BUILDING HOUSE GABLE WALLS

PREPARATION

The basic 2 x 6 gable walls will be pre-assembled off site and brought to the build area for final assembly and installation.

NOTE: Complete the following before starting the Gable Walls:
The deck should be swept off
The “wall lines” snapped and sealed
Centerline of the deck and the kitchen window marked on the deck
Outside edges of the deck checked to make sure it has been trimmed even with the rim boards
Check for “NO GLUE” marked on the deck in the HOUSE AND GARAGE door openings.

MATERIALS/TOOLS:

Wall plan and pre built wall panels # 5, 6, 11 and 12
Gable wall “Pack” of lumber
Porch Beams, brackets and galvanized 16d nails,
Gable Trusses, gable racks and front porch truss
OSB wall sheathing
brooms
2- saws with good blades
16d nails loose and Paslode
8d nails loose and Paslode
Paslode gas
pre-drilled for a 16d nail metal straps
2- 50’ tapes
clamps
barn spikes
drill and 3/8 bit
blue board and drywall saw
cap nails
blue board tape
F and J channel
solid soffit
straight siding jig
1-1/4” and 2-1/2” roofing nails
white trim nails
aluminum fascia
pork chops or 2X10 material
3 pair saw horses
extension chords
BUILDING THE WALLS:

(STEPS WILL APPLY TO FRONT AND REAR EXCEPT WHERE NOTED)

Use 16d nails for 2 x material and 8d nails for OSB. “Big wood big nails, small wood small nails”

CRITICAL REFERENCE POINT: VERIFY LOCATION and MARK the exact center of the deck, front and rear, at the 6” snapped layout line.

CUTTING THE STIFF BACK

Place 2- 2 x 6-16’, side by side, on saw horses. Measure 97” and mark on both boards. From that mark, measure an additional 82” (total 179”) and cut to length.

From the 97” mark to the end of the board, measure in 1-½”, snap a chalk line and cut this section out.
PORCH BEAM BACKER BLOCKS

Front wall Only: Verify placement of 2- 2 x 10, Porch Beam backer blocks. These will get nailed like ladders as backing for the porch beams.

If not there, cut 2 x 10 and nail into place with 4-16d nails prior to attaching stiff back.
PLACING THE WALLS

Position front ( #5 and #6 ) and rear ( #11 and #12 ) wall panels in the correct orientation ie, WINDOWS and WALL “L’s” are facing the correct direction for a RIGHT or LEFT hand house, DETERMINED BY WHERE THE GARAGE SITS AS YOU FACE THE HOUSE. Mark the center line of the “stiff backs”.

FRONT WALL ONLY Move the wall, WITH THE DOOR OPENING, into place, near the 6” snapped line. Nail the stiff back to this wall FIRST; with 2- 16d nails every 16”.

Align center of stiffback, to CENTER OF DECK mark and move bottom plate/wall to 6” snapped line. Toe nail the wall section into deck every 3’, ON THE INSIDE OF THE WALL.

Move 2nd wall section into place and nail to 1st Wall/stiffback, with same nailing pattern, as above.
VERIFY LOCATION OF SMALL KITCHEN WINDOW AT 78-1/2” IN FROM THE SNAPPED LINE ON THE GARAGE SIDE WALL. If OK proceed. If NOT, STOP and correct as needed.

REAR WALL:

Move the walls into position. Nail the stiffback to one side, move to the SNAPPED line and Toe Nail as described above. Nail the other wall section to the FIRST and toe nail to line.

FRONT WALL: Place 3-pre drilled metal straps, under the wall, in the openings below the windows and in the door way.

Secure top end of strap to deck with 1-16d nail. Bend the other end around the bottom plate, up 4” and nail into the bottom plate with a 16d nail.

REAR WALL: Place 1 strap under each window and 1 strap near the center of the wall and attach as described above.
INSTALLING THE DOUBLER’S

Measure IN 5-3/4” from the outside ends of the wall, on both sides, and mark for doubler “setback”.

REAR WALL: Measure from stiffback to offset mark (161”) and cut 4- 2 x 6 to this length.

FRONT WALL: Measure from stiffback to offset mark (161”) and cut 3- 2 x 6 and 1-2 x 4 to that length.

FRONT/ REAR WALL:

Attach 1- 2 x 6 “Double Top Plate” to each side of stiffback, with the 2 x 6 TIGHT against the stiffback.

Nail with 2-16d nails on top of wall studs. DO NOT NAIL IN THE AREA BETWEEN THE STUDS.

INSTALLING THE TRUSS NAILERS

Cut 8 short ( 16") pieces of 2x material. Lift the wall and slide the blocks, evenly spaced, under the wall, sitting flush or just below the top of the wall.

REAR WALL: Position the remaining 2 x 6 against the stiffback, with the top of the 2 x 6 flush with top of the stiffback.

Start nailing the 2 x 6 to the Doubler, at the stiffback, working toward the outside. A small piece of 2 x should be placed on top of the 2 x 6 to keep it in the correct position.
FRONT WALL: Install the 2 x 6 truss nailer on the side of the wall with the small window, following the steps above.

Install the 2 x 4 truss nailer on the side with large window, following the steps above.

SQUARING THE WALLS

The next step is to square the walls. With a 50’/100’ tape, pull diagonal measurements from the top of the wall to the bottom of the wall on the opposite corner. Reverse the location of the tape. Compare the numbers and move the top edge of the wall until the numbers match.

PLACING THE GABLE TRUSS’S

Place the gable truss on the 2 x 4/ 2 x 6 truss nailer installed in prior steps. Adjust, side to side, for an “equal reveal” at each end.
The truss must be tight against the top of the wall **BEFORE** nailing. Clamps may be required for correct/tight fit. Nail, with 1-16d, the truss to the truss nailer at the bottom of each truss Web.

Additionally, Barn Spikes will driven through the bottom chord of the truss into the wall, 1 spike, centered in each web space.

Pre- drilling the bottom chord of the truss will speed up nailing the spikes.

Cut 8 pieces of 2 x 6 and place them on edge, under the truss, supporting the top edge.
**CRITICAL STEP:** Center the stiffback under the middle web of the truss and nail the truss web to the stiffback, with 16d’s, every 6”.

**INSTALLING OSB**

The Front and Rear walls are now ready for OSB. Check wall stud layout for 24 OC before OSB placement. OSB will be placed **VERTICALLY** at each end of the wall and cover the first 2 stud bays.

Balance of 1st row sheets will be placed **HORIZONTALLY**. Nail with 8d’s, 6”OC on the edge and 8” OC on the lines in the field.

Mark window and door openings and cut with saw set to ½” blade depth.
The next row of OSB will be placed **VERTICALLY** above the first row and extend up and cover the truss starting at the 2nd sheet from the corner, working across the wall.

The final full sheet goes HORIZONTALLY, **centered**, over the middle web of the Gable truss.

Snap chalk lines, at top of truss, and trim 1/8” BELOW top of truss.

Use the triangle cut offs to fill in the corners.

Use 1/2” sheets to fill in the far, outside corner, **INCLUDING** the truss tails.

**NOTE:** A crew member should verify nailing and mark OSB after verification

**INSTALLING GABLE RACKS**

**REAR WALL.** Place pre-built gable racks at top of truss and check for fit. Flush top and end of gable rack with truss tail/end.

Start nailing (16d’s) at the **TRUSS TAIL** and work toward truss peak.

One crew member will be at the peak end of the rack adjusting the rack to be flush with top edge of the truss, **where it is being nailed.** Proceed up the rack.
Go back and nail **ON THE BOTTOM SIDE OF THE RACK** into the truss web at 24 oc, ie the OSB seams and halfway between the seams, with 1-16d nail. Repeat the process with the other Gable rack.

With a **framing square**, make sure the peaks are at 90 degrees to the wall. If not, cut the short edge of the rack to bring to 90 degrees and then nail together.

**FRONT GABLE WALL**

Place a **porch truss** on the front gable wall over **the big window**.

The Truss should be flush with the top of the Gable truss and the truss end tails matching.
Scribe a pencil line along the top edge of the truss on the wall, including the end angle, and along the BOTTOM chord of the porch truss. Remove the truss.

(Omit this step for the Brick Front houses)

Cut a 5/12 angle on one end of a 10’- 2 x 4. Lay it on the gable wall in the outline of the porch truss.

Scribe the TOP angle of the truss, cut the 2 x 4 and install on the line.

Nail (2-16d) into the truss webs, ie where the OSB seams are and 24”OC on the OSB.

PORCH BEAM BRACKET PLACEMENT (ALL HOUSES)

Position the Outside, 2 x 10, porch beam on gable wall so the top of the beam is on the pencil line, 2” IN from the outside edge of the OSB.

Place bracket around beam and nail in place with 16d GALVANIZED Nails. No Nails in top holes on the outside bracket.

Check the Long Beam for correct length of 15’ 2-1/2”. Place the Long 2 x 10 beam on the wall, so the LONG edge of the beam is flush with the OUTSIDE of the side beam just installed. SEE ATTACHED

Position the other “side” beam on wall, flush with OUTSIDE edge of LONG beam, with the top of the side beam on the pencil line.

Place bracket around beam and nail as described previously. Fill ALL nail holes in this bracket.
“Carefully” lift the long beam and place on top of short side beams. Nail securely through the **top** and **sides** with 4-16d’s each.

**(Omit this step for the Brick Front houses)**

Nail 2- 2 x 4 x 16’, cut to 15’2”, together to form an “L”. Place the assembly on the line at the top of the beam, with the 3-1/2” edge UP. Nail, with 16d’s, securely every 16” oc.

**(Omit this step for the Brick Front Houses)**

Cut 1-2 x 4 @ 66 ¼” and temporarily nail to support the **middle** of long beam.

Cut 1-2 x 4-16’ to fit width of beam ( 15’- 2”). This will be a **truss backer** for the porch gable truss.

Nail the 2 x 4, **12” oc**, to the top of the long beam, set back 1-1/2 “ from the front of the beam.

**(Omit this step for the Brick Front houses)**

Cut a piece of OSB 66 ¼”, with 3 factory edges remaining, and position in the outside corner of the beam.

*Adjust the beam, side to side, until the OSB squarely touches the bottom and sides.* Nail OSB to 2 x 4 truss backer on the beam and the 2 x 4 “L” on the wall, with 8d nails.

**BEAM BRACES**

Cut 2-2 x 4’s for diagonal beam braces with a notch on one end.
FIRST, nail brace to long beam, with 1 brace in the door opening and 1 in the window.

Use a framing square or scrap of **OSB WITH 2 FACTORY EDGES**, to insure side beams are at 90 degree angle to wall. **DO NOT USE A LEVEL FOR THIS STEP.** After beam is in position, nail braces to window/door framing.

**BRICK FRONT HOUSE ONLY**

Place 2- 2 x 4 diagonal braces from the side beams to the front beam. They should be on the bottom of the beams and about 8’ long.
GABLE RACK PLACEMENT (FRONT WALL)

Place the long gable rack on the side over the small window. Check for fit and nail as previously described.

If short, pre-built, gable rack is on site, cut to fit from peak to 2 x 4 nailer/LINE, MINUS 1-1/2", and nail in place.

If not available, build it on site to match long rack...

With a framing square, make sure the peak of the gable racks are 90 degrees to the wall then nail together.

SPECIAL TRIM BLOCKS (FRONT WALL, BRICK FRONT HOUSES ONLY)

2 x 4 plates with short 2 x 4 blocks, will be placed BELOW the Gable Racks on the FRONT WALL ONLY. AZAK trim will be “attached” to the blocks AFTER the brick install.

On the side with the LONG Gable Rack, cut a long (14’) 2 x 4 with 22.5 degree angles, top and bottom to fit between the PEAK and BACK of Pork Chop. Leave space for the aluminum trim at the back of the Pork Chop.

On the short Gable Rack side, cut a 2 x 4 with 22.5 degree angle at the peak and a 67.5 degree angle that follows the roof line, at the bottom, to fit between the peak and end of the gable rack.

Install the 2 x 4 blocks cut to 3 3/4” at 24OC intervals on the 2 x 4’s. Nail assembly(s) in to place under the gable racks.
CUT AND INSTALL PORK CHOP TRIM AT TRUSS TAILS

Pork chops are used to finish the ends of the Gable Racks and provide an attachment point for the soffitt and trim. They may have been pre-cut and ready to install. If not, they must be cut on site with 2 x 10 material. 2 are required for each truss tail end and a piece of OSB backer cut to fit. See below for layout and final assembly.

The House PC’s MUST BE CUT AND INSTALLED while the gable walls are being assembled on the house deck. This will insure that the blue board, soffitt and trim are positioned correctly.

Material: 2 X 10, OSB scraps
Tools: framing Square, circular saw, pencil, 8d and 16d nails

Quantities:
3 pairs (6 pieces) are needed for the house
2 pairs (4 pieces) are needed for the garage
2 pairs (4 pieces) are needed for the front porch

LAYOUT

Hold the framing square with the “legs” positioned as shown. The house roof is a 5/12 pitch, which is why the square is aligned with the numbers as shown.

Draw a line along the top edge of the square. Move the square to extend the line to the top of the board. Use the circular saw and carefully cut along the line to create what looks like a big wedge.
Place the wedge on top of the original board, mark and cut so you will have 2 wedges the same size. Use the original cut wedge as a template for the rest of PC's to be cut.

**ASSEMBLY:**

Align the bottom of the PC with the **bottom of the fascia** and nail the rear PC to the wall and thru the bottom of the PC in to the fascia.

Position the framing square on house wall, against the back of inside PC and gable rack.

Transfer and mark the location on the outside gable rack.

Align the back of the outer PC to the mark on outer gable rack and check that the PC is **flush with bottom of fascia**.

**NOTE:** The back edge of the PC may need to be trimmed if it does not align with the Wall PC.

Nail PC to gable rack.

Cut scraps of OSB into 7- pieces, 9” X 11 ¾”.

Nail the OSB to the back PC with 2- 8d nails. Straighten the front PC and nail OSB to front PC with 2- 8d nails.

This completes the house PC’s. Save the other cut PC’s and OSB for the garage and porch.

**INSTALL BLUE BOARD (Front and Rear):**

**(Omit this step on the Front Wall ONLY of the Brick Front houses)**

4 x 8 sheets of Dow blue board are installed to increase the insulation factor. Some sheets have Tongue and Groove and some may be square edge. **Do not mix the sheets.**

They will be installed VERTICALLY, WITH THE WORDING, RIGHT SIDE UP. Cap nails, 3 rows across and 5 rows down, will be used to secure the panels.

**CAP Nails must be held 4” away from gable racks, edge of walls, window and door openings, beams and leave a ½”space for additional OSB on the porch ceiling.**

Roof angle is 5/12 which means you can measure down 20” on one side of sheet, snap a chalk from the peak to the 20” mark, and that will give you the correct angle.

Install sheets by butting two sheets at the center peak. Continue right and left next to the center sheets butting the sheets to the roof angle.

Cut one sheet in half long ways so you have two pieces 2’X8’. Measure down 10” on long side of sheets, chalk a line to the opposite corner and cut. These will be trimmed to fit up under pork chops on sides.

Seams will be taped with house wrap tape.
A section of blue board, above the FRONT porch roof, 12” high, will be removed and nailed to the wall until Roofing steps are completed.

**GABLE BRACE (REAR WALL ONLY):**

Cut 2-2 x 6 x 18” long and nail together to make an “L”. Position 2’ below the peak, centered on the wall.

Scribe the outline and cut out the foam. Attach “L” to the wall with 16d’s.

Nail the piece of foam to the wall and it will be re-installed when the wall brace is removed.

**INSTALL “J” AND “F” CHANNEL AND VINYL SOFFITT**

*(Omit this step on the FRONT WALL ONLY, Brick Front Houses)*

Once the blue board is secured, the vinyl soffitt and aluminum fascia can be installed.

Have a crew member set up siding jig and start cutting soffitt, using a circular saw with the blade reversed. Dimension should be 10 ¾”.

Cut 5/12 angle at BOTTOM corner and start install of a full piece of “F” channel at back of pork chop, leaving room for aluminum trim. Fit small piece(s), using a butt joint, towards peak. Repeat process for “J” channel using special “inter lock” cut.
Cut the edges off 2 pieces of soffit.
Start 1 piece of soffitt, in each direction, from the peak. Nail the starters soffitt with white trim nails close to the peak. Nail balance of soffitt “snugly” in to gable rack with 1-½” roofing nails. Nail the final full piece securely to the wall and it will be cut to fit in a later step.

INSTALLING ALUMINUM FASCIA:

The aluminum fascia will overlap at the peak, AWAY from the rear of the garage. As you are standing on the deck facing the peak, the left side will be installed first.

Set the piece on the gable rack, scribe angle and cut to fit.

“Place” trim nails thru the short angle into the BOTTOM of the gable rack. Place the 1st nail about 12” from the peak, nailed parallel to the grooves in the vinyl, on the BOTTOM of the fascia.

Place the next nails every 3’, through the bottom of the fascia in the grooves in the vinyl. Leave last nail 3’ from the end of the fascia. This will allow the bottom piece to slide under the top piece.

Place 1 trim nail, about 6’ from the peak, at the top edge of the fascia.

NO ADDITIONAL NAILS ARE TO BE PLACED ON THE FACE OF THE FASCIA UNDER PENALTY OF BUYING LUNCH FOR THE LEADERS........

PREP FOR SNAPPING THE ROOF SHEETING OSB CONTROL LINE:

Hold a small piece of 2 x 4 at the end of the truss.
Hood a tape on the 2 x 4 and measure up the truss 48 ½". Mark this spot and put an 8d nail thru the line.

Repeat the process on the other 3 corners of the REAR and FRONT trusses.

Place a 16d nail at the peak of FRONT and REAR truss, with 2" left above the peak
Top View

Porch

House

Add 2x10 In the field

Add 2x10 In the field

4x4 Post

4x4 Post

½" OSB

Hanger

Hanger

Dimensions

5'- 8

5' – 6"

5'- 6"

5'- 8

14’ – 11 ½ “

15’ – 2 ½”

4BR PORCH HEADER

TT 1/20/2015