasses*
- ladders and/or scaffolding
- radial saw with a reversed fine-tooth blade

*NOTE: Protective eyewear should be worn when cutting, sawing, or nailing.

Some specialized tools include:

- snap-lock punch
- nail-slot punch
- j-trim cutter
- siding removal tool





Accessories needed

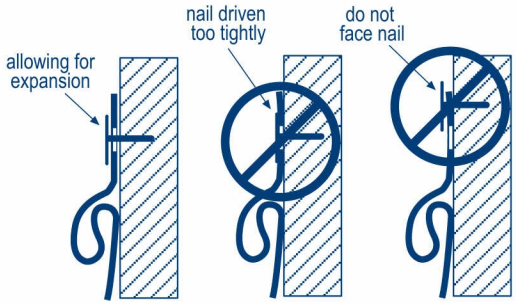
	starter base	window door drip cap	undersill trim	dual undersill trim	f-channel	j-channel	outside corner post	inside corner post	vertical base flashing	h-channel	vinyl fascia
Horizontal siding	√	√	√	√	—	√	√	√	—	—	—
Vertical siding	—	√	√	√	—	√	√	√	√	—	—
Soffit	—	—	—	—	√	√	—	—	—	√	—
Fascia	—	—	√	√	—	—	—	—	—	—	√

General installation tips

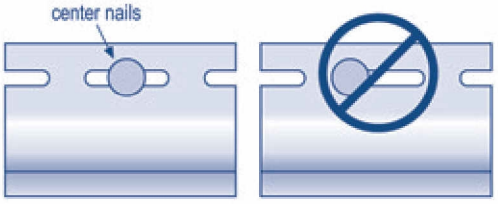
Important installation tips

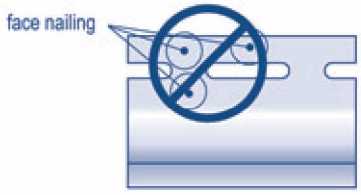
Before getting started, it is important to review several rules of thumb for vinyl siding application.
The following rules, which come up throughout this guide, are critical for proper vinyl siding installation:
The following are absolute “must-do’s” for every siding installation:

1. Installed panels must move freely from side to side. Don’t nail too tightly. Always allow a minimum of 1/32” space between the back of the head and the nailing hem. Space fasteners 12” - 16” apart on center.
2. When installing a siding panel, push up from the bottom until the lock is fully engaged with the piece below it. Without stretching the panel, reach up and fasten it into place.
3. When finishing the top of the wall perforate the cut edge using snap-lock punch approximately every 8”, ensuring the “tabs” face outward.
4. Leave 1/4” clearance at all openings and accessory channel stops. This allows for normal expansion and contraction. When installing in temperatures below 40° F, leave 3/8”.
5. DO NOT CAULK the space between the panels and the J-channel, outside and inside corners and any other trims. Do not caulk overlapping joints between siding panels.
6. NEVER NAIL THROUGH THE FACE OF THE SIDING! Face nailing is driving a fastener through the panel outside of the center of a nail slot.
7. Center fasteners in nail slots. Fastening at the end of the slot will cause permanent damage to the siding panel. If you need to lengthen the nail slot, you can do so with a nail-slot punch.
8. Drive fasteners in straight. Nailing at an angle will distort siding panels and cause buckling.
9. Be careful not to stretch panels. Apply slight upward pressure until the lock is fully engaged, then secure allowing panels to move freely without strain.
10. Overlap horizontal siding panels 1”. Excessive overlap can restrict free movement and cause product failure.
11. Use fasteners long enough to penetrate a minimum of 3/4” into the nailable base.
12. In residing, furring or removal of uneven original siding may be necessary.
13. In new construction, avoid the use of green lumber as the underlayment. Keep in mind that siding can only be as straight and stable as what lies under it.

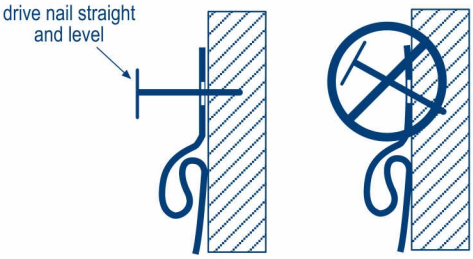


Nailing guidelines





Position of fasteners



Fasteners detail

Materials

Sheathing/Backerboard

Vinyl siding should be applied over a sheathing that provides a smooth, flat surface. Consult local building codes for sheathing requirements. Vinyl siding should never be applied directly to open studs without sheathing. As an alternative, installation of specific types of contoured foam underlayment for various styles of vinyl siding are available.

Weather Resistant Barrier

Vinyl siding should be installed over a continuous weather resistant barrier to stop the intrusion of incidental water. Consult your local building code for requirements in your area.

Flashing

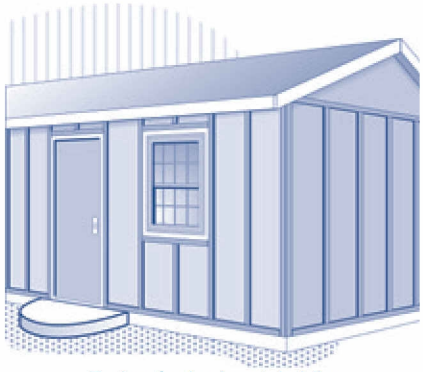
Code-compliant flashing should be integrated with the weather resistant barrier and applied around windows, doors, and other openings. Flashing should also be applied to inside and outside corners, and the intersection of walls and roofing to prevent water infiltration.

Preparing to install

Preparing your house

Proper surface preparation is one of the most important parts of your siding installation job. All exterior wall surfaces must be even, so that your new vinyl siding will be straight, and look sharp.

1. Remove all shutters, downspouts and fixtures. On older homes, replace any rotten wood and securely nail all loose boards, siding and wood trim. Tie back all shrubbery and trees when plantings are close to the house. Remove any old caulking around windows and doors.
2. Flashing: Use aluminum trim coil or other material which will not absorb water. Apply flashing below, on the sides of, and above (in that order) any openings where water might penetrate. This will help in directing water away from the opening.
3. Installing Furring: Furring or strapping must be applied to create an even base for siding. Apply 1" x 3" (minimum size) wood furring, not more than 16" on centers. Shim low spots to create an even surface. For horizontal vinyl siding, install furring vertically. For vertical siding, install furring horizontally. Place furring along all sides of door and window frames, corners, and top and bottom of areas to be sided. As an alternative, solid sheathing can be applied directly over the old surface to create a smooth base, or over furring to provide even support for the vinyl siding.
4. Housewrap: If required by building codes, apply a weather-resistant barrier over the sheathing. We recommend an approved breather-type code housewrap.
5. Insulation: The ideal time to increase the insulation value of the sidewall is before installing siding. Simply install insulating sheathing over existing siding, over or between the furring strips.
6. Laying the groundwork: Determine a starting point for your siding — it should be the lowest point. Measure at corners, and pull a chalk line across the wall to ensure a level starting position. Plumb corners, and shim if necessary, to ensure they are vertical.



Furing for horizontal siding



Furing for vertical siding

Preparing the Walls

Important notes: Weather Resistant Barrier

Vinyl siding has always been designed as an exterior cladding, not a weather resistant barrier.

Vinyl siding is designed to allow the material underneath it to breathe; therefore, it is not a watertight covering. Because of its design and application, it provides a supplemental rain screen that enhances the weather resistant barrier system by reducing the amount of water that reaches the underlying weather resistant barrier.

Preparing the Walls

A flat, level wall surface is necessary for proper installation of vinyl siding.

Install flashing before starting to apply the siding. Unless already installed, a weather resistant barrier should be applied to the house prior to installing vinyl siding. Always consult local building code for requirements in your area.

New Construction

- Tip: To reduce the possibility of the floor-plate compression, drywall, roofing, or other heavy building materials should be installed or stored throughout the house prior to the installation of vinyl siding. Floor-plate compression can result in buckled siding at the intersection of the floor and the wall.

Residing

- Nail down loose boards of existing siding, and replace any rotten ones. **Do not install vinyl siding over rotting wood.**
- Scrape off loose caulk and re-caulk around windows, doors, and other areas to protect from moisture penetration.
- Remove all protrusions such as gutters, downspouts, and light fixtures.
- Check all walls for evenness and install furring strips where necessary. When installing furring strips, please take appropriate measures to establish a smooth and continuous surface.

Note: In cases where the lower portion of a horizontal siding panel must be trimmed so that it may be installed over steps, porches, etc., the panel should be built out ("furred") for proper angle and rigidity. Undersill trim can be used to seal the cut edge of the panel and then secured to the wall.

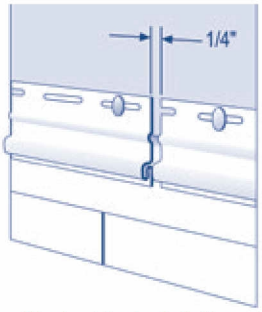
Installing accessories

Before the siding itself can be hung, a number of accessories must be installed first, including starter strips, corner posts, window flashing, trim, and J-channels over the roof lines.

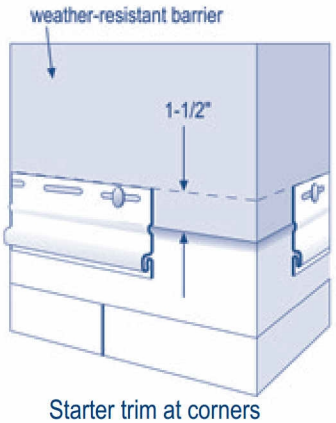
Starter trim

- In order for the siding to be installed properly in a level fashion, the starter strip at the bottom of the wall must be level.
- Determine the lowest point of the wall that will be sided; from that point, measure up 1/4" less than the width of the starter trim and partially drive a nail at one corner.
- Attach a chalkline; go to the next corner and pull the line taut.
- Make sure the line is level by using a line level or a 4' level.
- Snap the chalkline and repeat the procedure around the entire house.
- Optional method to determining the position of the starter trim in new construction and some residing applications: Measure down from the soffit at one corner of the house to the top of the foundation and subtract 1/4" less than the width of the starter strip. Make a mark on the wall and record the measurement. Transfer the measurement to the other corner of the wall. Snap a chalk line in between the corners at the marks. Repeat the procedure around the entire house.
- Using the chalkline as a guide, install the top edge of the starter strip along the bottom of the chalkline, nailing at 10" intervals. Allow space for the corner posts, J-channels, etc.
- Keep the ends of starter trims at least 1/4" apart to allow for expansion
- Nail in the center of the starter strip nailing slots.

Notes:
When using insulation/backerboard, fur the starter trim, if necessary, to accommodate thickness. For a vertical siding starter strip, see vertical siding section. In certain situations, it may be necessary to use J-channel as a starter strip; remember to drill minimum 1/8" diameter weep holes no more than 24" apart.



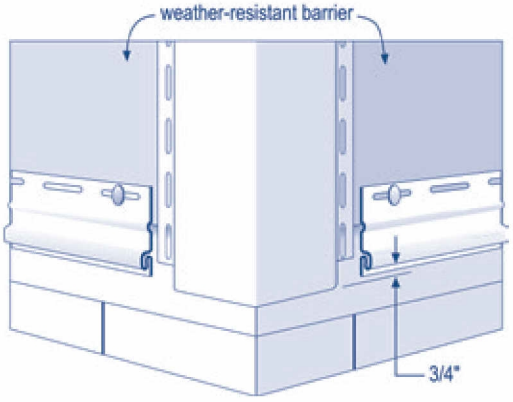
Starter trim installation



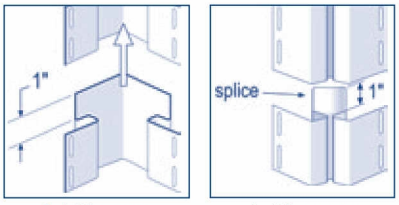
Starter trim at corners

Outside and inside corner posts

- A water resistant material should be used to flash the inside and outside corners a minimum of 10" on each side before installation of the corner.
- Place the corner post in position, allowing a 1/4" gap between the top of the post and the eave or soffit.
- Position a nail at the top of the upper slot on both sides of the corner post, leaving a 1/32" gap between the nail heads and the corner posts. The corner post hangs from these nails.
- The balance of the nailing should be in the center of the slot, 8" to 12" apart, again leaving 1/32" between the nail head and the corner post. This allows for the expansion and contraction to occur at the bottom.
- The corner post should extend 3/4" below the starter strip. Make sure the posts are plumb (i.e., vertically straight).
- If more than one length of corner post is required, overlap the upper piece over the lower piece by cutting away 1" of the nailing flange on the top piece. Overlap 3/4", allowing 1/4" for expansion. This method will produce a visible joint between the two posts, but will allow water to flow over the joint, reducing the chance of water infiltration.

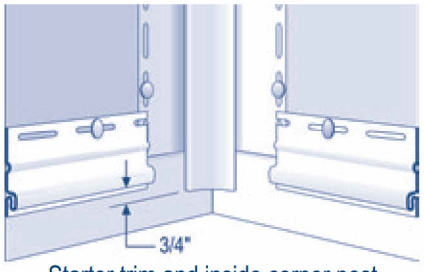


Starter trim and outside corner post



Outside corner splicing detail

Inside corner splicing detail



Starter trim and inside corner post

Installing accessories

Windows, doors and roof lines flashing

The following instructions should be followed when applying window flashing to an existing window:

- Apply a continuous bead of sealant adjacent to the sill of the existing window. For windows with nailing flanges, the sealant should be applied to the nailing flange in a manner that covers the nails and nail slots (figure A).
- Apply a minimum of 9" wide horizontal sill flashing level with the bottom edge of the existing window by pressing the flashing into the sealant bead at its top edge.
- Cut the sill flashing long enough to extend a minimum of 9" beyond each jamb.
- Fasten the sill flashing at the bottom and side edges (figure B).
- Apply a continuous bead of sealant adjacent to the side jambs of the window. For windows with nailing flanges, the sealant should be applied to the nailing flange in a manner that covers the nails and nail slots.
- Continue the bead of sealant at the jambs vertically a minimum of 8 1/2" above the head of the window to allow for bedding the top portion of the jamb flashing into sealant in the next step (figure C).
- Install the jamb flashing by pressing the flashing into the sealant beads at the window jambs. Extend the bottom edge of the jamb flashing approximately 1/2" short of the sill flashing edge, and extend the top edge approximately 8 1/2" beyond the head of the window, where the head flashing will be placed next (figure D).
- Fasten the jamb flashing along the edges further most from the window.
- Apply a continuous bead of sealant adjacent to the head of the installed window. For windows with nailing flanges, the sealant should be applied to the nailing flange in a manner that covers the nails and nail slots (figure E).
- Install the head flashing by pressing the bottom edge of the flashing into the sealant bead previously applied across the mounting flange.
- Extend the ends of the head flashing approximately 10" beyond the jamb flashing at each end. Fasten the head flashing into place along the top edge (figure F).

Note:
Sealant should be compatible with window, flashing, and weather resistant barrier materials. Contact sealant manufacturer for job-specific recommendations.

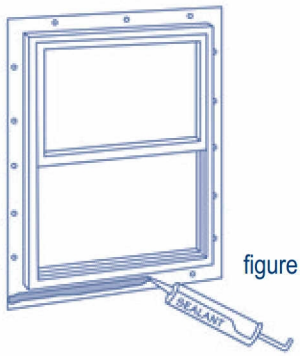


figure A

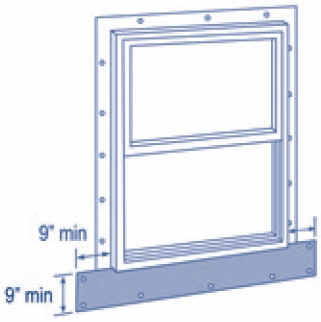


figure B

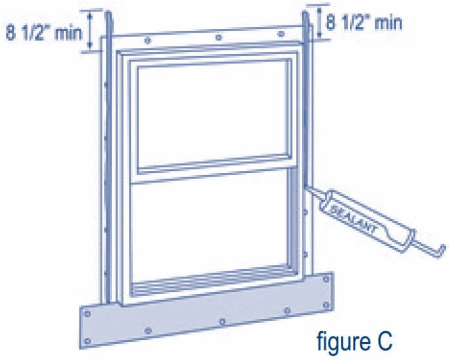


figure C

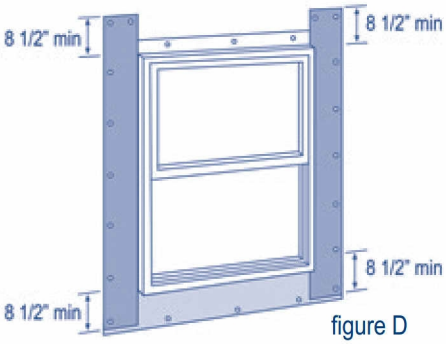


figure D

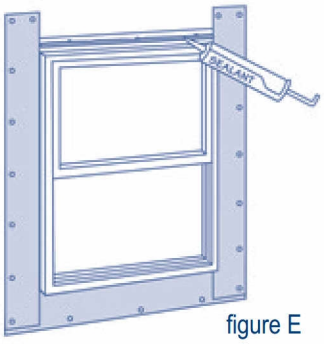


figure E

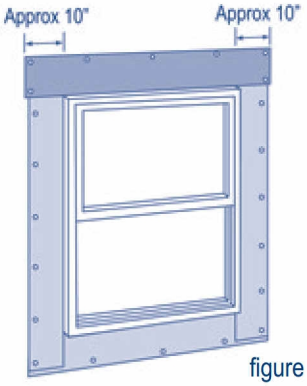


figure F

Flashing new window installations

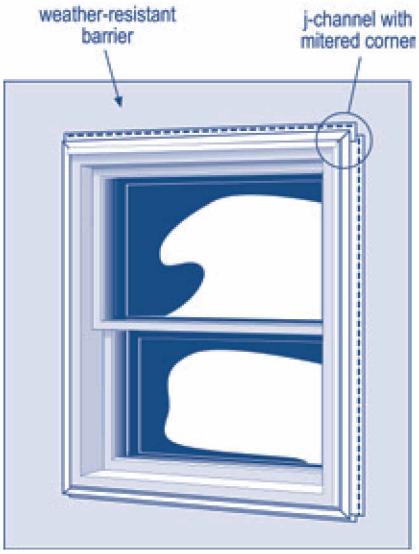
Refer to window manufacturer's instructions and *ASTM E2112, Standard Practice for Installation of Exterior Windows, Doors and Skylights* for the proper flashing installation method for the window type and wall configuration on the project.

Installing accessories

J-channel installation

J-channel is used around windows and doors to receive the siding. Follow the steps below when applying trim.

- Cut and bend the tab of the top piece of J-channel down to provide flashing over the side J-channel.
- Fold the bottom end of the side piece of J-channel inward at the bottom of the window, to fit over the existing J-channel to prevent water from entering under the sill.
- Cut the side J-channel members longer than the height of the window or door, and notch the channel at the top.
- Miter cut the free flange at a 45° angle and bend the tab down to provide flashing over the side members. A similar miter and tab may be provided at the bottom of the window, depending on the sill's condition. The J-channel should fit snug to the window.
- To trim the bottom of windows, and at the eave, J-channel can be used with the undersill molding inside the J-channel. The J-channel and undersill combination will secure the cut siding panel and help to keep the alignment straight. Dual undersill molding combines both functions into one part. Cut and secure dual undersill similarly to using J-channels.



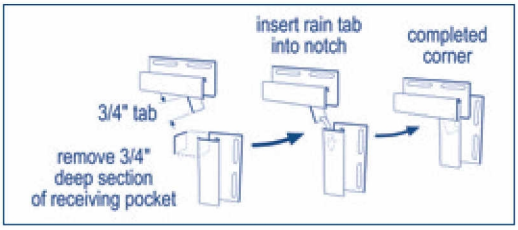
Window detail

J-channel over roof lines

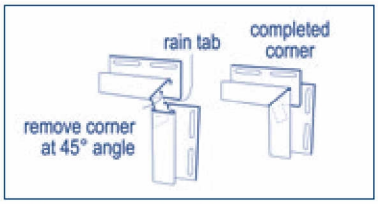
Install the flashing before the J-channel to prevent water infiltration along the intersection of a roof and wall.

- Keep the J-channel approximately 1/2" from the roof line. Chalk a straight line up the roof flashing to guide J-channel installation. Tip: You can use another J-channel laid over the shingles as a spacer to create the straight line desired.
- Overlap the J-channel (lapping the upper piece over the lower piece) if it is necessary to use more than one piece.
- Extend the J-channel past the edge of the roof, channeling water into the gutter, in order to ensure proper runoff.
- With dark shingles, or a south or west exposure, it is recommended to either use a metal J-channel or to install the vinyl J-channel as far away from the roofing as is aesthetically acceptable, having first ensured that there is sufficient flashing behind the J-channel to prevent water infiltration.
- Fasten the nail, screw, or staple that is closest to the roof line at the far end of the nail hem slot, to ensure that siding will expand away from the J-channel.

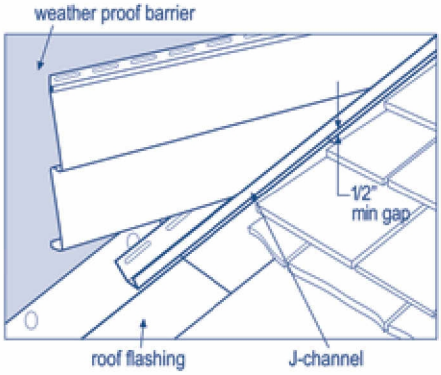
Note:
Vinyl J-channels should not be in direct contact with roofing shingles, since the shingles may transfer enough heat to the vinyl J-channel to cause its distortion.



Corner detail A - Square corner



Corner detail B - Mitered corner

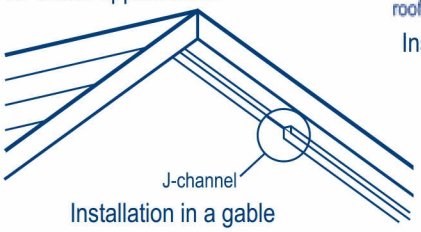


Installation over roof line

J-channel installation in a gable

Before applying siding to the gables, the J-channel should be installed to receive the siding at the gable ends:

- Where the left and right sections meet at the gable peak, let one of the sections butt into the peak with the other section overlapping.
- A miter cut should be made on the face flange of this piece for better appearance.
- Fasten the J-channel every 8" to 12".
- If more than one length of J-channel is required to span a wall surface, be sure to overlap the J-channels by 3/4".

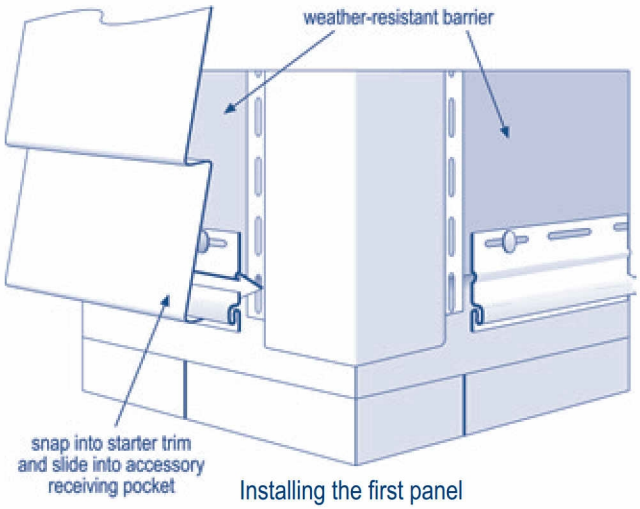


Installation in a gable

Horizontal siding installation

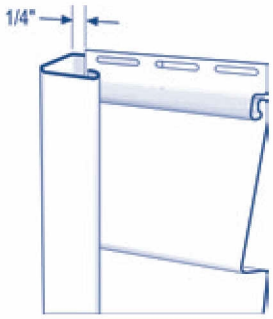
Installing panels

- The first course (row of panels) should be placed in the starter trim and securely locked along the entire length of the siding panel. Make sure the panel is securely locked before fastening.
- Fasten the panels in the center of the nailing slots. Allowance should be made for expansion and contraction by leaving a 1/4" gap between the siding and all corner posts and channels (increase to 3/8" when installing in temperatures below 40° F. If the panels are 20 feet or longer, increase the gap to 3/8".
- Do not drive the head of the fastener tightly against the nail slot. Leave 1/32" between the fastener head and the vinyl (about the thickness of a dime).
- Do not force the panels up or down when fastening. Panel locks should be fully engaged; however, the panels should not be under vertical tension or compression when they are fastened.
- Since vinyl siding moves as the temperature changes, make certain that the vinyl panels can move freely in a side-to-side direction once fastened.



Installing the first panel

- Check every fifth or sixth course for horizontal alignment. Also check siding alignment with adjoining walls.
- When panels overlap, make sure they overlap by one half the length of the notch at the end of the panel, or approximately 1".
- Stagger the siding end laps so that no two courses (rows of panels) are aligned vertically, unless separated by at least three courses (rows of panels).
- Always overlap joints away from entrances and away from the point of greatest traffic. This will improve the overall appearance of the installation.

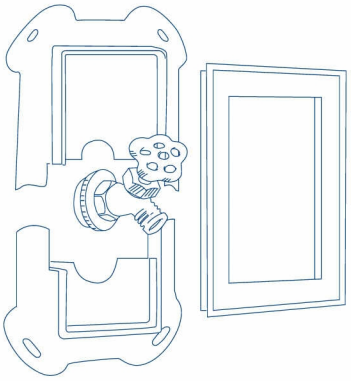


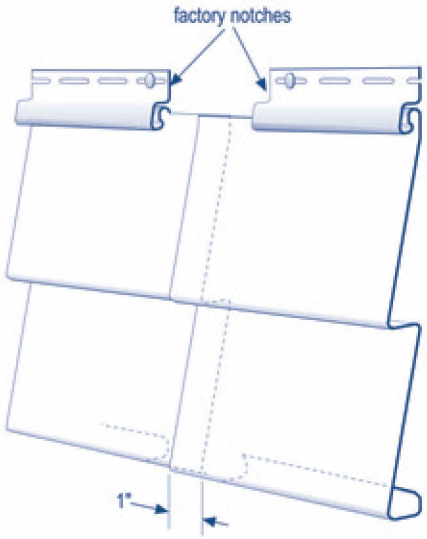
J-channel detail

Fitting siding around fixtures

Use a commercially available trim ring to fit siding to a penetration such as a faucet or railing attachment, following the manufacturer's installation instructions. If a commercial trim ring is not available for the application, refer to the figure below, which illustrates how to fit the siding to the penetration. In addition, the following tips are suggested:

- If hand-fitting to the fixture, always begin a new course of siding at the fixture to avoid excess lap joints.
- Cut an opening 1/4" bigger than the fixture or the trim ring.
- When cutting, match the shape and contour of the obstruction.


Triming pieces for faucet



Siding panel overlap

Horizontal siding installation

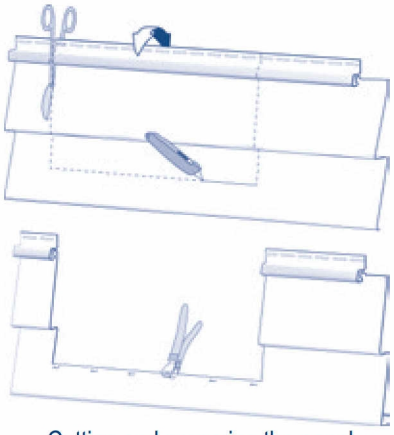
Fitting under windows

To mark the section to be cut, perform the following:

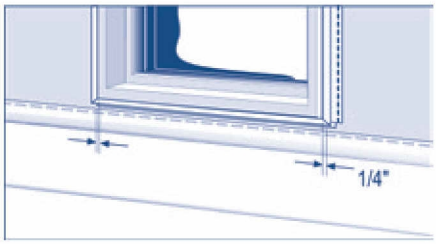
- Hold the panel under the window and mark the width of the window opening on the panel. Add approximately 1/4" to both sides to allow for expansion and contraction of the siding. These marks represent the vertical cuts.
- Lock a small piece of scrap siding into the lower panel next to the window. This will be used as a template for the horizontal cuts. Mark it 1/4" below the sill height.
- Transfer the horizontal measurement to the panel, which will be installed under the window. Measurement may not be the same on both sides of the window.
- Cut the panel with tin snips and a utility knife.

The cut panel is now ready for installation under the window. Perform the following:

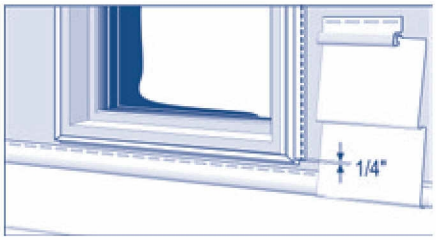
- Using a snap lock punch, punch the vinyl siding along the cut edge every 6" so the raised tab is on the outside face.
- Install undersill trim under the window, as a receiver for the cut siding. Undersill trim is used any time the top lock has been removed from the siding. Furring may be needed to maintain the face of the panel at the desired angle.
- Install the siding panel, making sure the tabs (from the snap lock punch) lock into the undersill trim.



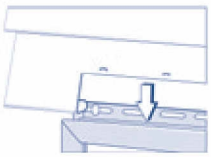
Cutting and preparing the panel



Measuring the width of the section to cut



Measuring the height of the section to cut

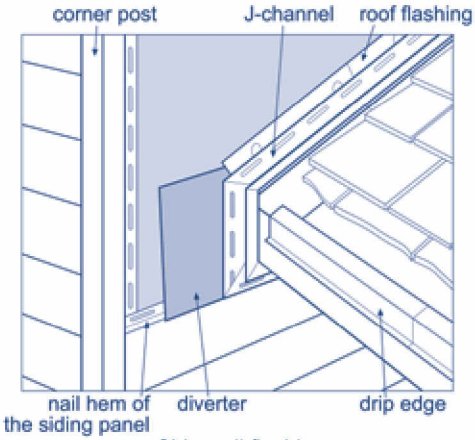


Installing the top panel

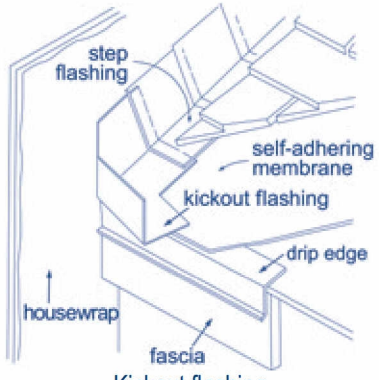
Sidewall flashing at roof lines

- Install the siding panel, making sure the tabs (from the snap lock punch) lock into the undersill trim.
- Run the siding until the last full course under the roof area.
- Cut a diverter from aluminum trim sheet, making sure it sits on the nail hem of the last full course.
- Also make sure to slip it behind all J-channels and roof flashing (similar to flashing the bottom of window detail).
- As an alternative to the diverter, create a "kickout" from metal flashing.
- Cut the next piece of siding, making sure the vertical lap falls behind the roof flashing and roof J-channel.
- Cut a small piece of siding that will be placed on top of the previous piece of siding and sits in the roof J-channel.
- Install the remaining course of siding. Water running behind the panel will be directed by the diverter into the butt of the panel, draining out in the weep holes.

Note: "Kick-out flashing" is an additional flashing strip that extends beyond the edge of the fascia that is required in some cold-climate localities.



Side wall flashing



Kickout flashing

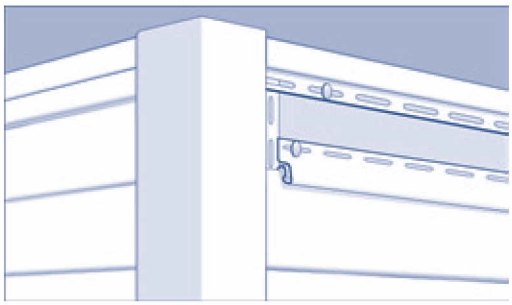
Horizontal siding installation

Under eave installation

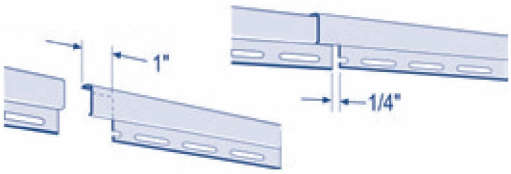
- Nail undersill trim along the top of the wall, flush with the eave of the house. Furring may be necessary to maintain the proper pitch of the topmost siding panel. Should more than one length of undersill trim be required, make a splice as shown by cutting away 1” from the back of the undersill trim and lapping the sections, leaving a 1/4” space between nailing strip sections.
- If topmost siding panel is trimmed near the butt leg, an undersill trim alone may not be sufficient.
- Either combine an undersill trim inside a J-channel, or use an undersill trim molding to hold the siding panel firmly.
- A dual undersill trim molding replaces the need for both a J-channel and undersill molding. Simply place the snap-lock punched top panel in the appropriate receiving pocket to keep the proper siding angle.
- Another alternative to finishing the top panel of a wall is to use a frieze plate and crown molding. Secure frieze plate (either with or without a soffit receiver), no more than 16” on center. Allow 1/4” between adjoining frieze plates.
- Using a nail slot punch, create nail slots every 12” - 16” in the top panel of siding and secure normally. Finish the application by cutting crown moldings to length as needed, and snapping them into the frieze plate receivers.

Fitting and installing top siding panel

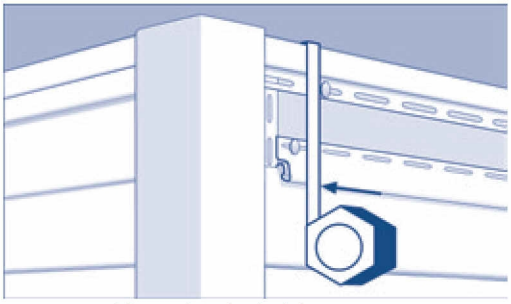
- Measure and cut siding panel to the desired length.
- Determine how much of the top panel must be removed by measuring the distance between the top of the undersill trim and the lock of the panel below, and subtracting 1/4”. Be sure to measure several times across the wall as the dimension could change slightly.
- Cut the top siding panel to proper height, removing the nailing strip.
- Using a nail slot punch, create nail slots every 12” - 16” in the top panel of siding and secure normally.
- Finish the application by cutting crown moldings to length as needed, and snapping them into the frieze plate receivers.



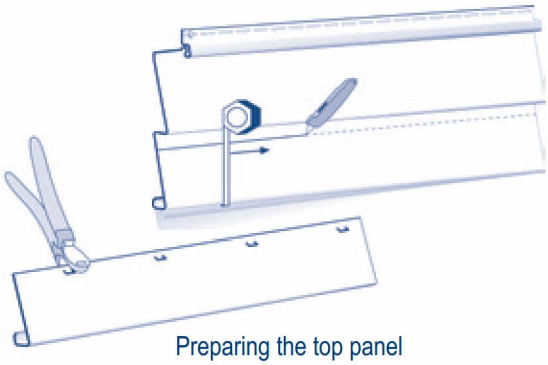
Last full siding panel on the top of the wall



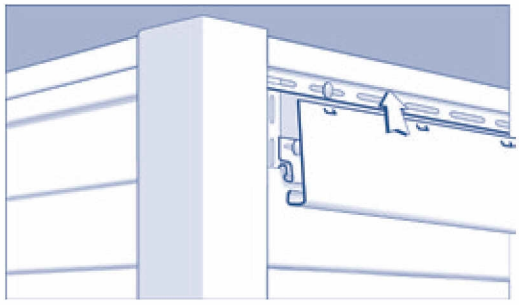
Splicing of the undersill trim



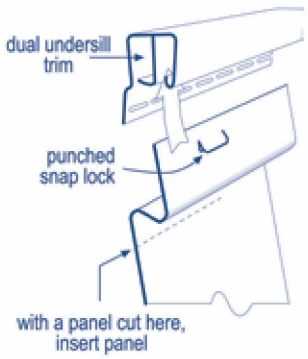
Measuring the height to cover



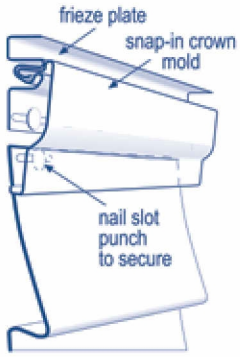
Preparing the top panel



Installing the top panel



Top panel installation using dual undersill trim



Top panel installation using frieze plate and crown mold

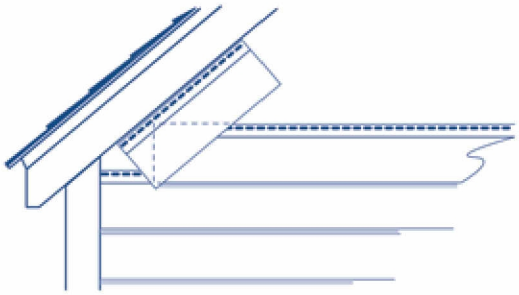
KP BUILDING PRODUCTS

Horizontal siding installation

Finishing a gable end

To install around gable ends, make a pattern that duplicates the slope of the gable:

- Lock a short piece of siding into the gable starter course (i.e., the last course before the gable starts).
- Hold a second piece of siding against the J-channel at the slope of the gable. Mark the slope with a pencil on the short piece of siding. Check the angle template every few courses.
- Remove the short piece and cut along the pencil line as a pattern for the gable angle cuts. Repeat the procedure on the opposite side of the gable.
- It may be necessary to fasten the last panel at the gable peak with a trim nail. Use a 1 1/4" to 1 1/2" nail. This is the only time a nail should be placed in the face of the vinyl siding.

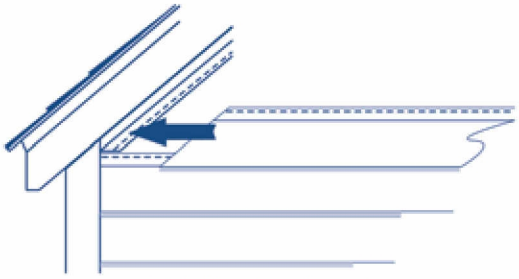


Measuring the cutting angle

Eaves treatment

The last course of siding may be cut to fit the eaves opening.

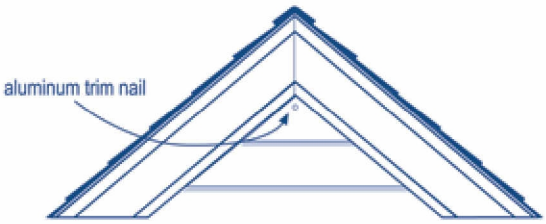
- Measure from the soffit to the base of the upper lock on the previous course of panels. Subtract 1/4". Mark this dimension on the panel to be cut, measuring from the bottom edge of the panel. It is a good idea to check the dimension in several locations along the length of the wall.
- Using a snap lock punch, punch the vinyl siding along the cut edge every 6", so the raised tab is on the outside face.
- Push the siding into the undersill trim that has been nailed in place along the top of the wall. Furring may be needed to maintain the face of the panel at the desired angle. The raised tabs will catch and hold the siding firmly in place.



Installing the cut panel

Transition from horizontal to vertical

- Finish the last course of horizontal siding with the J-channel and/or finish trim. Install a drip cap and a J-channel. The top piece of J-channel must have minimum 1/8" diameter weep holes drilled no more than 24" apart to allow for water runoff.



Position of top nail

Transition transition from brick to vinyl siding

- Caulk where the sheathing meets the brick or stone exterior. Flashing should be caulked where it meets the brick or stone and a drip cap should be in place.
- If horizontal siding is used, a J-channel or starter strip may be used. If a starter strip is used, it is necessary to provide at least 3/8" clearance for proper engagement of the siding.
- Use a J-channel to receive vertical siding; remember to drill minimum 1/8" diameter weep holes no more than 24" apart.

Adirondack vinyl log siding installation

US Patent Number: US 6, 647, 682, B2

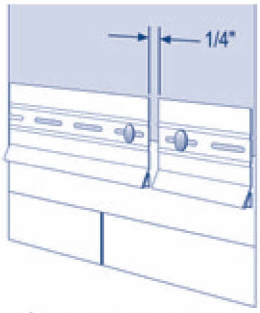
Adirondack starter installation

In order for Adirondack vinyl log siding to be properly installed in a level fashion, the starter at the bottom of the wall must be level.

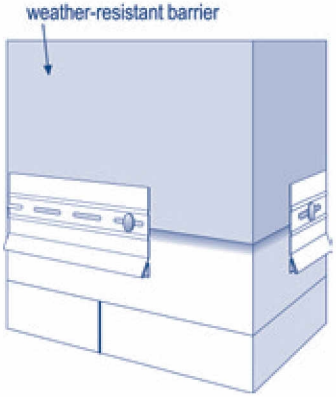
- Determine the lowest point of the wall that will be sided; from that point, measure up 1/4" less than the width of the starter and partially drive a nail at one corner.
- Attach a chalkline; go to the next corner and pull the line taut.
- Make sure the line is level by using a line level or a 4' level.
- Snap the chalkline and repeat the procedure around the entire house.

Using the chalkline as a guide, install the top edge of the starter along the bottom of the chalkline, nailing at 10" intervals. Allow space for the corner posts, J-channels, etc.

- Keep the ends of starter strips at least 1/4" apart to allow for expansion.
- Leave approximately 1/4" between the starter and the corner post.
- Nail in the center of the starter strip nailing slots.



Starter trim installation



Starter trim at corners

Adirondack J-channels

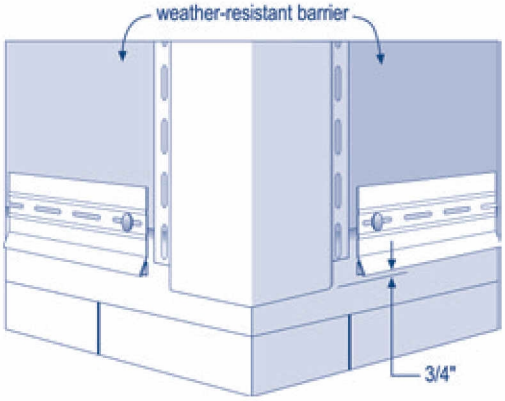
- Install 1 1/4" J-channels along windows and wall not requiring corner posts.

Follow J-channels installation instructions in the Vinyl Siding Estimating and Installation Guide.

Adirondack outside corner posts

The installation of the Adirondack outside corner posts is important as these corners are an integral part of the wall system.

- A water resistant material should used to flash the inside and outside corners a minimum of 10" on each side.
- Place the corner post in position, allowing a 1/4" gap between the top of the post and the eave or soffit.
- Position a nail at the top of the upper slot on both sides of the corner post, leaving a 1/32" gap between the nail heads and the corner posts. The corner post hangs from these nails.
- The balance of the nailing should be in the center of the slot, 8" to 12" apart, again leaving 1/32" between the nail head and the corner post. This allows for the expansion and contraction to occur.
- The corner post should extend 3/4" below the starter strip. Make sure the posts are plumb (i.e., vertically straight).
- For a better finished appearance, remove a 3/4" portion of the nail hem on both sides of the corner post.



Starter trim and outside corner post

Adirondack inside corner application

Two J-channels must be used when installing Adirondack vinyl log siding in the inside corner of a house.

You must follow the same instructions as for the installation of the outside corner post while using two J-channels installed as shown in the illustration.



Starter trim and J-channels in an inside corner application

Adirondack vinyl log siding installation

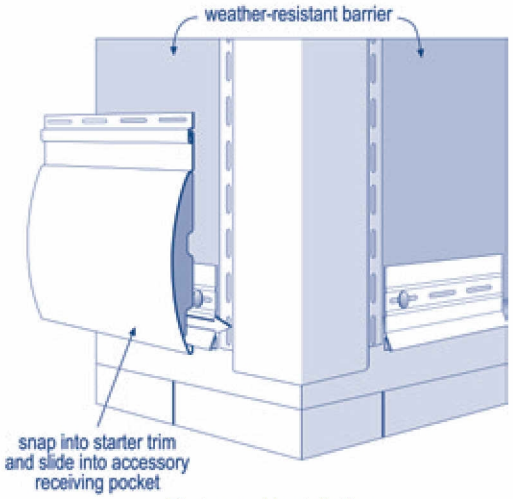
Installing the Adirondack vinyl log siding

As with all vinyl siding installation, the first row of siding is the one that will guide the rest of the wall. Start the installation the right way to have an easy installation.

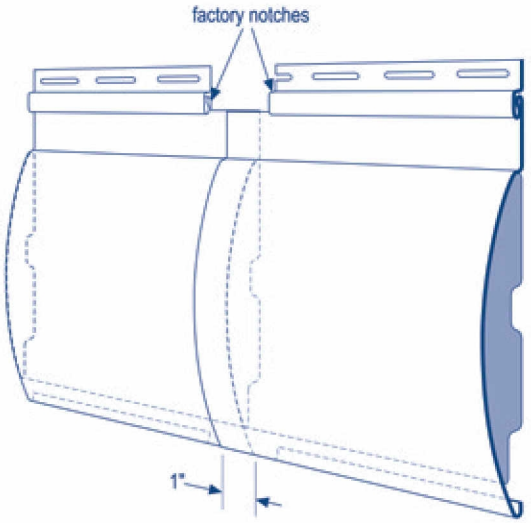
- Place the first vinyl siding panel into the starter trim and slide the panel into the pocket of the corner post.
- Fasten the panels in the center of the nailing slots. Allowance should be made for expansion and contraction by leaving a 1/4" gap between the siding and all corner posts and channels (increase to 3/8" when installing in temperatures below 40° F).
- Do not drive the head of the fastener tightly against the nail slot. Leave 1/32" between the fastener head and the vinyl (about the thickness of a dime).
- Do not force the panels up or down when fastening. Panel locks should be fully engaged; however, the panels should not be under vertical tension or compression when they are fastened.
- Since vinyl siding moves as the temperature changes, make certain that the vinyl panels can move freely in a side-to-side direction once fastened.
- Check every fifth or sixth course for horizontal alignment. Also check siding alignment with adjoining walls.
- When panels overlap, make sure they overlap by one half the length of the notch at the end of the panel, or approximately 1". The foam insert in the back of the panels should but together.

Always overlap joints away from entrances and away from the point of greatest traffic. This will improve the overall appearance of the installation.

Vinyl siding panel seams should be staggered along the installation and should be at least three courses apart.



First panel installation



Adirondack panel junction detail

Installing under window and crown area

Several options are available to secure the topmost panel below the eaves or windows. Depending on where the siding panel has to be cut, you have to follow one of the methods below:

If the Adirondack panel is cut in a thick section of the panel;

- Cut the siding panel and punch snap locks every 6" to 8".
- Push the panel securely into the top J-channel.

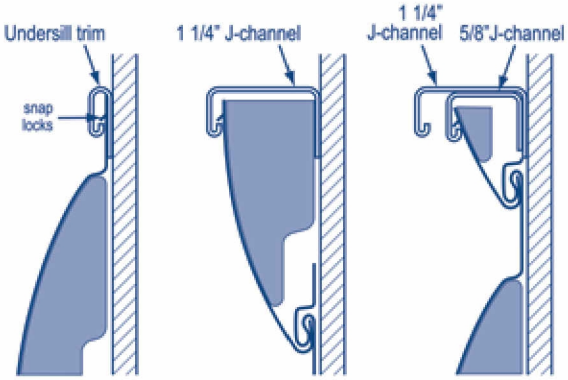
If the Adirondack panel is cut above or below the thickest section of the panel;

- Place a smaller 5/8" J-channel inside the 1 1/4" J-channel to act as an undersill trim.
- Cut the siding panel to the appropriate dimension and punch snap locks every 6" to 8".
- Push the panel securely into the 5/8" J-channel.

If the Adirondack panel is cut above the foam section of the panel;

- Install an undersill trim in the top J-Channel.
- Cut the siding panel to the right dimension and punch snap locks every 6" to 8".
- Snap lock the siding panel into the J-channel, checking for proper free movement.

At all time the top of the panel going into the undersill trim or 5/8" J-channel must have a series of snap locks on the top.



Finishing the top of a wall.

Horizontal insulated siding installation

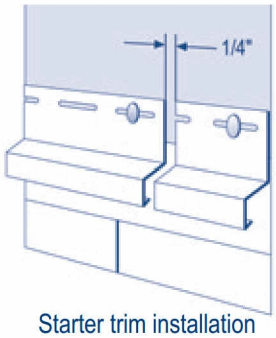
Insulated starter installation

In order for the siding and insulation to be installed properly in a level fashion, the insulated starter at the bottom of the wall must be level.

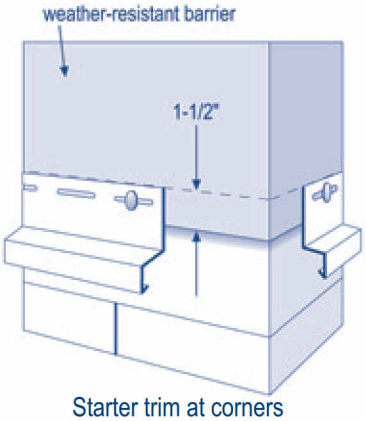
- Determine the lowest point of the wall that will be sided; from that point, measure up 1/4” less than the width of the insulated starter and partially drive a nail at one corner.
- Attach a chalkline; go to the next corner and pull the line taut.
- Make sure the line is level by using a line level or a 4’ level.
- Snap the chalkline and repeat the procedure around the entire house.

Using the chalkline as a guide, install the top edge of the insulated starter along the bottom of the chalkline, nailing at 10” intervals. Allow space for the corner posts, J-channels, etc.

- Keep the ends of starter strips at least 1/4” apart to allow for expansion.
- Leave approximately 1/4” between the insulated starter and the corner post.
- Nail in the center of the starter strip nailing slots.



Starter trim installation

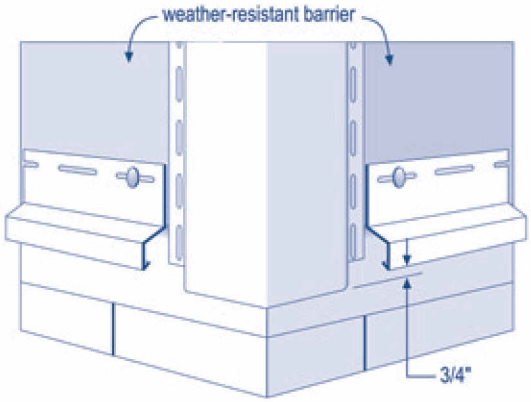


Starter trim at corners

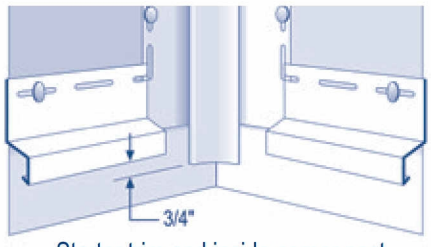
Insulated outside corner posts

The installation of the insulated outside corner posts is important as the insulated corner insert are an integral part of the insulated wall system.

- A water resistant material should used to flash the inside and outside corners a minimum of 10” on each side.
- Place the insulated corner insert inside of the outside corner post prior to nailing on the wall.
- Place the corner post in position, allowing a 1/4” gap between the top of the post and the eave or soffit.
- Position a nail at the top of the upper slot on both sides of the corner post, leaving a 1/32” gap between the nail heads and the corner posts. The corner post hangs from these nails.
- The balance of the nailing should be in the center of the slot, 8” to 12” apart, again leaving 1/32” between the nail head and the corner post. This allows for the expansion and contraction to occur at the bottom.
- Make sure to install the insulated corner inserts inside the outside corner post as you go down the wall and nail the corner post.
- Make sure to leave no gaps between insulated corner inserts.
- The corner post should extend 3/4” below the starter strip. Make sure the posts are plumb (i.e., vertically straight).
- For a better finished appearance, remove a 3/4” portion of the nail hem on both sides of the corner post.



Starter trim and outside corner post



Starter trim and inside corner post

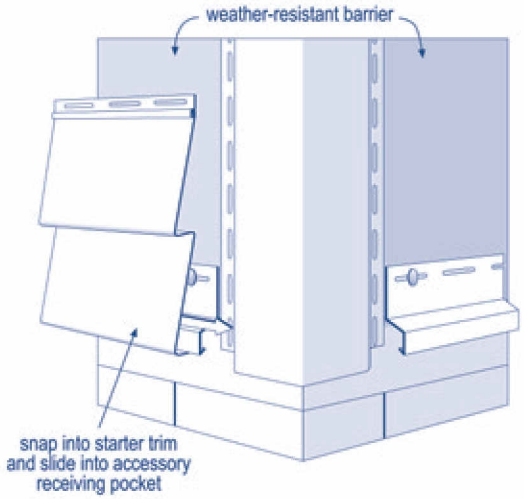
Horizontal insulated siding installation

Installing the insulated wall system

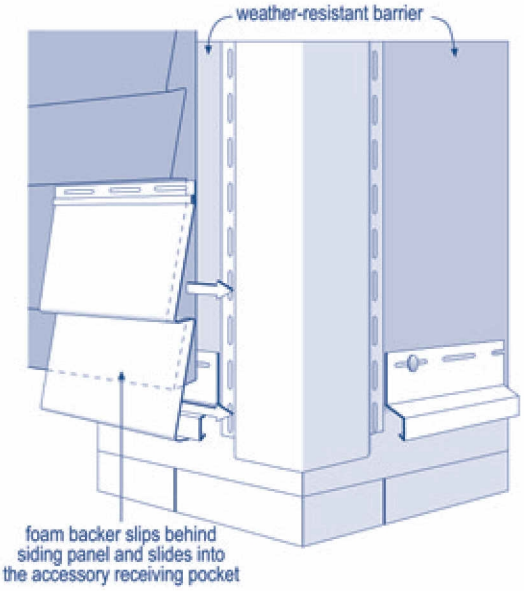
As with all vinyl siding installation, the first row of siding is the one that will guide the rest of the wall. Start the installation the right way to have an easy installation.

- Place the first vinyl siding panel into the insulated starter trim and slide the panel into the pocket of the corner post. Do not nail in.
- Place the first piece of contoured backer board behind the siding panel already in place. Allowing 1/4" for the expansion and contraction of the siding. Slide the backer board next to the insulated corner pieces leaving no gaps. Align the backer board to make sure that it fits snugly with the profile of the panel.
- Nail in the section of the first siding panel that has the backer board behind it. The panel should be nailed in the center of nailing holes every 16" while making sure not to nail it in too tightly.
- Install sections of contoured backer board next to the first one, leaving no gaps between the sections.
- Siding panels should overlap 1". Make sure to have overlaps visible away from areas of high traffic.
- Install the contoured backer board along the first row of siding before starting another row.
- Once the first row of siding is installed; put up the second row. Contoured backer boards cover two siding rows.
- Install the first panel of the third row of panels on the wall.
- Place the second row of contoured backer board directly over the first row of backer board behind the siding panels and nail in the siding panel.
- Continue this way until the top of the wall. Check the level of the siding panels every 3 courses.

Vinyl siding panel seams should be staggered along the installation and should be at least three courses apart.



First panel installation



First contoured insulation panel installation

Installation under window and crown area

Several options are available too secure the topmost panel below the eaves. Depending on where the siding panel and backer boards have to be cut, you have to follow one of the two methods below:

Using an undersill trim inside a J-channel:

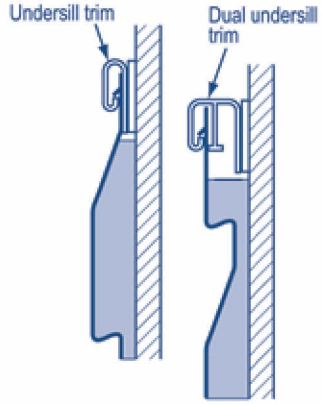
- Install an undersill trim with a furring strip to the proper dimension inside the top J-channel.
- Cut the contoured backer board to fit in the top J-channel.
- Cut the siding panel to the right dimension and punch snap tabs every 6" to 8". The locks have to be towards the outside of the panel.
- Snap lock the siding panel into the undersill trim, checking for proper free movement.

A dual undersill trim should be used when the siding panel has to be cut at its thicker section

Using a single J-channel:

- Cut the contoured backer board to fit in the top J-channel.
- Cut the siding panel to the right dimension and punch snap locks every 6" to 8".
- Snap lock the siding panel into the J-channel, checking for proper free movement.

Note that siding panel seams should not be situated under windows.



Use of undersill and dual undersill trims when finishing the top of a wall.

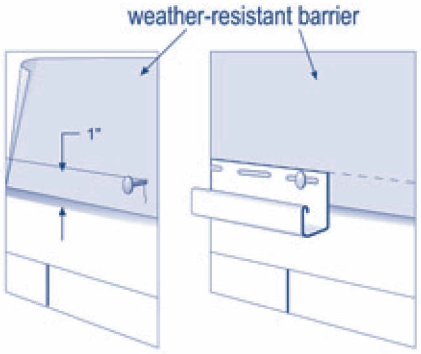
Vertical siding installation

Preparation

See section “Preparing to install” before starting.
When installing vertical siding, however, follow these additional preparatory steps:

- Install horizontal furring strips, 12” on center, or a solid nailable sheathing prior to the siding, if needed, to level the surface or provide sufficient material for 3/4” fastener penetration.
- Snap a level chalkline around the base of the sidewalls. Typically, the chalkline is positioned so that the bottom of the J-channel that will serve as a vertical starter strip is 1/4” below the lowest point on the wall that will be sided.
- Install J-channel along the chalkline as a receiver for the vertical siding.

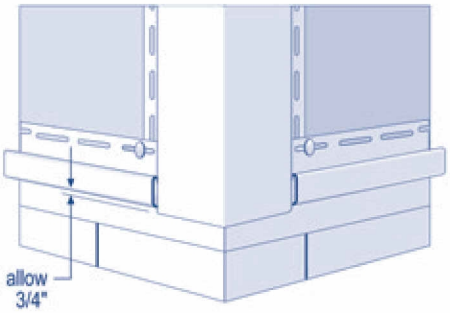
As with horizontal siding, when installing vertical siding it is necessary to install several accessories first, including corner posts and window, door, and roof trim.



Starting the wall

Outside and inside corner posts

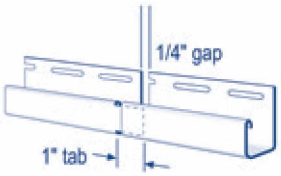
- Leave 1/4” gap at the top of corner posts.
- Place the first nails in the uppermost end of the top nail slots to hold them in position. Place all other nails in the center of the slots. Nails should be 8” to 12” apart.
- Corner posts should extend 3/4” below the siding. Do not nail tightly; the corner post should move.



Outside corner detail

Bottom receiver

- Position the top edge of a J-channel or vertical base along the previously snapped chalkline. Remember to drill minimum 1/8” diameter weep holes no more than 24” apart.
- Fasten every 8” to 12”. Use the center of the nail slots. All vinyl should be fastened securely but not tightly. Sideways movement should not be restricted. Leave 1/4” gaps at the corner posts. Where lengths adjoin, trim the nailing flange 1” and overlap 1/2” to produce a neat joint.



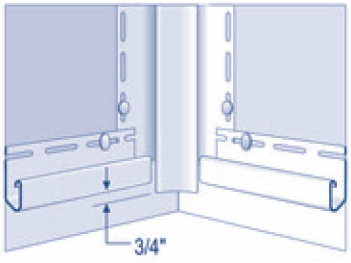
Splicing J-channels

Window, door, and roof trim

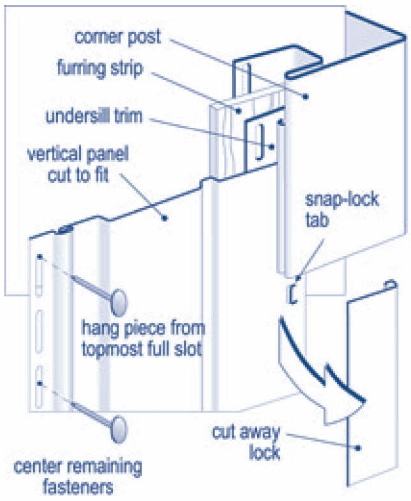
Install J-channel at the tops of the sidewalls. At the gable ends, snap a level chalkline along the base of the gable and install J-channel. Overlap where necessary and allow for expansion.

After installing flashing, trim around all windows and doors using J-channel. The following sequence is suggested:

- Cut a J-channel for the bottom of the window, as wide as the frame, and install it.
- Cut side J-channels the length of the frame plus the width of the top and bottom J-channel. Cut and bend tabs into the bottom channel. Install the side channels.
- Cut the top J-channel the width of the frame PLUS the width of the side J-channels. Notch the top J-channel on each end, bend the tabs into the side J-channel, and fasten the top J-channel.
- A miter cut and tab can be provided at the bottom of the window depending on the sill’s condition.



Inside corner detail

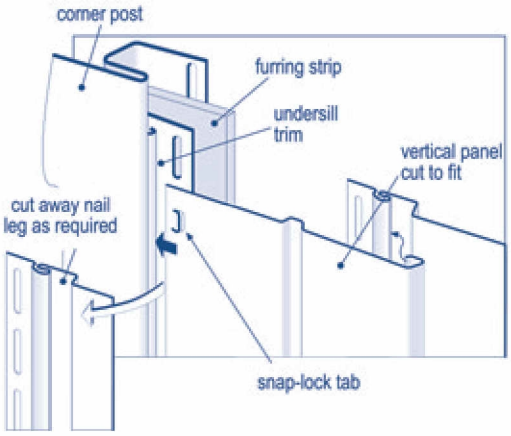


Wall ending detail

Vertical siding installation

Sidewalls starter strip

- Create a vertical starter strip by cutting the nailing hem and adjacent lock off a vertical siding panel. Fasten it inside the receiver channel of the corner post. Be sure this piece is plumb. Leave enough clearance in the pocket of the corner post to allow the siding panel to be attached.
- Install J-channels at top and bottom. Fasten panels 12” on center. Leave 1/4” clearance at top and 3/8” at bottom. Place the first fasteners in the uppermost end of the top nail slots to hold them in position. Place all other fasteners in the center of the slots.
- If it will take more than one course to span the height of the house, terminate the first course into an inverted J-channel, allowing 1/4” for expansion. Install head flashing on top of the J-channel and begin the second course leaving 1/4” gap at the head flashing.



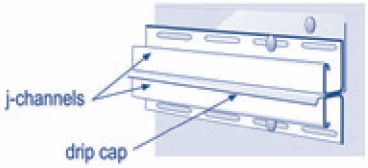
Alternate wall ending

Panels

- Working from the starter strip to the corners, lock each panel and fasten every 12”. Vertical panels are terminated into the J-channel installed at top and the vertical base or J-channel installed at bottom.

Horizontal joints

If a horizontal joint is needed, combine J-channels back-to-back with flashing, or use a single J-channel with a minimum 3/4” face drip cap to direct water over the lower wall.



Horizontal joints

Optional method for gable end sidewalls

- Find the center of each sidewall and use a level or plumb line to install two back-to back J-channels or an H-channel.
- Leave a 1/4” gap at the top and bottom. These will serve as starter strips in which to lock the vertical siding.

Windows and Doors

- At window and doors, cut the panels (if necessary) to fit the openings, allowing 1/4” for expansion.
- If the panel is uncut or cut down in the “V”- shaped groove of a piece of vertical siding, simply insert it into the J-channel, locking the other side onto the previously applied panel. A furring strip should be installed to prevent panel detachment.
- If the panel is cut on the flat surface, install undersill trim, backed by furring, into the J-channel. The flat surface of the vertical siding should be snap lock punched and fitted into the undersill trim. The panel is further secured above and below the windows and above the door when the panel is fastened in place.

Corners

- Install the undersill trim or J-channel into the receiver of the corner post.
- If the panel is cut in the bottom of the V-groove, insert it into the J-channel. A furring strip should be provided prior to panel insertion. This will prevent the panel from detaching.
- If the panel is cut on the flat surface, install undersill trim, backed by furring, into the J-channel. Punch snap locks along the cut edge of the panel at 6” intervals and snap it into the undersill trim.

Gable Ends

- Begin by fastening J-channel along the inside edge of the roof. Install vertical base on top of previously installed J-channel at the base of the gable.
- Attach either vertical siding starter strip or two back-to-back regular starter strips, centered with the peak of the gable. This area should be flashed prior to installing the starter strips.
- Make a pattern for end cuts along the gable using two pieces of scrap siding. Lock one piece into the vertical strip at the center of the wall. Hold the edge of the other piece against and in line with the roof line. Mark the slope on the vertical piece and cut along that line. Use it as a pattern to mark and cut the ends of all other panels required for this side of the gable end. Make another pattern for the other side of the gable.

Installing soffit and fascia

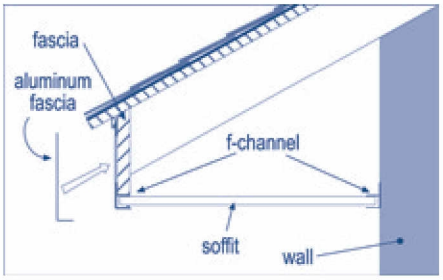
Please note: Although vinyl soffit's are manufactured with the same exacting standards as all vinyl products; UV Inhibitors are not added to the vinyl formulation as soffits are not exposed to direct sunlight. For this reason, vertical or horizontal installation of soffits on walls is not recommended and cannot be guaranteed.

Installing trim - Option A

When fascia is applied without exposed nailing.

With open eave: Secure F-channel to the exterior of the fascia with the top leg resting against the bottom of the board. Secure F-channel on wall, level with the F-channel on the fascia.

With closed eave: Use a J-channel in place of the F-channel at the wall. Secure all channels every 12" on center, in center of nail slots.



Option A

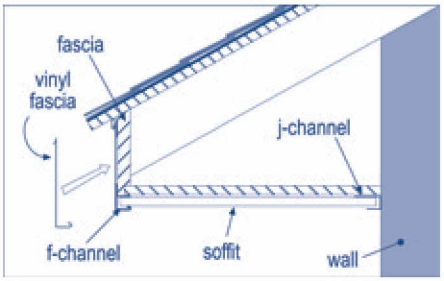
Installing trim - Option B

When soffit only is applied, or when fascia panel is secured to underside of wood fascia.

With open eave: Secure F-channel to the wall and to the inside of the fascia board, level with each other. Cut out back of channel to fit around rafters, if needed.

With closed eave: Substitute J-channels for the F-channels.

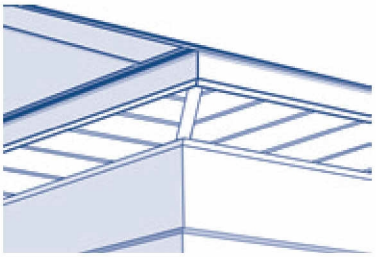
Secure all channels in the center of the nail slots, 12" on center.

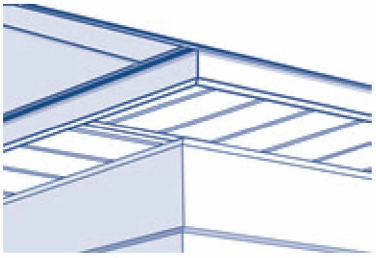


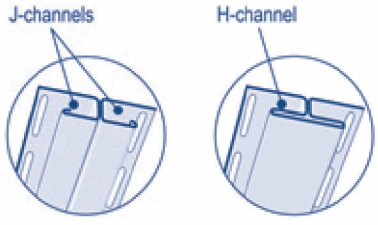
Option B

Installing soffit

1. Measure the distance between the inside of the inside and outside trims. Allow 1/4" per side for expansion and cut the panels to length. Insert panels into trims. For eaves over 18" in width, you will need to install intermediate nailing supports to keep the soffit from sagging.
2. Interlock panels as you would vertical siding. Closed soffit can be secured every 12" on center.
3. When fascia panel is not being applied, use an F-channel or J-channel at corners of the overhang to properly finish the installation.
4. When soffits meet at a corner, the joint can either be diagonal (mitered) or square (both illustrated). Both methods are made with J-channel or H-channel.


Diagonal trim use


Straight trim use

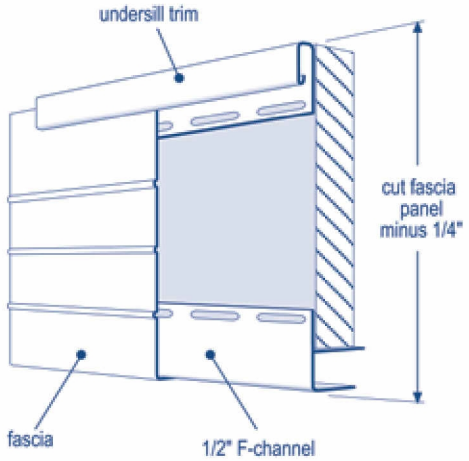


Installing soffit and fascia

Installing fascia

1. Install an undersill trim at the top of the fascia board.
2. Measure distance from the bottom of the F-channel to the top of the undersill trim, and then subtract 1/4” for clearance. Cut panel to width.
3. Perforate the cut edge using snap-lock punch approximately every 8”, ensuring the “tabs” face outward.
4. Hook the leg of the fascia panel over the F-channel, and snap the tabs into the undersill trim. If soffit is not being installed, hook the fascia directly over the fascia board.

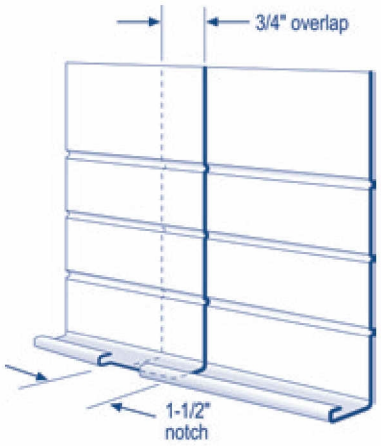
An alternative to snap-lock punch attachment is to slide the top of the fascia behind metal drip-edge.



Fascia installation

Overlapping fascia

1. Overlap fascia by cutting the bottom edge of the underlaying panel, leaving a 1 1/2” tab to be inserted into overlapping panel.
2. Overlap 3/4” (half the distance of the notch).

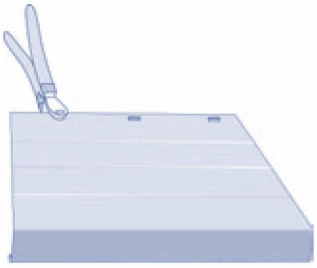


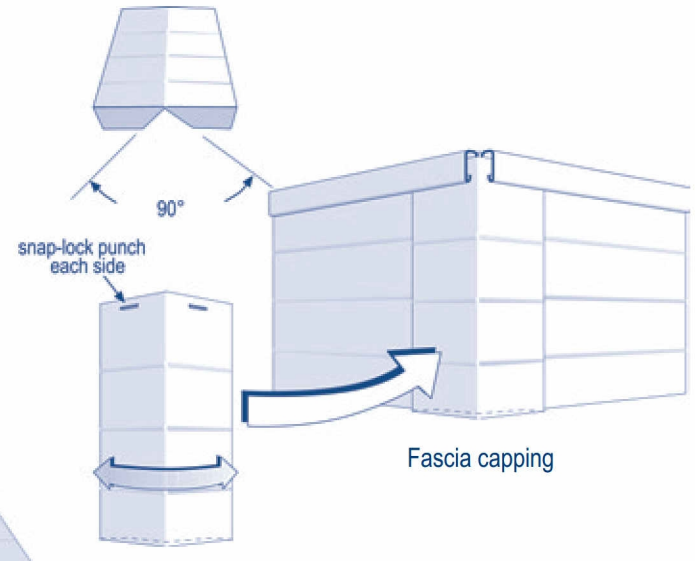
Fascia overlapping

Capping fascia

To make corner caps, cut a piece of vinyl fascia that is 5 1/2” long.

1. Mark the vertical centerline on the back of the piece.
2. Cut a 90° section of the bottom flange from the center, leaving a 45° angle on either side.
3. Use a hand seamer or metal straightedge to fold fascia piece along vertical centerline to make a right-angled corner.
4. Using a snap-lock punch, make tabs just below the top edge of the corner cap, making sure that tabs face outward. Install corner cap by locking the bottom over the existing F-channel and snapping the top edge into the undersill trim.



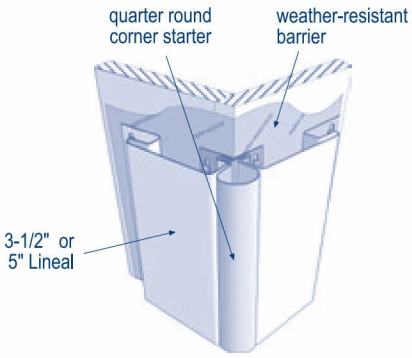


Fascia capping

TrimFX™ installation

Wide corners with lineals

The completed application includes a quarter round corner starter, and two lineals.



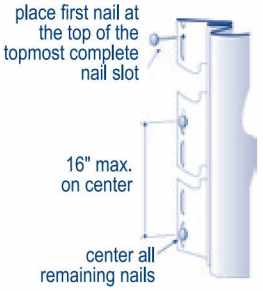
Assembled Lineal corner

Preparation

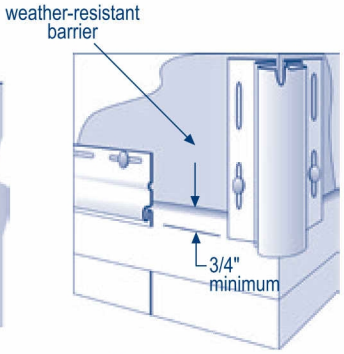
- Start at the lowest corner of the structure.
- Measure the height of the corner; remember to allow 1/4" clearance from the top of the wall.
- The quarter round corner starter should extend a minimum of 1/4" lower than where the siding will start to allow enough material to cover the corner completely during normal expansion and contraction.

Install quarter round corner starter

- Position the quarter round corner starter along the wall corner. Make sure the quarter round corner starter is plumb and square. Use of a corner level is recommended in aiding placement.
- Nail the quarter round corner starter to the wall, securing it from the top of the topmost full nail slot, and then securing and centering the remaining fasteners in the slots. The quarter round corner starter should hang freely to allow for normal movement.
- Continue this process around the entire house.



Quarter round corner starter installation



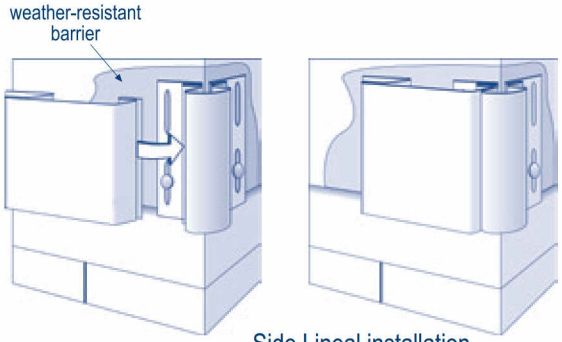
Outside corner detail

Installing corner lineals

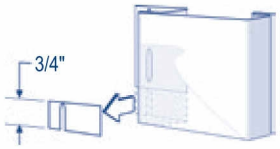
- Trim lineals to be equal in length to the quarter round corner starter.
- Remove a 3/4" tab from the nail leg.
- Slide the lineal into the receiver of the quarter round corner starter. The lineal will automatically seat itself flush to the quarter round.

NOTE: It may help to "squeeze" the face of the lineal by applying pressure on the lineal face towards the corner, to fully seat the lineal into the quarter round corner starter.

- Secure the lineal by first positioning a nail in the top of the topmost full nail slot. The lineal should hang freely from this point.
- Secure the remainder of the lineal using the centers of the nail slots not exceeding 16" on center.
- Continue the application by securing any siding starters required.



Side Lineal installation

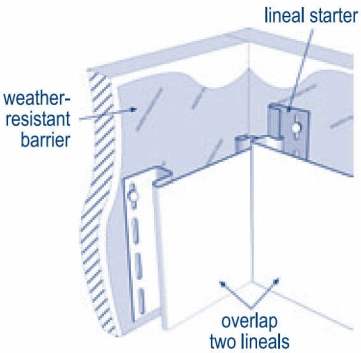


Lineal bottom installation detail

Inside corner application

Lineals can also be used as inside corners. Various looks can be achieved using 3-1/2" and 5" lineals.

- Begin the installation by securing a lineal snug to the inside corner. Remember to position the first fastener at the top of the topmost full nail slot such that the lineal hangs from it.
- Place remaining fasteners not exceeding 16" on center.
- Fasten a lineal starter strip against the secured lineal making sure both the previously installed lineal and starter strip have unrestricted movement.
- Complete the corner by sliding the remaining lineal into the lineal starter. Hang the lineal from the topmost nail slot, and finish with fasteners not exceeding 16" on center.



Inside corner detail

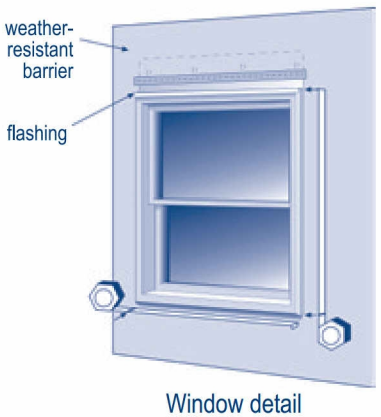
Trim*FX*™ installation

Installing lineal starters

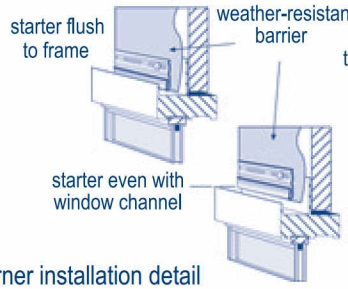
Make sure the wall opening is properly flashed. Use aluminum coil stock or other non-absorbent material to wrap the opening.

- Run wide strips of flashing underneath, up the sides, and across the top in that order, overlapping each corner for the best possible drainage.
- Measure the window and cut starter strips 1/2" shorter than the overall window size. Position the starters allowing 1/4" at both ends. On vertical pieces, position the top nail at the topmost full nail slot (similar to hanging corner pieces).
- Secure remaining slots a maximum of 16" on center. For horizontal starters, simply place fasteners in the center of the slots. Remember that all starters must have unrestricted movement after securing or the performance of the lineal may be affected.

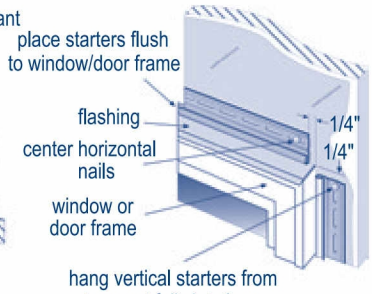
NOTE: Certain styles of windows may have a small channel. In such case, approximate the position to be even with the window channel, and secure the starter. The starter is designed to work even with it flush to the window frame.



Window detail



Corner installation detail



End-cuts for lineal installation around doors and windows

Bottom or sash lineal

Both ends of the bottom lineal are cut identically.

- Remove a 3/4" - 7/8" section from the flat edge, and a 3/4" - 7/8" tab from the receiving channel. Removing these pieces allows the side lineals to be installed, and clearance for siding panels.

Side lineal

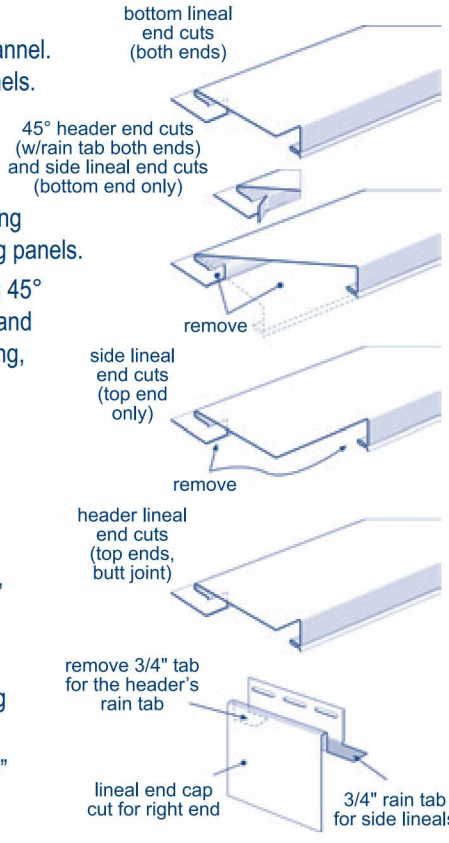
Side lineals have different cuts at both ends.

- The bottom end will always be miter cut 45° and the miter will always start from the receiving channel. A tab 3/4" deep is removed from the receiving channel for the application of siding panels.
- The upper end can be cut two ways: for a 45° corner or for a butt joint header. When using 45° miters around the entire window, remove a 3/4" - 7/8" tab from both the receiving channel and the flat edge of the lineal. Removing these tabs allows clearance for the application of siding, and for proper water drainage.
- If applying a header using a butt joint, simply square the end.

Top or header lineal

There are also two ways to cut a header lineal: for a 45° miter, and for a butt joint.

- When using a 45° miter, cut both ends the same way as shown for the bottom end of side lineals EXCEPT do not remove the 3/4" tab from the receiving channel. Instead, make 3/4" deep slits to create 3/4" rain tabs at both ends.
- When applying a butt joint header, square up both ends. Next, make 3/4" rain tabs at both ends of the receiving channel. Finally, remove a 3/4" - 7/8" tab from the flat end for clearing the side lineals and end caps.
- End caps are required for both sides of a butt joint header application. Remove a 3/4" - 7/8" deep tab from the receiving channel at one end, and a minimum of 3/4" from the face and nail slot areas thus creating a rain tab. The length of the cap is dependent of whether a 3-1/2" or a 5" lineal is used.

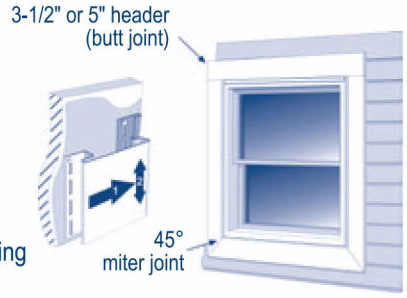


Trim*FX*™ installation

Installing lineal

Determine the look required. Typical installations use both square cuts and 45° miter cuts.

- Use square cuts (butt joint) when applying a 5” lineal as a header over 3-1/2” surrounds, or if the intended look is to emphasize the header.
- Use 45° miter joints in the bottom corners and at the top if the entire opening is wrapped using similar sized lineals. Install lineals by sliding into the starter, then side-to-side to position.



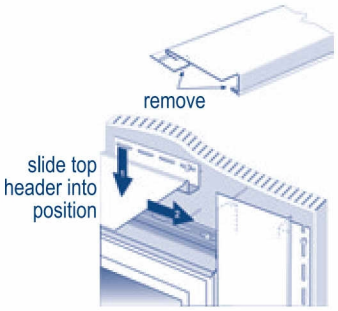
Window corner detail

Installing 45˚ miter joints

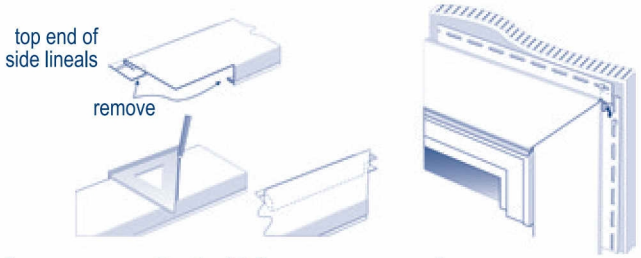
- Measure the window and cut lineals allowing for the proper overlap.
- Use a speed square or similar tool to help create consistent 45° cuts. Starting at the bottom of the window, cut a lineal to size.
- Remove 7/8” tabs from both ends of the flat edge of the lineal and in the receiving channel to allow clearance for the side lineals.

Next, cut the side lineals.

- For 45° corners, cut miters at the bottom of the side lineal only.
- At the top, remove a 3/4” tab from the receiving channel for siding application and water drainage, and proper clearance from the flat edge for the application of the header lineal.



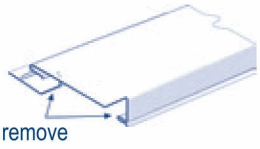
Lineal corner detail



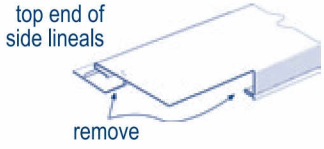
Assembled Lineal corner detail

Installing a 5” header over 3-1/2” surrounds

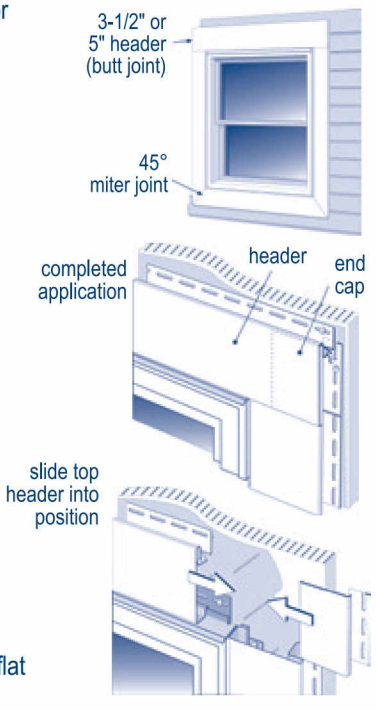
- Measure the window and cut lineals allowing for the proper overlap. Use a speed square or similar tool to help create the 45° miters where required.
- Starting at the bottom of the window, cut a lineal to size. Remove 7/8” tabs from both ends of the flat edge of the lineal and in the receiving channel to allow clearance for the vertical lineals.



- Next, cut the side lineals. Cut miters at the bottom of the side lineal only. Remove a 3/4” tab from the receiving channel.



- To create the top header, square both edges to size allowing an extra 1/4” for movement.
- Cut 3/4” rain tabs in the receiving channels. Two end caps will be required to complete the installation.
- End caps for the header can be made from a 5”-7” piece of scrap lineal. First, remove the flat edge of the lineal.
- Cut the end cap to length allowing for a 3/4” rain tab.
- Finally, remove a 3/4” tab for the header lineals’ rain tab. A completed right end cap will appear like the illustration.



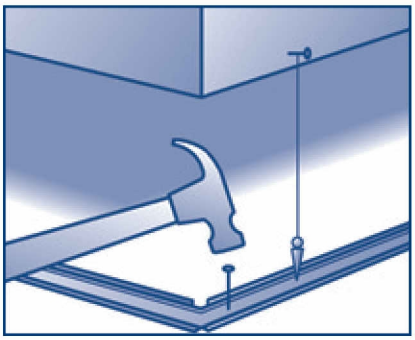
Assembly Lineal corner detail

Vinyl skirting installation

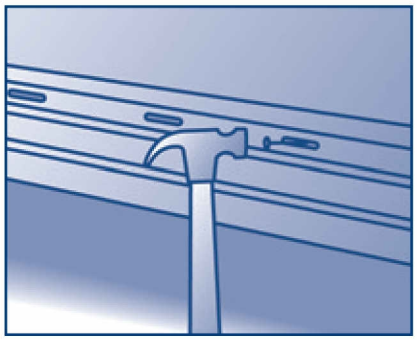
Here's everything you'll need to add that finishing touch to any foundation. KP Building Products Vinyl Skirting is engineered to fit together precisely, for a professional installation every time.

Installation is quick and easy

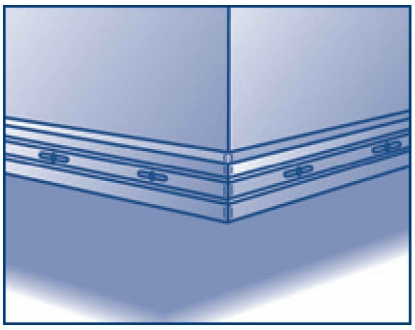
Before you begin your skirting installation, you will need to gather a few household tools: Hammer, chalk line, tape measure, tin snips or aviation snips, and plumb bob.



1. Install the vinyl ground channel directly under the outside edge of your home, using galvanized nails. Use a plumb bob to determine exact location.



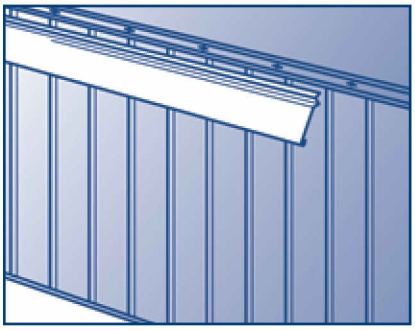
2. Install the back skirting trim. Snap a chalk line at the bottom of your home to mark the position for the back skirting trim. Nail the trim pieces to the home using the nail slots. Make sure you place the nail in the center of the slot and do not hammer tightly.



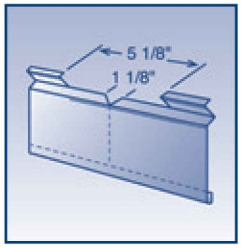
3. To go around corners, bend the back skirting trim at the corners of the home and continue nailing. Do not cut.



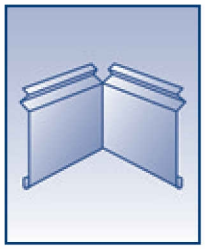
4. Measure the skirting panels to the proper height, subtracting 1/4" for expansion. Cut the panels to size, using tin snips. Slide panels over the back skirting trim and into the vinyl ground channel, interlocking the panels as you install them. To form corners, bend but do not cut the panels.



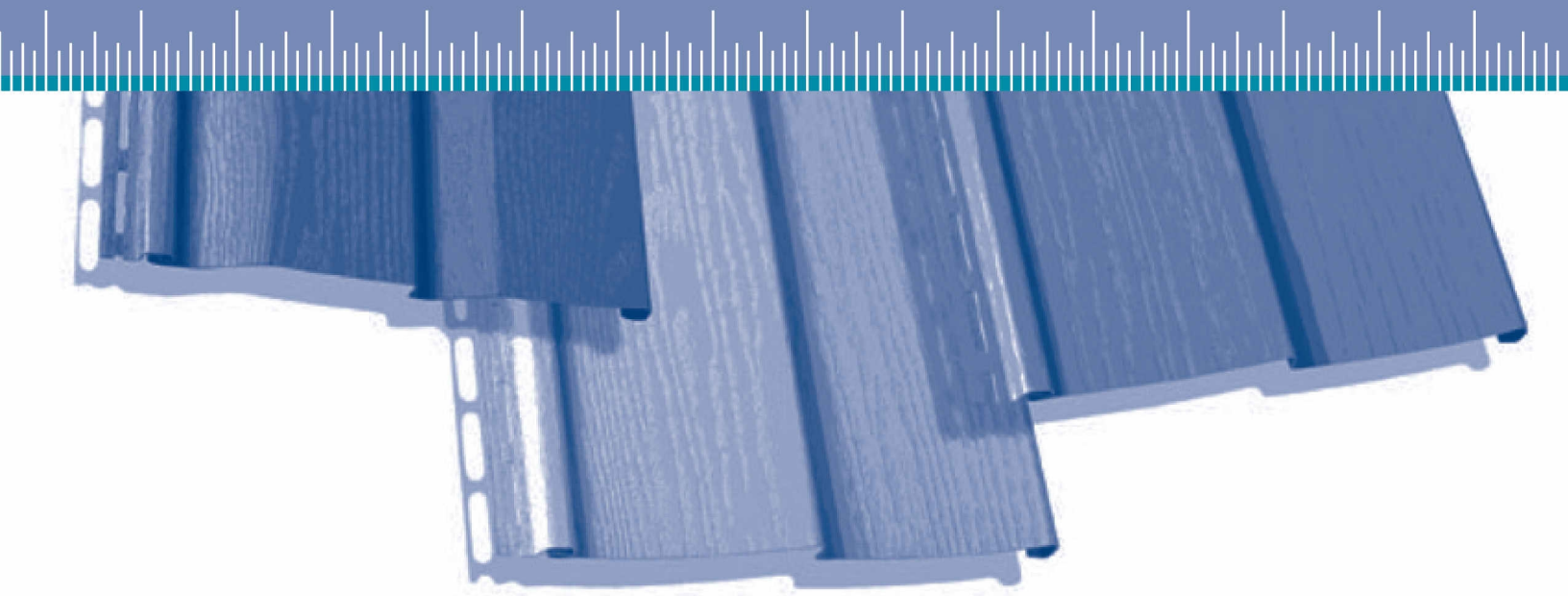
5. Snap the front skirting trim into place to hold panels securely. To form corners, do not cut the panels, notch and bend the panels. Follow the special guidelines shown in illustrations 6a and 6b to finish the skirting trim at the corners.



6. a) Cutting outside corners. Determine the location of the corner and cut a 5 1/8" section from the top edge of the spring lock. In the center, cut a "V" 3/4" deep and 1 1/8" wide at the top edge, and a small "V" cut at the bottom. Bend the front skirting trim and snap it into the corner.



6. b) Cutting inside corner. To cut the front skirting trim for inside corners, cut out a 1" or 2" tab in the top edge of the spring lock and make a small "V" cut through the bottom lip. Bend and snap the trim piece into place.



Cleaning

The beauty of vinyl siding is maintained with little effort.

Vinyl siding cleanup

Although vinyl siding will get dirty, like anything exposed to the atmosphere, a heavy rain will do wonders in cleaning it. Or, it's possible to wash it down with an ordinary garden hose.

If neither rain nor hosing does a satisfactory job, follow these simple instructions:

1. Use an ordinary, long-handled car washing brush. This brush has soft bristles, and the handle fastens onto the end of the hose. It allows the siding to be washed just like a car. Avoid using stiff bristle brushes or abrasive cleaners, which may change the gloss of the cleaned area and cause the siding to look spotty.
2. To remove soot and grime found in industrial areas, wipe down the siding with a solution made up of the following:
   a. 1/3 cup powdered detergent (e.g., Tide®, or equivalent powder detergent)*
   b. 2/3 cup powdered household cleaner (e.g., Spic & Span®, or equivalent)*
   c. 1 gallon water.
3. If mildew is a problem, use the solution previously mentioned, but add 1 quart liquid laundry bleach.
4. When washing down your entire house, start at the bottom and work up to the top in order to prevent streaking.

For stubborn stains, refer to the Stain Cleaners below.

Stain cleaners**

Bubble Gum: Fantastic®, Murphy's Oil Soap®, or solution of vinegar (30 percent) and water (70 percent)

Crayon: Lestoil® DAP (Oil-based caulk) Fantastic®

Felt-tip Pen: Fantastic® or water-based cleaners

Grass: Fantastic®, Lysol®, Murphy's Oil Soap®, or Windex®

Lipstick: Fantastic® or Murphy's Oil Soap®

Lithium Grease: Fantastic®, Lestoil®, Murphy's Oil Soap®, or Windex®

Mold and Mildew: Fantastic® or solution of vinegar (30 percent) and water (70 percent)

Motor Oil: Fantastic®, Lysol®, Murphy's Oil Soap®, or Windex® Oil Soft Scrub® Paint Brillo® Pad or Soft Scrub®

Pencil: Soft Scrub®

Rust: Fantastic®, Murphy's Oil Soap®, or Windex®

Tar: Soft Scrub®

Top Soil: Fantastic®, Lestoil®, or Murphy's Oil Soap®

* Cleaning materials are listed in alphabetical order.

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