Slot tool

Planks Ladders

Drill w/41/8" hole saw

## Chapter 11. Siding and Soffit

11.1 SIDING PREP
11.2 INSTALLING HOUSE SIDING
11.3 INSTALLING SHED SIDING
11.4 INSTALLING SOFFIT
11.5 INSTALLING FASCIA
11.6 INSTALLING SHUTTERS
11.7 SITE CLEANUP

Tools needed by volunteers:	Materials needed:
Hammer	Vinyl siding
Nail apron	Vinyl corners
Tape measure	J-channel
	Undersill trim
	F-channel
	Soffit
	Fascia
	Siding nails
	Soffit nails
Tools and equipment needed:	Personal Protection Equipment:
Siding trailer	Safety glasses (required)
Generator	
Extension cords	
Tin snips	
Crimper	
Siding hook	
Speed square	
Utility knife	

NOTE: Figures 11-4 through 11-7, 11-9, and 11-10 were provided courtesy of the Vinyl Siding Institute, Inc. Figures 11-3 and 11-12 are modified versions of figures provided courtesy of the Vinyl Siding Institute, Inc.

Safety First! Review the Safety Checklist before performing tasks in this chapter.

## 11.1. SIDING PREP

#### 11.1.1. Siding Pre-Installation Steps

1. Continuing from Section 4.9, install the remainder of the wall foamboard, including any required above the porch if there is one at the gable end. Verify that all foamboard joints are taped. DO NOT tape any horizontal seams where house wrap exits from inside the foamboard. If necessary, use a few small pieces of tape to hold the bottom edge of the house wrap in place.

#### 11.1.2. J-Block Installation

- 1. Verify that all J-blocks for two exterior lights, two outlets, and all exterior pipes have been installed (per plan).
- 2. If J-blocks have not been installed, locate per plan and install. J-blocks located where there is OSB can be fastened directly to the wall. Where there is no OSB, 2x6 blocking between wall studs must be installed with a gap of 1" between the outside face of the blocking and the inside face of the exterior foamboard. Cut a piece of 1" foamboard the size of the 2x6 blocking to use as a permanent spacer when nailing.



Figure 11-1. 2x6 Blocking for J-blocks.

- 3. Outlet J-blocks above concrete slabs are located with the center 14" above the slab. For those above grade, install the blocking with the bottom edge on top of the bottom plate, and install the J-block centered on the blocking.
- 4. The centers of wall-mounted light J-blocks are located 12" below the top edge, and 12" from the outside edge of the exterior door brickmold, unless there is to be a window shutter on that side of the door. If so, locate the J-block centered between the brick molding and the edge of the shutter. If so, and the window is less than 43" from the door molding (assumes shutters are 15" wide), make a mark 15" from the window edge, and center the J-block between the door brickmold and this mark. Note the location on the inside wall next to the door for the electricians to find.

- 5. <u>For each light location</u> in the porch ceiling, create a 24"x22½" frame using two 2x4s or 2x6s 22½" long spaced 22½" apart with a 24"x22½" piece of ¾" OSB or two layers of ½" OSB nailed to them using 2¾" Paslode or 8d nails.
- 6. Install the frame between two trusses at the location specified by the plan, with the bottom of the OSB flush to the bottom of the truss, as close as possible to midway between the house wall and the front of the porch. If the truss layout is such that a truss is within 6" of the midway point, locate the frame on the house side of that truss. Nail through the trusses into the ends of the 2x4s or 2x6s using  $3\frac{1}{4}$ " Paslode nails.
- 7. The light must be at least 8" from a truss to avoid having the electricians hole-saw through the truss; measure from the close-to-midway truss 8" and mark on the OSB. Then measure from the house wall to the mark, and record that distance, as well as the side-to-side location on the wall so the electricians will know where to drill for the light.
  - **NOTE:** Soffit will be installed against the bottom of the OSB so electricians can easily drill a hole thru the soffit and the OSB to mount the ceiling porch can/light
- 8. Install a dryer vent by drilling a 4<sup>1</sup>/<sub>8</sub>" hole through the rim board and attach the vent. See House Plan for location.
- 9. <u>Verify whether there will be a second (or future) bath</u>. If so, install the 6" vent fan <u>outlet in the proper location</u>.
- 10. All J-blocks must be air sealed using blue Weathermate<sup>™</sup> Straight Flashing tape applied shingle-style. Keep the tape edge a minimum of ½" away from the inside edges of the J-block opening so the tape won't show after siding installation. Nails, slots and all edges must be covered by the tape

#### 11.1.3. Siding Layout

- 1. <u>Refer to the House Plan, or Construction Supervisor, to determine whether there are any special siding items such as shakes, white band, gable vent, J-blocks, etc., and note those locations with a marker on the exterior foamboard.</u>
- 2. At each corner on the eave sides of the house, use a framing square to mark the bottom of the sub-fascia on the wall. With the blade (long leg) firmly against the wall, slide the square up until the tongue (short leg) contacts the bottom of the sub-fascia, and make a mark on the wall at the top of the square (this will be the **bottom of the gable corner blocking**) and ½" below the top of the square (this will be the **bottom of the soffit F-channel**). Drive an 8d nail into the corner stud at the vertical center of the ½" mark.

- 3. Locate marks as follows, making them very close to the corner so they can be easily transferred to the gable side of the house.
  - a. Measure the height of several starter strips, to verify they are consistent. To determine the location of the top **of the starter strip**, subtract the starter strip width from  $102\frac{1}{2}$ ".

**EXAMPLE:** For a starter strip width of  $2^{1}/4^{2}$ ,  $102^{1}/2^{2}-2^{1}/4^{2} = 100^{1}/4^{2}$ .

- b. Hook a tape measure on the nail at the bottom of the F-channel location from Step 1 above and mark the calculated distance below the nail (in the above example, 100<sup>1</sup>/<sub>4</sub>").
- c. Mark the location of the **top of the skirting** 1" below the top-of-starter-strip mark.
- d. Repeat Steps a-c at each corner.
- **NOTE:** This procedure assumes 12 siding courses at 8" each (96") and that the top course will be 6<sup>1</sup>/<sub>2</sub>" tall, to total 102<sup>1</sup>/<sub>2</sub>". Non-standard houses with a different wall height will require adding or subtracting increments of 4" (one half of a course-height) to the 102<sup>1</sup>/<sub>2</sub>" dimension
- 4. Snap a chalk line between all three sets of marks (bottom of F-Channel, top of skirting, top of starter strip) along both eave walls, being sure the chalk line is very taut. If not, the chalk line will not be straight. Where there is a porch, underground electrical service or other obstacle that interferes with snapping the lower chalk lines, once the top chalk line has been snapped, measure down from the snapped line to locate the lower lines at each side of the interference. Then snap chalk lines from these marks to the corresponding corner.
- 5. Using all the corner marks, snap lines on both gable ends. (Be sure the chalk line is very taut.) If there is a gable end porch or other interference, see Step 4 above for instructions on snapping the lower two lines on either side of the interference.

### 11.1.4. Installing Metal Skirting

- 1. Consider the foot traffic around the house to determine how to hide as many seams as possible.
  - **EXAMPLE:** If installing on the driveway side, start at the rear of the house with the first piece. Then work toward the front. This will hide the seams when the house is viewed from the street up the driveway.
- 2. Install metal skirting around the house. Using the "nail slot punch tool", punch slots every 12"-18" and 1" from the top. Do not install any piece longer than 12'. Any piece longer than 12' will buckle and get wavy when the summer sun heats it up and expands it.

- 3. Install skirting flush with the skirting chalk line (created in Section 11.1.1.3 above) with care. Nail with 2<sup>1</sup>/<sub>2</sub>" siding nails into the center of the pre-punched slots. DO NOT nail tight. Leave a <sup>1</sup>/<sub>8</sub>" gap between nail head and skirting. The skirting will hang on the nails the same way the siding does.
- 4. Overlap all seams by 3" and hold back from each corner by 3". If a vertical edge will show, create a hem on the exposed end to improve its appearance and strength.

#### 11.1.5. Installing Skirting Corners

1. Bend corner pieces with hems on both vertical edges for all inside and outside corners. Dress up the appearance of each visible vertical edge with a back bend. Install corners using 2<sup>1</sup>/<sub>2</sub>" siding nails.

**NOTE:** Make sure back bends (hems) are folded TIGHT. Outside corners should be bent slightly less than 90° for snug fit.

- 2. Standard outside corners are finished with a 5"w x 5"w (L-shaped) x 12"corner (including the 1" hem on each visible edge).
- 3. Corners used next to egress wells are considered an outside corner but only need a finished 2"w x 5"w (L-shaped) x 12" corner.
- 4. The skirting over egress wells is a two-piece system that includes corner bends. Measure the width of the well (outside to outside). Divide that number by 2 and add 2" to obtain the length for each of the two pieces. Each piece will be 3" x (distance from concrete foundation to outside of house wall) x the calculated length.

#### 11.1.6. Installing Starter Strip

- 1. Keep the starter strip 4" short of the corners. Nail the top of the starter strip snug to the chalk line on the house every five slots using 2<sup>1</sup>/<sub>2</sub>" siding nails except when installing directly onto OSB sheathing then use 1<sup>1</sup>/<sub>2</sub>" siding nails. Nail in the top slots only.
- After installation, use a string line or sight down the length of the starter strip to check for rises and dips. Straighten the starter strip if rises and dips exceed <sup>1</sup>/<sub>4</sub>". Use a speed square or similar method at each corner to verify that the bottom edges of the starter strip are at the same elevation.
- 3. Measure the distance from the top of the nail flange to the bottom of the top lock (see Figure 11-11). This is normally 1<sup>1</sup>/<sub>4</sub>" to 1<sup>3</sup>/<sub>8</sub>". Add this measurement to 8" and 40" to obtain the height of the lower and upper quality lines in Step 4, below.
- 4. Create quality lines: At each corner of the house, and at one or two locations in between, make marks at the heights calculated in Step 3, above, measuring from the bottom of the starter strip. Snap horizontal chalk lines at both sets of marks, and

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verify that the middle marks are within 1/16" of the chalk line. If they are not, it means that the starter strip is not straight, or the marks were poorly measured, or the chalk line was not taut enough when snapping. Correct by rechecking that the starter strip is straight and adjust as required until the middle measurement is the same as both ends (and re-snap the chalk lines if required). If the starter strip was straight, then re-check and re-snap the chalk line as needed. These quality lines represent the top (of the nailing flange) of the first and fifth rows of siding.

#### 11.1.7. Installing Gable End Corners

1. At each corner of the house, measure from the eave end sub-fascia to the house wall (inside measurement). Measure every corner because the measurements at each corner can vary slightly.

**NOTE:** Most measurements will be between 21" and 22" in length for 5:12 pitch roofs, and about 15" for 6:12 pitch roofs.

- 2. Gable end corners are built using two layers of ½" OSB. Refer to Figure 11-2. For 5:12 pitch roofs (most common) take some scrap OSB (two pieces for each corner), at least 14" wide, and as long as the measurement determined in Step 1 above (e.g. 22" length). From the nominal 22" length side, measure up from one edge of the OSB 14" and make a mark. Measure up the other edge 5" and make a mark. Draw a line to connect these two marks, stack the two pieces with two edges on the desired piece aligned, and cut.
- 3. For 6:12 pitch roofs take some scrap OSB (two pieces for each corner), at least 13" wide, and as long as the measurement determined in Step 1 above (e.g. 15" length). With the two OSB pieces stacked and aligned, from the 15" side, measure up one edge 5", and the other edge 13", draw a line to connect the marks, and cut.
- 4. Cut a scrap 2x4 to the same length (eave to wall measurement from Step 1) as the OSB.
- 5. Cut a scrap 2x6 to 8".
- 6. Flush the edge of the 2x4 with the 2x6 and nail together with two 3<sup>1</sup>/<sub>4</sub>" Paslode nails.
- 7. Stack (sandwich) the two pieces of OSB together so the two right angle edges are flush with frame. Nail the two pieces of OSB to the 2x4 and the 2x6 with six 2<sup>3</sup>/<sub>8</sub>" Paslode nails, using either factory edges or a framing square to keep the pieces square to each other. See Figure 11-2.
- 8. Lift the assembly into place between the sub-fascia and wall. The OSB that matches the angle of the roof will be up and over the outside of the gable truss tail.
- 9. Line up the bottom of the 2x4 frame with the bottom of the sub-fascia and the top mark on the house wall.

- 10. Nail the OSB to the gable truss tail with five  $2\frac{3}{8}$ " Paslode nails.
- 11. Line up the gable corner block so it is flush with the corner of the house.
- 12. Nail through the corner 2x6 into the house framing with two 3<sup>1</sup>/<sub>4</sub>" Paslode nails. Make sure to nail into solid framing and not just the foamboard or the OSB.
- 13. Verify that the 2x4 is flush with the bottom of the sub-fascia; nail through the sub-fascia into the 2x4 with two 3<sup>1</sup>/<sub>4</sub>" Paslode nails.



Figure 11-2. Gable End Corner.

#### 11.1.8. Corners

1. Use the corner post jig to mark nailing location of corner posts. Install corners so their bottoms run 1" below the bottom of the starter strip. Nail the top, bottom and middle of each flange, then step back to assess straightness and squareness; adjust as required. Then, nail every five slots to the corner of the house making certain the fit remains square, straight and plumb. Use 2½" siding nails, (except when being

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applied directly over OSB sheathing, then use 1<sup>1</sup>/<sub>2</sub>" siding nails) being sure to hit framing or OSB sheathing. Nail at the top of the slot so the corner post will not slide down and away from the F-channel.



Figure 11-3. Siding Corner.

### 11.1.9. J-Channel

- J-channel is installed around doors and vents, gables (eave to peak), <u>above the</u> porch roof, and on the porch gable after the porch ceiling soffit and fascia have been installed, using 2<sup>1</sup>/<sub>2</sub>" siding nails every five slots, (except when being applied directly over OSB sheathing, then use 1<sup>1</sup>/<sub>2</sub>" siding nails) being sure to hit framing or OSB sheathing.
- Above the porch roof, install the J-channel ¼" above the shingles. Use a long strip
  of ¼" thick underlayment as a spacer to ensure a uniform gap. Tape the top edge of
  the J-channel, covering the nail slots, using Weathermate<sup>TM</sup> Straight Flashing tape.
  Then tape the top edge of the step flashing, covering the top edge of the J-channel
  tape shingle-style.

**NOTE:** Use a single strip of 6" wide Weathermate Straight Flashing tape, if possible, to cover both joints.

3. For door side pieces, measure from the top of the brickmold to the porch cement. Cut J-channel side pieces to that length. Install side pieces flush with the top of the brickmold, nailing snugly every five slots. See Figure 11-4.



Figure 11-4. J-Channel Upper Corner Detail.

- 4. Cut the top piece so that both ends are flush with the exposed face of the side pieces.
- 5. Cut a tab on each end of the top piece. Install top piece (nailing snugly every five slots) and fold the tabs down into the vertical pieces so that water will run off.

### 11.1.10. Undersill Trim

- Undersill trim (or "utility trim" as noted in Figure 11-5.) is installed under the soffit F-channel on eave sides of the house and under windows. Under soffit F-channel, nail snugly every five slots using 2<sup>1</sup>/<sub>2</sub>" siding nails (use 1<sup>1</sup>/<sub>2</sub>" siding nails when applying directly over OSB sheathing) being sure to hit framing or OSB sheathing.
- 2. Undersill trim is primarily used to add strength to cut areas of siding under and above windows and above doors. Cut the trim to the same length as the siding cutout, and slide into place over the cut edge (do NOT nail to the house).
- 3. Undersill trim is not needed around J-blocks.
- 4. Do NOT use undersill trim along porch slabs, tops of windows, or tops of doors. The goal is to bring the siding forward and tight to the front inside surface of the J-channel for a neat look and to keep debris from getting into the J-channel. Instead cut roughly 1" wide strips of 1/2" blue foam and insert this behind the bottom of the cut section of the siding (between the J-channel nailing flange and the back of the siding). Seat the foam snugly to the bottom of the J-channel.



Figure 11-5. Undersill ("Utility") Trim.

## 11.1.11. F-channel

 Install F-channel on eave and gable ends by lining up the BOTTOM of the Fchannel to the chalk-line created in Section 11.1.3.3 and nail snugly every 12 -18", using 2<sup>1</sup>/<sub>2</sub>" siding nails, (except when being applied directly over OSB sheathing, then use 1<sup>1</sup>/<sub>2</sub>" siding nails) being sure to hit framing or OSB sheathing. F-channel will also be needed under the porch ceiling area.

# 11.1.12. Siding

1. The last step in Siding Prep is to install two courses of siding on all walls of the house. This will ensure that each side of the house has started out straight, that the layout is accurate, and that the first course has matched the quality line. This will further ensure that the siding elevation matches at each corner.

# 11.2. INSTALLING HOUSE SIDING

## 11.2.1. Rules for Hanging Siding

1. Vinyl siding expands and contracts due to temperature changes. Never drive nails tight. The siding panels must hang on the nails and be permitted to move from side to side. Leave a <sup>1</sup>/<sub>8</sub>" gap between the nail head and the siding slot.



Figure 11-6. Siding Nail Head Gap.

2. Install every piece with a 1" overlap between pieces and a minimum of ½" space between the top locks. Also, maintain a ¼" gap at the corners (to allow for expansion) and ends of pieces, including corner posts, J-channel, windows, J-blocks, etc. (see Figure 11-7). Overlap the siding pieces such that in high traffic areas, one cannot see into the overlapped joint.



Figure 11-7. Siding Overlap.

- 3. Always use 2<sup>1</sup>/<sub>2</sub>" siding nails, except when the siding is being installed directly over OSB (e.g., on a garage or shed). In those cases, use 1<sup>1</sup>/<sub>2</sub>" siding nails.
- 4. Always nail in the center of the slots in the lower row of slots and into a stud. Avoid nailing at angles: if a stud is not accessible from a slot in the lower row, use one of the offset slots in the upper row of slots.



Figure 11-8. Nail Location in Siding Slots.

5. Always drive nails straight, never at an upward or downward angle.



Figure 11-9. Proper Nailing Angle.

6. Be sure to leave <sup>1</sup>/<sub>4</sub>" clearance when fitting siding around windows and other wall penetrations.



Figure 11-10. Wall Penetration Siding Clearance.

## 11.2.2. Hanging Siding

1. Install siding so that overlaps are not seen from the street or drive side of the house.

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- 2. In most cases, start with a full piece (12'6"). Keep installing full length pieces until a full length will not fit and then cut a piece to fit (minimum length is 3'). The drop from the cut piece may be used to start the next row. Maintain a 3' stagger with the seams.
- 3. In some cases, starting with a full piece results in a piece less than 3' at the end of the row. Before starting a row, determine the best length to start with in order to yield the least amount of scrap.
- 4. As shown in Figure 11-11, the "Buttlock" of each course locks into the "Top Lock" of the course below.



Figure 11-11. Siding Nomenclature.

- 5. On the 8s: The visible portion of each siding course is 8" high (see Figure 11-11). For each new course, snap the buttlock onto the top lock of the previous course along the entire piece. Nail the ends and middle, then measure up from the BOTTOM of the first course to the BOTTOM of the course being installed. Each measurement should be a multiple of 8 (e.g. 8", 16", 24", 32"). At each nail position, before nailing, check the measurement and adjust up or down to an even multiple of 8, and finish nailing the entire piece. Recheck as necessary and adjust the position of the nailing flange and re-nail, if required. Small adjustments can be made by tapping the nail head up or down as required. When installing the first and fifth courses, be sure the top of the siding (the nail flange) just touches the quality line previously snapped (see Section 11.1.6.3) on the wall.
  - **NOTE:** When measuring, hold the tape vertically close to the measuring point, and be sure to observe the measurement with an eye at the same level as the measuring point to reduce parallax error.
- 6. As each piece is installed, pull along the top (nail flange) to ensure nails are in the studs; re-nail the siding if it pulls away. Slide the piece side-to-side to ensure there is at least <sup>1</sup>/<sub>4</sub>" of movement each way.

- 7. Step back from the house at least 10' after every third course and look at the total appearance. Things to look for include:
  - Matching sides at the corners
  - No sagging rows
  - Minimal waves or no bulges
- 8. On eave walls, measure from the bottom of the F-channel to the bottom of the top lock of the last full-width row of siding and subtract ¼" (max). Rip the last course of siding to this measurement. Crimp at 24" intervals with side-by-side (2"-3" apart) pairs of opposite crimps (front and back). Hold the crimps about 2" away from each end so they don't interfere with overlaps. Snap siding into place while inserting the top edge and crimps into the undersill trim installed below the soffit F-channel. The piece should EASILY snap into the under sill with light to medium pressure. If it has to be FORCED into place either the width of the piece is too narrow or the crimps are too low on the piece. Cut a new, wider piece and/or set the crimps slightly closer (no more than ¼") toward the cut edge of the piece.

NOTE: Use a 12" to 24" test piece before cutting each full piece.

9. On gable end walls, repeat Steps 1–7 until just before the siding reaches the top of the windows on the gable ends.

**NOTE:** Be sure to install the soffit and fascia under the porch ceiling prior to siding the porch gable.

- 10. Before the siding reaches the top of the windows on gable ends, secure the house wrap to the foamboard with Weathermate<sup>TM</sup> Construction tape. Pull the house wrap down tight, making sure it covers the nailing flange at the top of the windows, and hold the bottom edge down with 6" pieces of Weathermate<sup>TM</sup> Construction tape every 6'. Tape the vertical ends of the house wrap along the entire edge. Tape the ends (at each corner of the house) from top to bottom.
- 11. When the siding on the gable ends reaches the roof angle, a transition must be made to cut the ends of the siding pieces to the proper angle to fit into the J-channel. Use the siding angle jig to cut the proper angle.

## 11.3. INSTALLING SHED SIDING

- 1. In general, installing siding on a shed is done in the same manner as installing siding on a house except that the layout dimensions vary and 1½" siding nails are used.
- 2. Measure and start a nail <sup>1</sup>/<sub>2</sub>" below the sub-fascia at each corner and snap a chalk line around the shed. This line represents the bottom of the F-channel.
- 3. Measure and start a nail at 78<sup>1</sup>/<sub>2</sub>" less the width of the starter strip (typically 2<sup>1</sup>/<sub>2</sub>"), below the F-channel nail at each corner and snap a chalk line around the shed. Nail the top of

the starter strip flush to this line. This puts the bottom edge of the first piece of siding at  $78\frac{1}{2}$ " down from the F-channel.

- 4. Measure the distance from the top of the nail flange to the bottom of the top lock (See Fig. 11-11). This is normally 1¼" to 1¾". Add this measurement to 40" to obtain the height of the quality line. For each side of the shed at each corner, make marks at the height calculated, measuring from the bottom of the starter strip. Tack a nail into each of those marks and snap a Quality Control chalk line around the shed.
- 5. Cut corners 79" long, or  $\frac{1}{2}$ " below the bottom of the starter strip.
- 6. J-channel around the door is installed the same way as around the house doors, but ends 1/2" below the starter strip. Measure from the top of the door brick mold to the bottom of the starter strip, add 1/2", and cut the J-channel to that length.
- 7. Install soffit and fascia on the eave sides and fascia on the gable ends.

# 11.4. INSTALLING SOFFIT

- 1. Start by installing soffit pieces on the eave side of the house. Measure from wall to outer edge of the sub-fascia and cut soffit pieces  $\frac{1}{4}$ " less than that dimension.
- 2. Install the first soffit piece with the tongue end into the gable end F-channel and the grooved end exposed. Using a soffit nail, nail the grooved end to the bottom of the subfascia. Then, nail through the <u>two valleys toward each end</u> of the soffit <u>piece</u> where it contacts the sub-fascia. The nail head does not need to be tight to the bottom of the valley.
- 3. Interlock the next piece by sliding the tongue end into the F-channel and exposed groove of the previous piece, making sure the soffit does not extend past the face of the sub-fascia. Check that it is square to the wall, and nail into the sub-fascia through the flange at the groove end of the piece, and the middle valley. Continue the length of the eave, checking for square every three or four pieces.
  - **NOTE:** To ease installation, open the sawn ends of the groove with a utility knife or screwdriver, and cut about <sup>1</sup>/4" at a 45° from the tongue ends.



Figure 11-12. Eave Soffit.

4. Install the porch ceiling soffit using one of the two patterns shown in Figure 11-13. While both are acceptable installation methods, the second pattern is easier to install.



Figure 11-13. Porch Soffit.

5. When installing soffit on gable ends, start at the peak with the first piece bent down the middle. The installation process for one side of the gable will be different than described above, since the pieces will be installed by slipping the groove onto the installed piece's tongue, which is not nailed to the sub-fascia.

### 11.5. Installing Fascia

- 1. Install eave fascia first starting at the back of the house so overlaps are not seen from the front of the house. Overlap fascia pieces as required 1<sup>1</sup>/<sub>2</sub>", with a factory edge exposed. Fascia pieces must be at least 60" long.
- 2. Nail about 24-30" apart and about 6" from each end (on a full piece, only 4-5 nails are required). Do NOT try to nail through overlapping flanges. Do NOT hit the corner of fascia with a hammer as it will "kink".
- 3. Cut 1"-2" of the flange from the end of the fascia and bend a 1"-2" corner to fit over the corner of the gable sub-fascia. Trim the bottom corner from the bend to match the bottom edge of the gable sub fascia.

4. Push the fascia up under the gutter apron until the flange is snug to the soffit and drive a soffit nail through the fascia flange and soffit valley into the underside edge of the subfascia. This prevents nails from showing on the face of the fascia. Do not nail tightly; leave a ¼" gap between the fascia and the head of the soffit nail. Make sure the fascia does not show "wrinkles" when installing.

**NOTE:** Another option is to pre-drill <sup>1</sup>/<sub>8</sub>" holes into the fascia flange through the soffit valleys.

- 5. To finish the opposite end, repeat Step 3 above.
- 6. On gable ends, start at the bottom of the gable at the back of the house. Continue up the gable, shingle style, so overlaps will enable rain to wash off. At the peak, the front will overlap the back so the seam is less visible.
- 7. At the bottom of the gable end, the fascia must be cut at an angle to match the roof pitch. Determine the pitch from the house plan. In this example, it's 5:12. The lower end must be cut at this angle to match the eave. The point of this angle will be the flanged edge. The following figures describe a right-hand side of a gable end; the left hand will be opposite. In this example, at the peak, the RH side is the front of the house, so its cut edge will be exposed.
- 8. Position the flange of a speed square along the soffit flange (or along the edge where the LONG point will be) as seen in Figure 11-14. With the square corner of the speed-square against the edge at the length desired, pivot the speed-square at the 90° corner until the "5" on the "Common/Top Cut" (red) scale is aligned with the same edge (e.g. flanged edge). Draw a line along the short edge of the speed square on the face of the fascia.



#### Figure 11-14. Marking Gable End Fascia Angle

9. Cut the fascia on this line; once installed, the cut edge will be vertical and will match the eave fascia corner. For reference, the blue scale indicates degrees; a 5:12 pitch aligns with 22.5°. Figure 11-15 shows the resulting piece after being cut to the correct angle.



Figure 11-15. Lower Gable Fascia

- 10. At the peak, first cut a piece for the back side of the gable. This piece extends 1" past the sub fascia joint at the peak, and the factory edge will overlap the lower piece of fascia by  $1\frac{1}{2}$ ".
- 11. Measure from the top of the peak to the end of the fascia already installed and add 2<sup>1</sup>/<sub>2</sub>". Measure that distance from the appropriate factory end on the fascia and mark the top edge.
- 12. At the peak, the top edge of the fascia (under the roof drip edge) will be longer than the flanged edge. Follow the procedure in Step 8 above, but with the speed-square against the fascia top edge (again, the edge with the "long" point of the angle-to-be), to mark and cut the proper angle.
- 13. Cut the flange and trim the top corner as shown on Figure 11-16, and bend the tab to match the front-side gable angle. This small tab will cover the bottom of the joint and the top corner is trimmed to prevent any interference with the drip edge.



Figure 11-16. Gable Peak Back Side Fascia

- 14. Install this piece with the flange bend snug to the bottom of the sub fascia joint.
- 15. Finish the peak with fascia on the front side. This piece's factory end will overlap the lower fascia by 1½". At the peak, it will have a finished 5:12 cut aligned with the peak and tight to the bend in the flange of the backside piece.



Figure 11-17. Gable Peak Front Side Fascia

16. Measure from the end of the lower fascia piece to the peak and add 1½". Measure this distance from the appropriate factory edge and mark the top edge. Align the speed square 90° corner with this mark to mark and cut the necessary angle. See Figure 11-17 for the right-hand peak end cut.

## 11.6. INSTALLING SHUTTERS

- 1. Shutters are held in place by shutter pins attached to the siding. Pins should be cut to a length of  $2\frac{1}{4}$ " (the combined thickness of the shutter plus the siding) to prevent them from completely penetrating the foamboard.
- 2. Count the pins before drilling any holes. Different size shutters may require different numbers of pins. Use the number provided in the kit.
- 3. Locate and drill holes for the pins in the shutter according to the manufacturer's instructions. Then, with the shutter held in the correct installation position, use the shutter as a template to mark and drill holes for the pins through the siding. Take care to not drill all the way through the foamboard behind the siding.

### 11.7. SITE CLEANUP

- 1. On the last day of siding, the lot must be cleaned up for final grading and lawn preparation.
- 2. All returnable materials must be separated into piles "wood" (lumber, OSB, I-joist, etc.), "siding-related" (vinyl and starter strip), and "metal" (soffit, F-channel, fascia, etc.) and neatly stacked and covered with tarps. Neatly stack leftover cut siding pieces (longer than ~3') in the shed.
- 3. All usable scrap lumber or wood having nail holes, or too dirty to return, should be stacked near the recycle barrels to make it easy for the Logistics Crews to access it to take to another work site.
- 4. For future workdays, take a variety of the following from the scrap wood pile and place under the basement stairs (take from the returnable pile if there is not enough scrap):
  - Three to four full-length 2x4 studs;
  - Six to eight pieces of 2x4 or 2x6, 3'-5' long;
  - $\frac{1}{2}$ " and  $\frac{3}{4}$ " OSB scraps (six to eight small- to medium-size pieces).