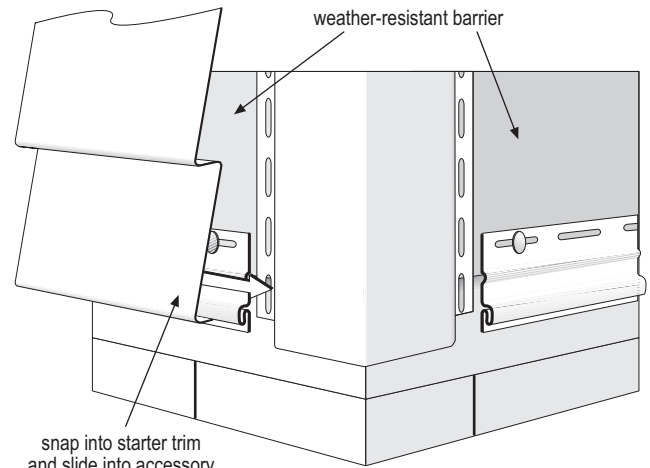


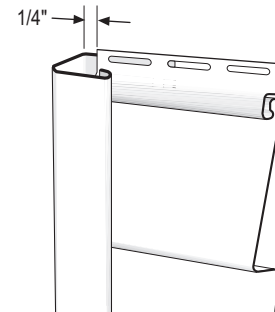
Horizontal siding installation

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.
- 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.



Installing the first panel

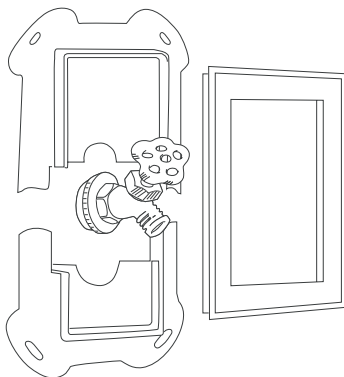


J-channel detail

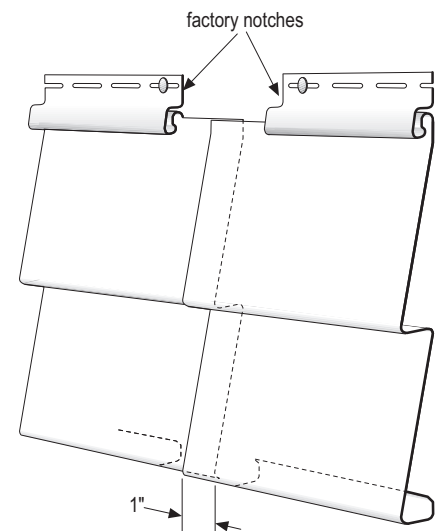
Fitting siding around fixtures

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.



Trimming pieces for faucet



Siding panel overlap

Horizontal siding installation

Fitting under windows

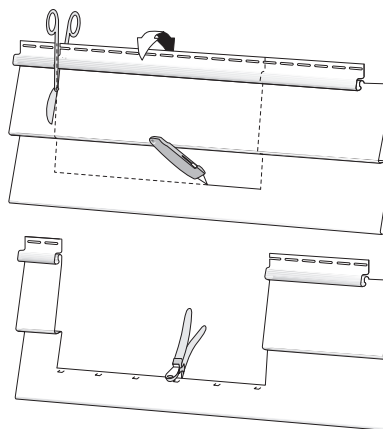
To mark the section to be cut, perform the following:

- 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.

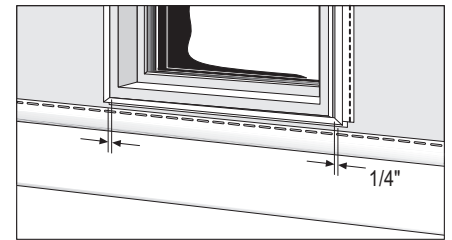
- Cut the panel with tin snips and a utility knife.

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

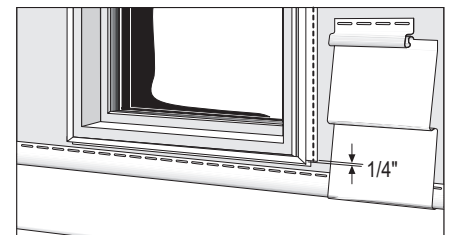
- Using a snap lock punch, punch the vinyl siding along the cut edge every 6" so the raised tab is on the outside face.
- Install undersill trim under the window, as a receiver for the cut siding. Undersill trim is used any time the top lock has been removed from the siding. Furring may be needed to 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.



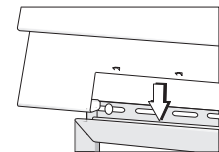
Cutting and preparing the panel



Measuring the width of the section to cut



Measuring the height of the section to cut

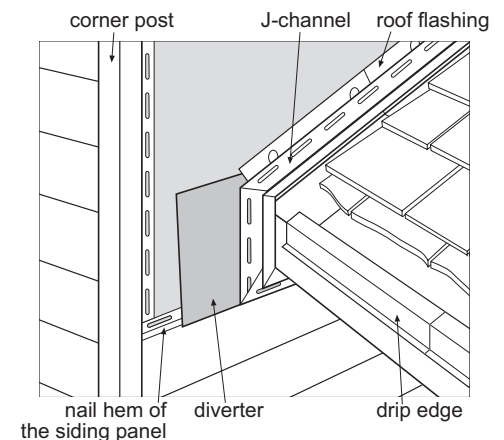


Installing the top panel

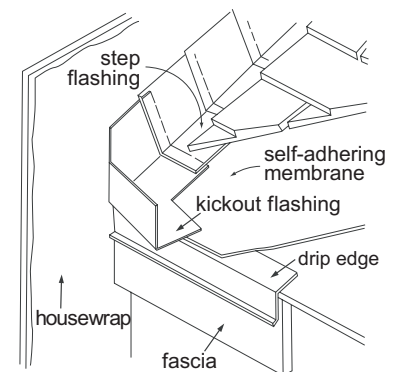
Sidewall flashing at roof lines

- 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

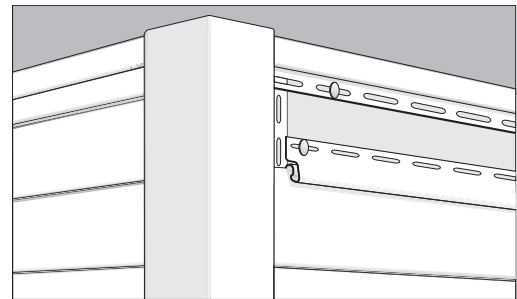


Kickout flashing
Horizontal Siding Installation 2

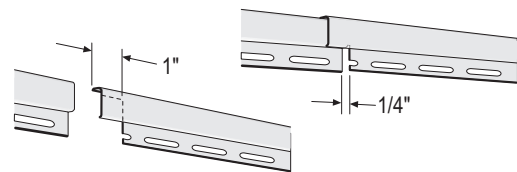
Horizontal siding installation

Under eave installation

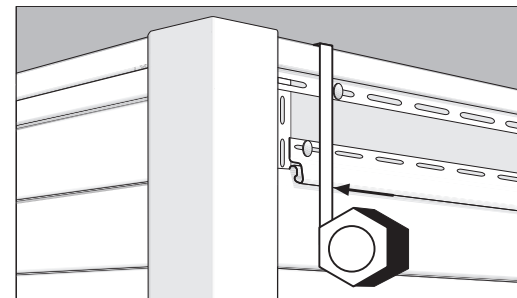
- Nail undersill trim along the top of the wall, flush with the eave of the house. Furring may be necessary to maintain the proper pitch of the topmost siding panel. Should more than one length of undersill trim be required, make a splice as shown by cutting away 1" from the back of the undersill trim 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.



Last full siding panel on the top of the wall



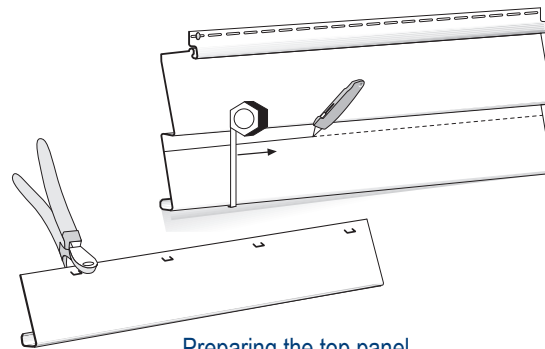
Splicing of the undersill trim



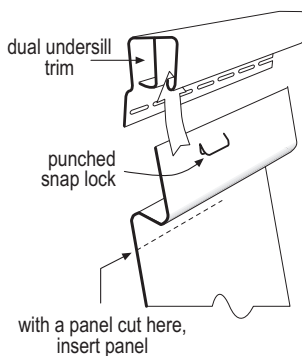
Measuring the height to cover

Fitting and installing top siding panel

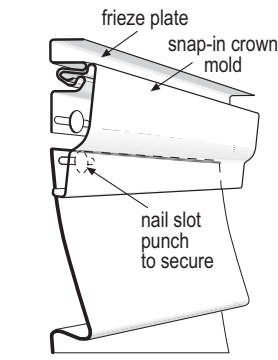
- Measure and cut siding panel to the desired length.
- Determine how much of the top panel must be removed by measuring the distance between the top of the undersill trim and the lock of the panel below, and subtracting 1/4". Be sure to measure several times across the wall as the dimension could change 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.



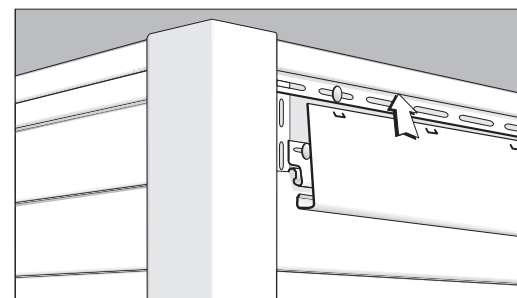
Preparing the top panel



Top panel installation using dual undersill trim



Top panel installation using frieze plate and crown mold



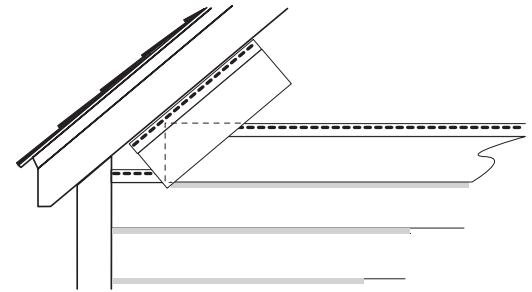
Installing the top panel

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.

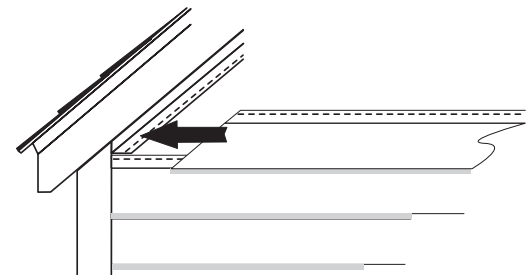


Measuring the cutting angle

Eaves treatment

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

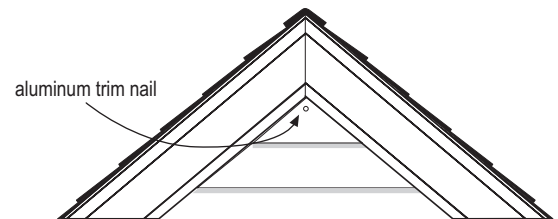
- Measure from the soffit to the base of the upper lock on the previous course of panels. Subtract 1/4". Mark this dimension on the panel to be cut, measuring from the bottom edge of the panel. It is a good idea to check the dimension in several locations along the length of the wall.
- Using a snap 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.