



Assembly Book

revised April 25, 2025



Handmade Haven 10' x 16'

Manufactured by RBS Holdings, LLC

205 Arlington Drive

Greenville, PA 16125

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IMPORTANT INFORMATION ABOUT YOUR KIT

Thank you for purchasing our kit. Please read the following information before beginning construction. Always check with your local HOA or building code office for any requirements or restrictions.

Floor: Wood flooring is sold optionally. You may choose to build your own or pour a cement pad.

Always wear safety glasses when cutting or nailing!

Tools Required: Hand or Circular Saw
Cordless Drill
Hammer
Pencil

Level
Measuring Tape
6'-8' Ladder(s)

Safety Glasses
Dust Mask
Phillips Screwdriver
Framing Square

Additional Materials - Not included in kit:

Required: Shingles or metal roofing, Drip Edge, Roofing Nails or Screws, Paint

Optional: Caulk, Ridge Vent

Terminology:

Square - Confirm corners are at 90 degrees

Plumb - Confirm walls and trusses are straight vertically

Wall Plate - Top and bottom 2x4s used to frame walls

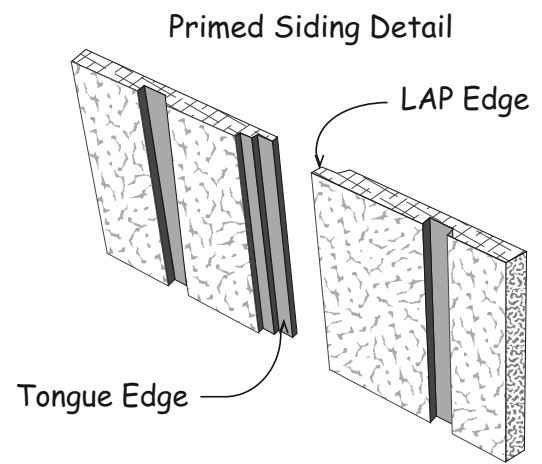
Tie Plate - 2x4s connecting wall sections together

Header - Spans top of door opening

OSB - Oriented Strand Board

LAP - Edge of siding that overlaps Tongue

Tongue - Edge of siding that is overlapped



Organize:

Unpack all items & organize according to size and type. This will make items easier to find when instructed.

Review the parts list on the back page. Should there be missing items or sub-par material contact Best Barns Customer Service.

DO NOT discard any material including the pallet until your project is complete.

Assembly:

Review all instructions before you begin. Please follow steps carefully and in sequence for successful results.

If you have any questions we are happy to assist you. Please contact us at:

800-245-1577 - Mon - Fri 8AM - 5PM EST

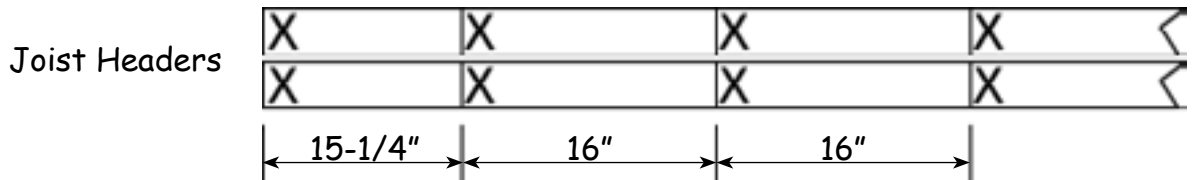
724-866-4357 - After hours and weekends

Email - questions@barnkits.com

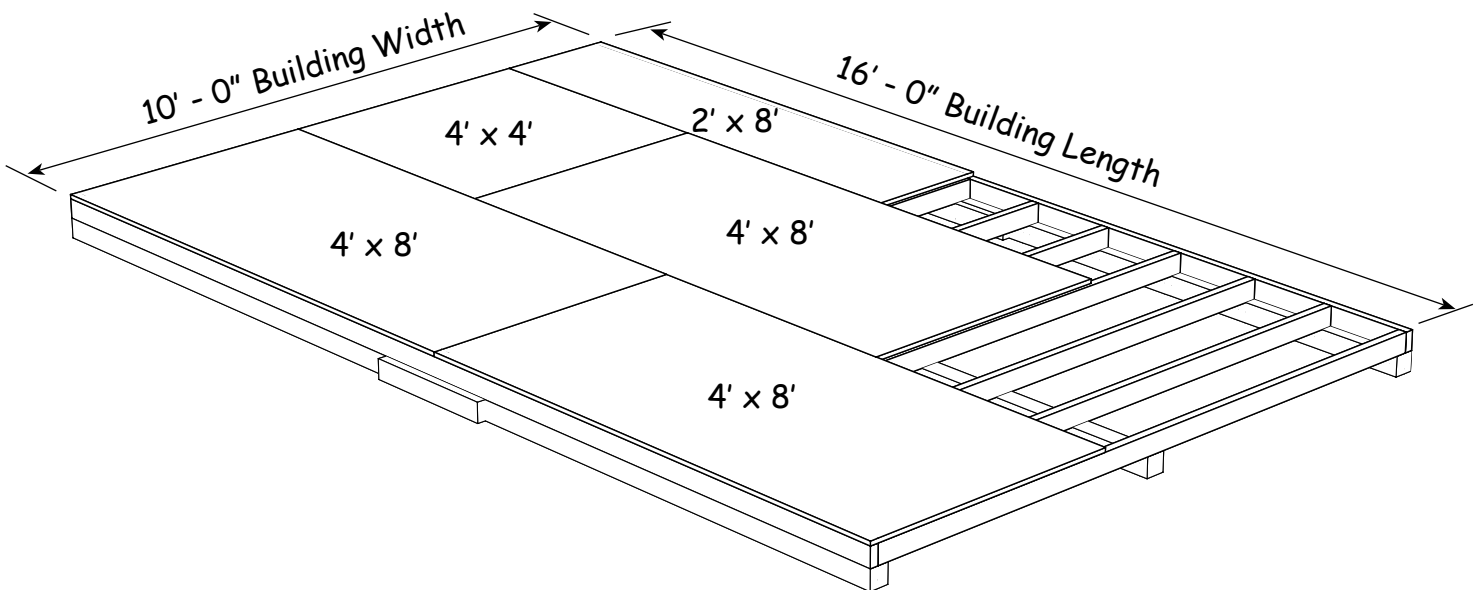
Construction Details for FortressFloor System

Foundation size is 10'-0" x 16'-0". Check local building codes in your area, the construction may need to be modified. Insure the area is level and cleared of vegetation. Several inches of clean gravel is recommended to build upon.

1. Cut a 12' long pressure treated 2x4 into (6) six 2' long sections. Using these butt (2) two 8' long 4x4s end to end and splice together to make (3) three 16' long boards. Use 16d galv. nails.
2. Cut, if necessary, (2) two 2x4-16' long boards to 16'-0". Position boards together and indicate with 'X' marks where floor joists will be installed.



3. Cut (13) thirteen 2x4-10' long boards to 9'-9". Treated lumber may be thicker than 1-1/2". Take this into consideration when cutting the length of the floor joists. Shorten length if necessary to obtain a total width of 10'-0".
4. Install floor joists over 'X' marks between joist headers. Use (2) two 16d galv. nails on each end of joists.
5. Place 4x4s evenly spaced on ground. Set floor framing on top. Toenail 2x4s to 4x4s using 16d galv. nails.
It is important for the floor to be level and square. Before installing the floor sheathing, measure the floor diagonally (corner to corner). Then measure the opposite corners. These measurements will be the same if the floor is square. Adjust framing accordingly.
6. Cut (1) one 4'x8' sheet of plywood in half to make (2) two 4'x4' sheets. Rip (1) one 4'x8' sheet of plywood to make (2) two 2'x8' sheets.
7. Install plywood in a staggered pattern as shown below. Use 8d galv. nails spaced 12" apart.



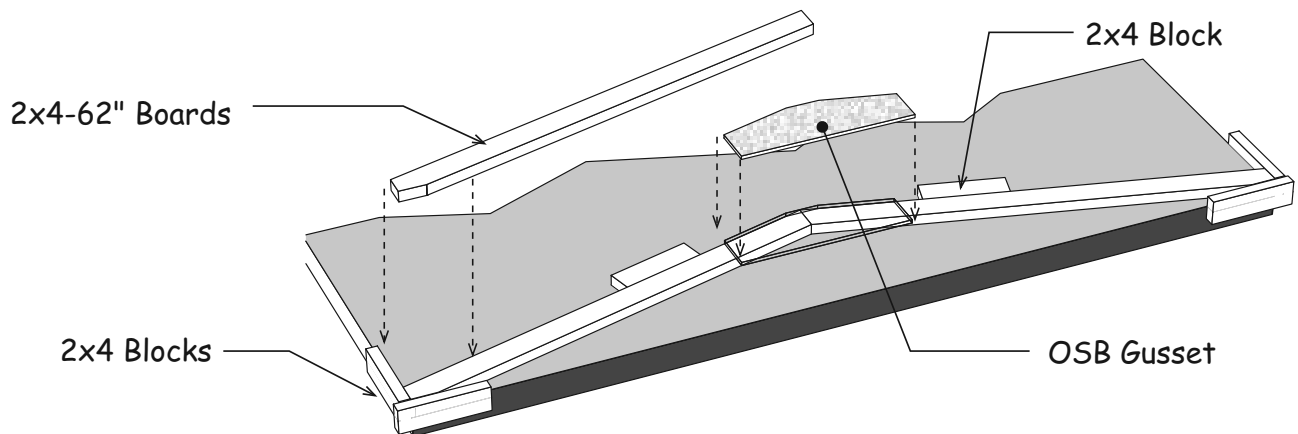
Material Description	10' x 16' Shed				
2x4 Joist Headers	2 pcs.	16'	3/4" Plywood	5 pcs.	4'x8'
2x4 Floor Joist	13 pcs.	10'	Galv. Deck Nails	2 lbs.	8d
2x4 Blocking	1 pc.	12'	Galv. Deck Nails	1 lb.	16d
4x4 Treated Runners	6 pcs.	8'			

Step 1 Assemble Roof Gables and Trusses

 *Gables will have (1) one gusset applied. Trusses will have (2) two gussets.*

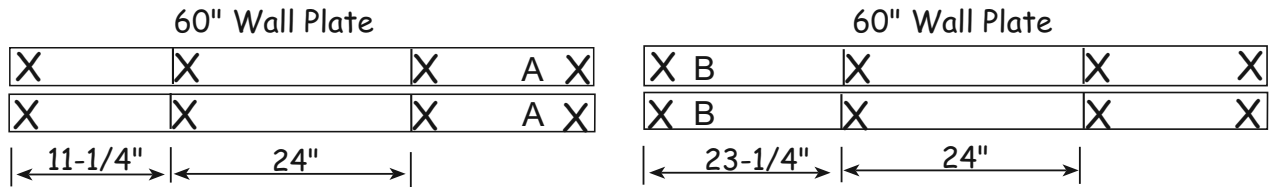
Tip: If possible, temporarily screw 2x4 blocks to the floor using 2-1/2" deck screws. Short 2x4s, *that may have an angle on one end*, supplied in the kit for this purpose. This will secure the gable and truss boards in position so all the trusses will be assembled the same.

1. Place (2) two 62" long 2x4 boards with angled ends together as shown below to make a gable. Hold in place with 2x4 blocks as shown. Make sure the gable measures 10'-0" wide when assembled to fit properly when installed
2. Secure the tops together with a 24" wide OSB gusset. Nail the gusset to the 2x4s with (14) fourteen 6d common nails. Angle nails slightly so nails do not protrude through the 2x4 boards.
3. Repeat to assemble (1) one more gable for a total of (2) two gables.
4. Select (2) two 62" long 2x4 boards with angled ends to make the first truss. Secure the tops together with a 24" wide OSB gusset. Turn truss over and install another 24" wide gusset.
5. Repeat steps to assemble (6) six more trusses.

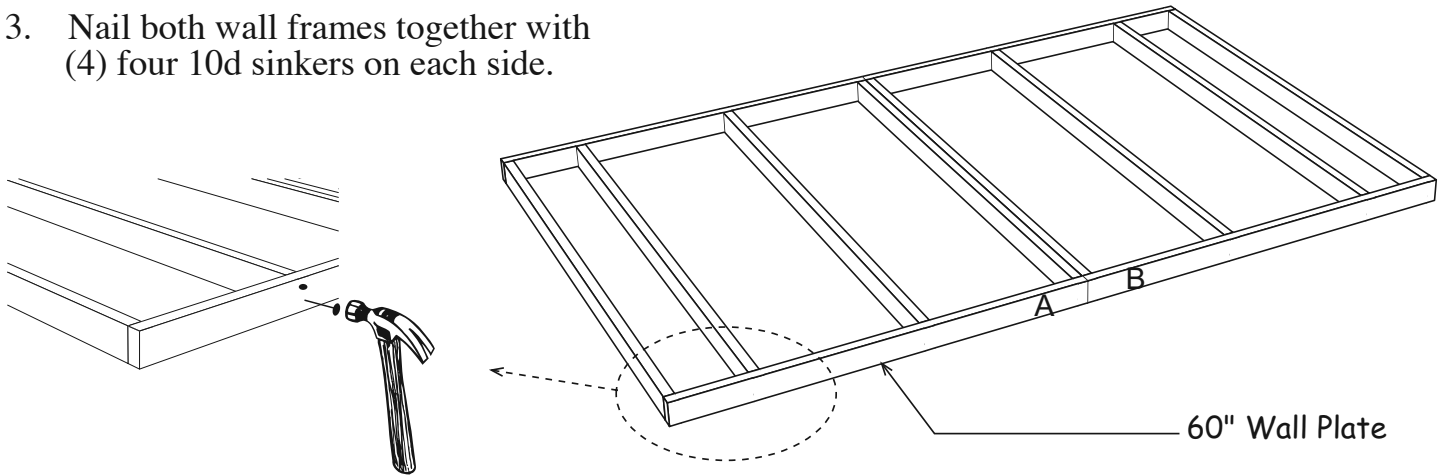


Step 2A Assemble End walls

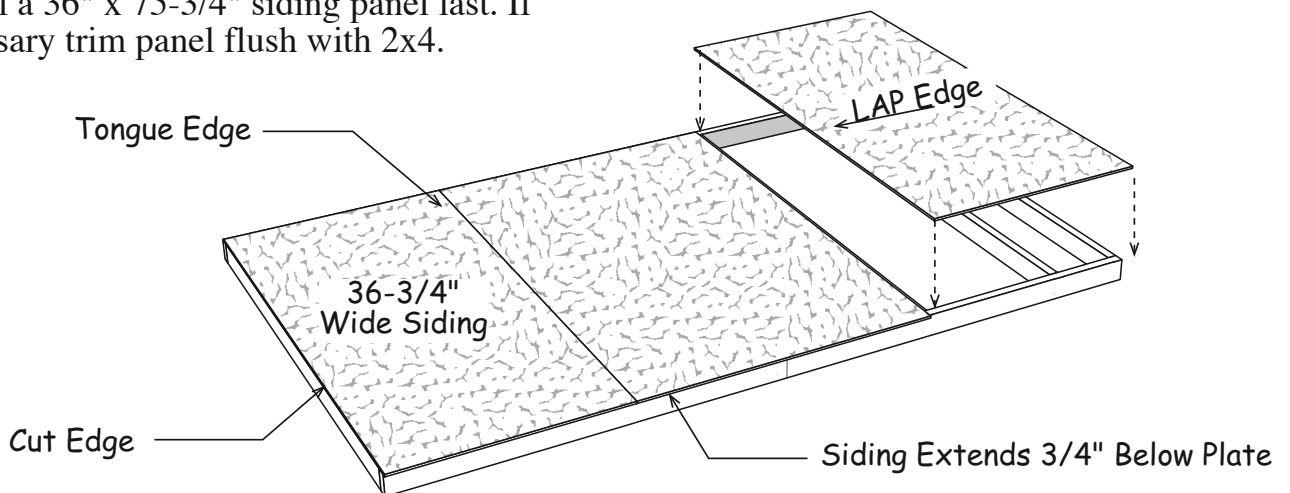
1. Position (4) 60" boards together and indicate with 'X' marks, where the wall studs will be located. Mark the ends that will butt together with the letters 'A' and 'B'.



2. Install 72" wall studs between the top and bottom plates. Assemble wall frames with 10d sinkers. Use (2) two nails at end of each wall stud.
3. Nail both wall frames together with (4) four 10d sinkers on each side.

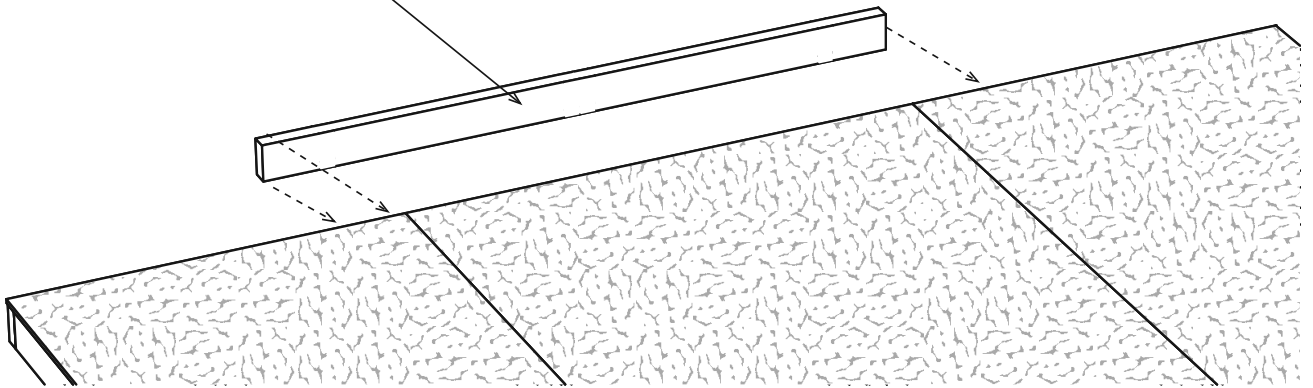


4. Square frame, *measure diagonally (corner to corner)*. The measurement should be 141-1/2".
5. Repeat steps 1-4 to assemble next end wall frame.
6. Select a 36-3/4" wide siding panel with a 'tongue' edge. Install this panel with the 'Cut' edge flush with the end of the wall frame. Install siding flush with the 2x4 top plate. Use 6d galv. nails spaced 8" apart.
7. Install a full width x 75-3/4" long siding panel next.
8. Install a 36" x 75-3/4" siding panel last. If necessary trim panel flush with 2x4.

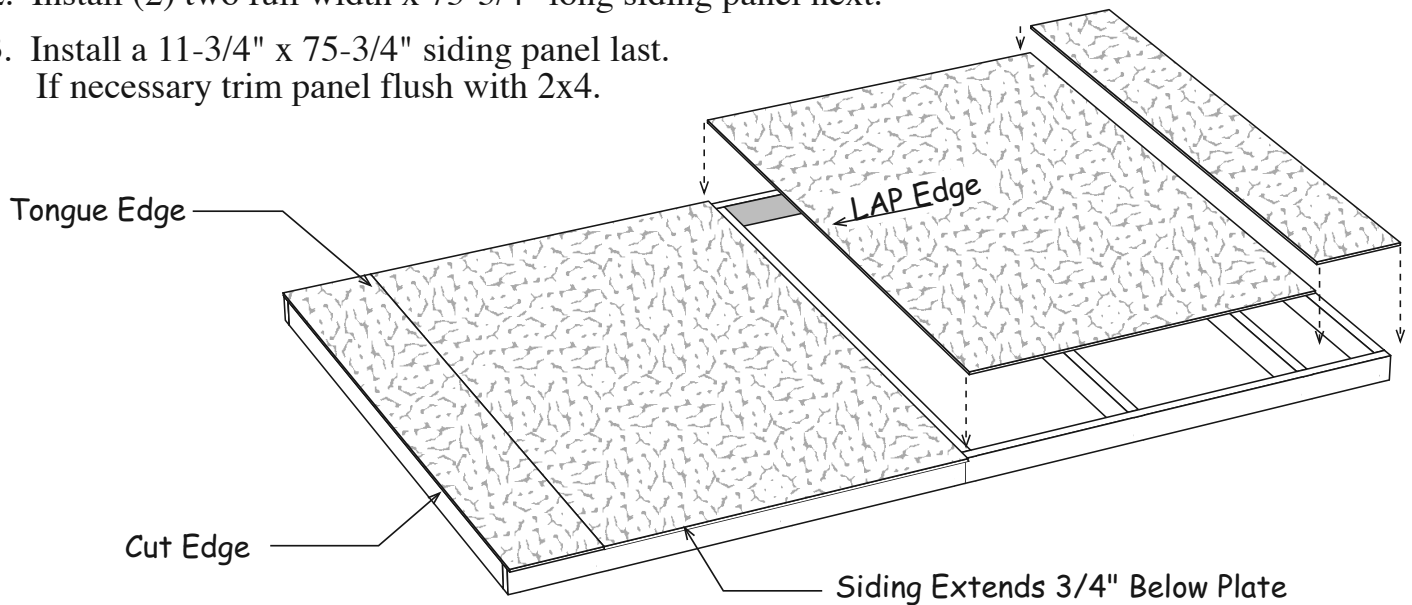


Step 2B Assemble End Walls Continued

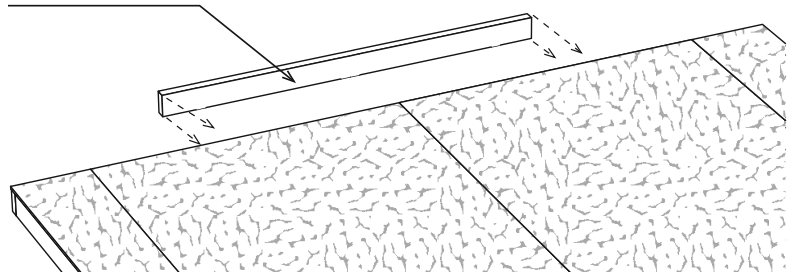
9. Install a 60" long 2x4 in the center of the wall panel, at the top. Use (6) six 10d sinkers. Set wall aside.



10. Select the other end wall frame.
11. Square wall frame. Select a 12-1/2" wide siding panel with a 'tongue' edge. Install this panel with the 'Cut' edge flush with the end of the wall frame. Install siding flush with the 2x4 top plate.
12. Install (2) two full width x 75-3/4" long siding panel next.
13. Install a 11-3/4" x 75-3/4" siding panel last.
If necessary trim panel flush with 2x4.

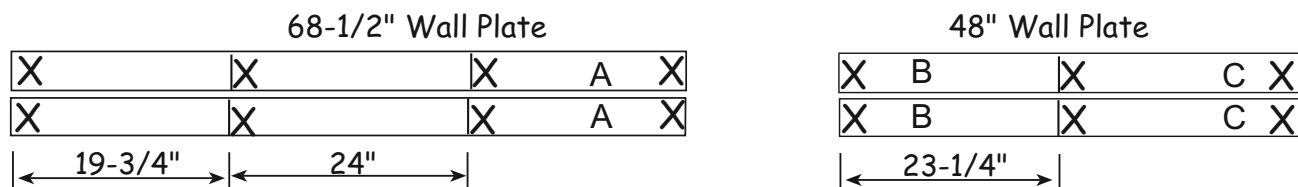


14. Install a 60" long 2x4 in the center of the wall panel.

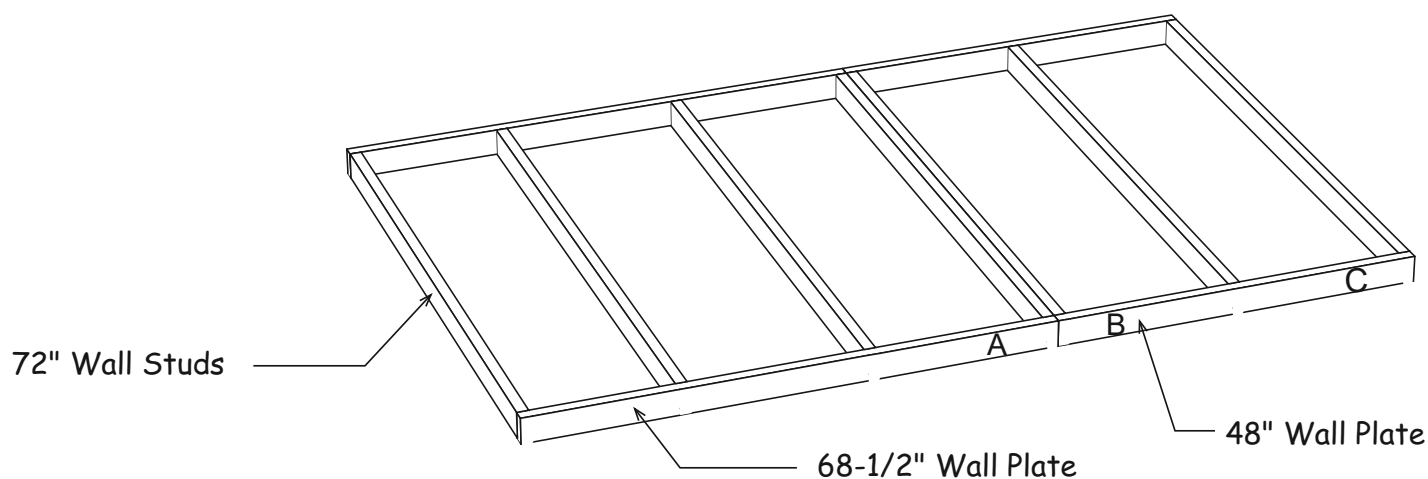


Step 3A Assemble Back Wall

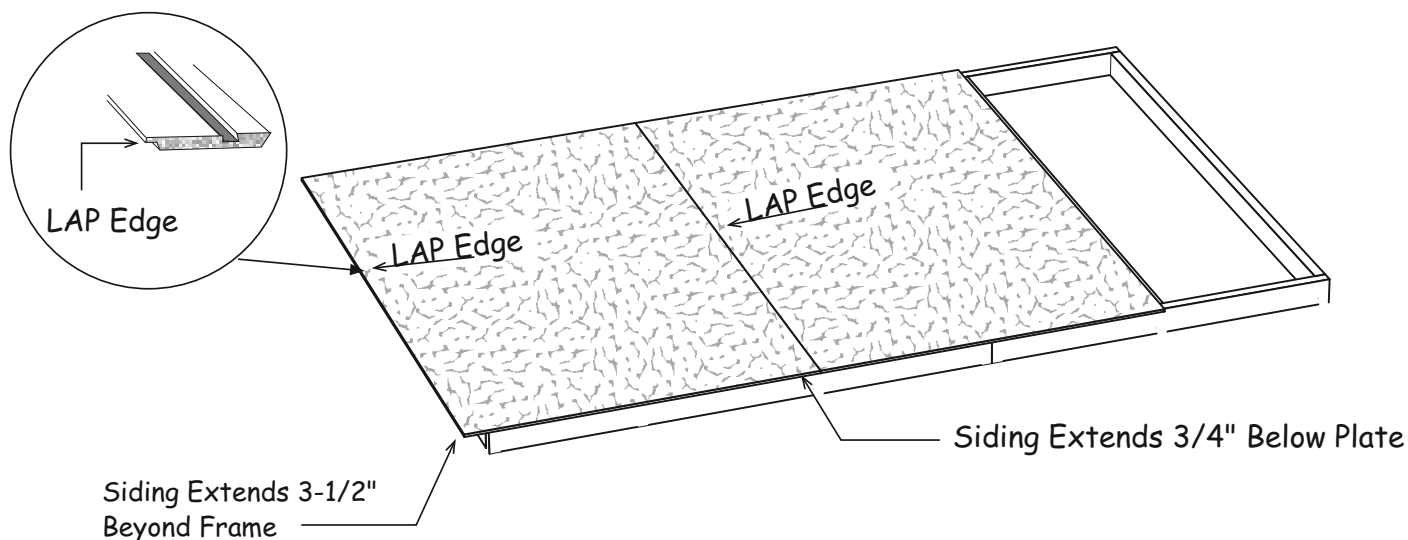
1. Position (2) two 68-1/2" and (2) two 48" long 2x4s together and indicate with 'X' marks, where the wall studs will be located. Mark plates with the letters 'A', 'B' and 'C' so frames are correctly oriented.



2. Install 72" wall studs between the top and bottom plates. Assemble wall frames with 10d sinkers. Nail both wall frames together.

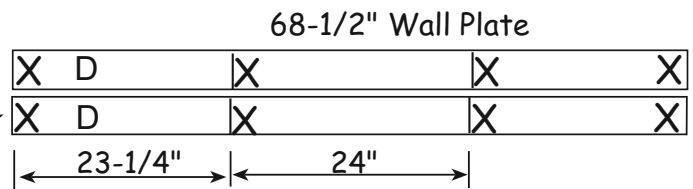


3. Square wall frame. The measurement should be 138-1/2". Install (2) two full width siding panels. Install the first siding panel with the 'LAP' edge extending 3-1/2" past the end of the wall frame. Install a full width panel next. The siding should extend 3/4" below the bottom plate and flush with the top plate. The last siding panel will be installed in a later step.

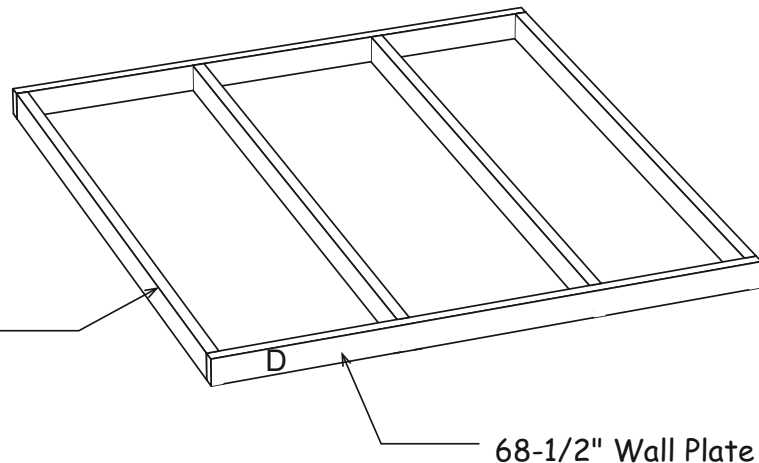


Step 3B Assemble Back Wall Continued

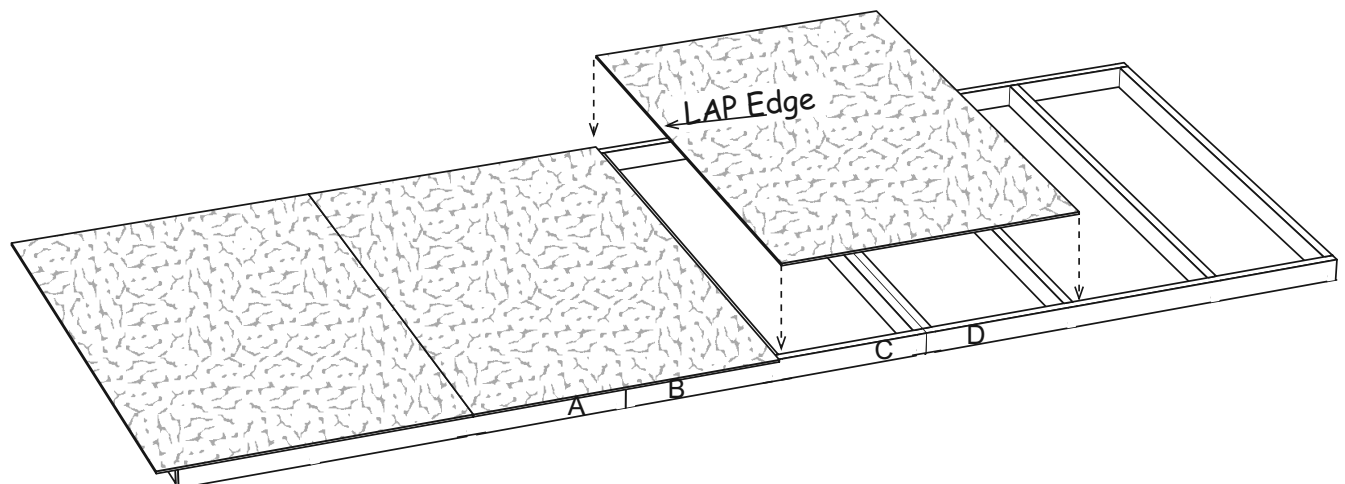
5. Position (2) two 68-1/2" long 2x4s together and indicate with 'X' marks, where the wall studs will be located. Mark the left ends with the letter 'D'.



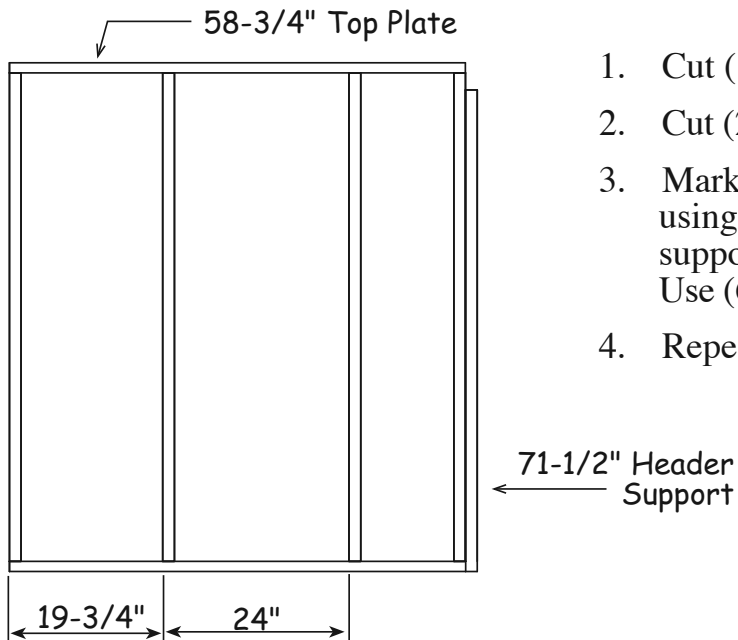
6. Install 72" wall studs between the top and bottom plates.



7. Select the wall panel from previous step. Nail, with 10d sinkers, the 68-1/2" frame assembled above to the end of the wall panel.
8. Install a full width siding panel. The last siding panel will be installed after the walls are erected on the floor.



Step 4 Assemble Front Wall Frames

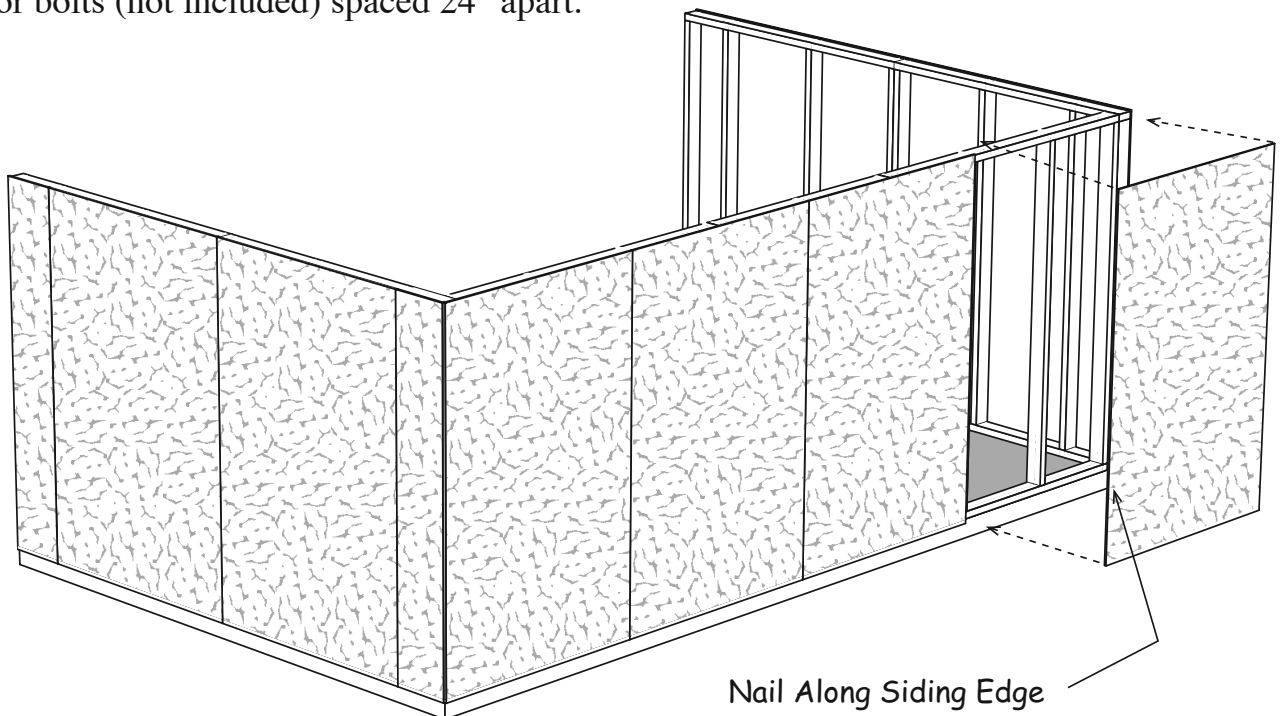


1. Cut (1) one 72" long 2x4 to a length of 71-1/2".
2. Cut (2) two 68-1/2" long 2x4s to a length of 58-3/4".
3. Mark spacing as shown and assemble a wall frame using (4) four 72" long 2x4s, (1) one 71-1/2" header support and (2) two 58-3/4" top and bottom plates. Use (6) six 10d sinkers to nail header support to stud.
4. Repeat to assemble another wall frame.

Step 5A Set Walls

 **IMPORTANT:** Make sure walls are plum and square.

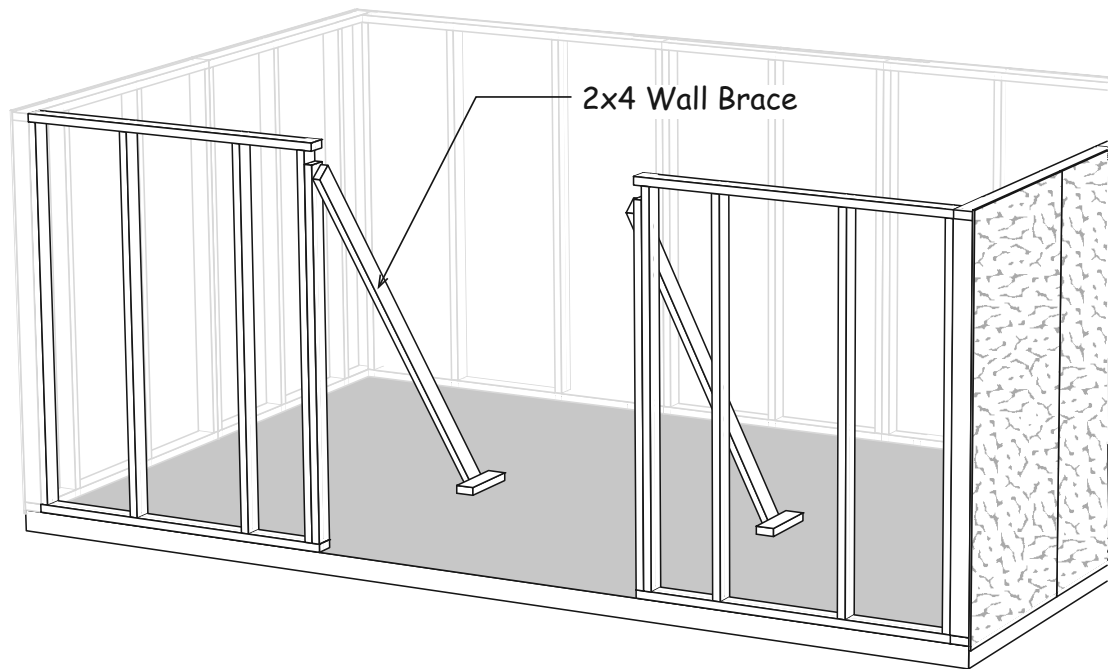
1. Secure the back wall between the end wall panels. Secure panels together at the corners. Use (4) four 10d sinkers per corner. Use 10d sinkers or, if erecting on a concrete slab, concrete anchor bolts (not included) spaced 24" apart.



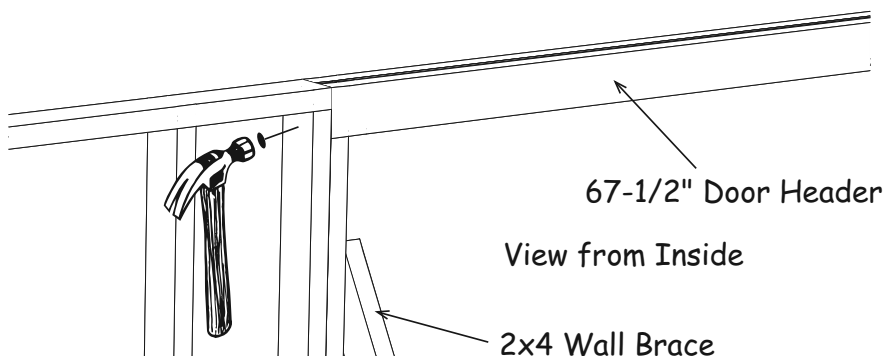
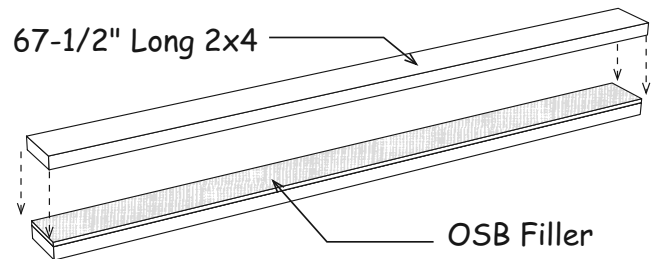
2. Install a 48" x 75-3/4" siding panel to the back wall. Use 6d galv. nails. Nail along the adjoining siding panel.

Step 5B Set Walls Continued

3. Install front wall frames between the end walls.
4. Temporarily install (2) two 2x4-72" boards at both sides of the door opening to hold the wall straight. These boards will be used later for tie plates.



5. Gather (2) two 67-1/2" long 2x4 boards and a 3-1/4" x 67-1/4" OSB filler panel. Nail header together from both sides with 10d sinkers staggered 6" apart.
6. Install header on top of header supports. Nail through studs with 10d sinkers.

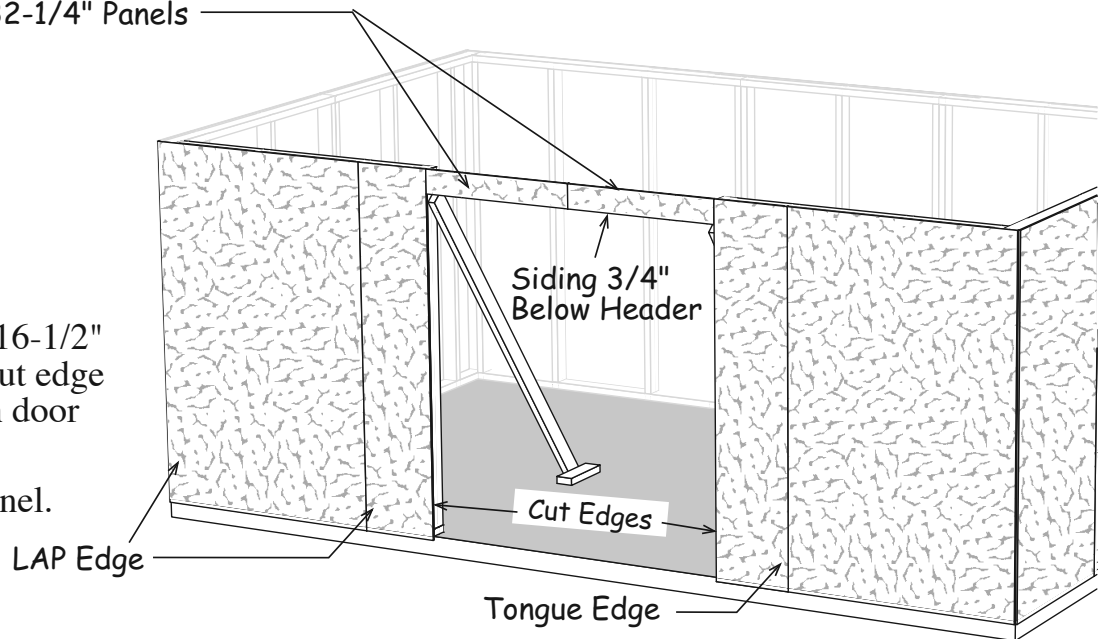


Step 6 Install Siding on Front Wall

1. Select a full width siding panel and install at the front left corner.
2. Install a 15-3/4" siding panel with a 'LAP' edge next. Cut edge should be flush with door opening.
3. Install (2) two 4-3/4" x 32-1/4" siding panels over the door opening. Bottom of siding should extend 3/4" below header. Trim will cover where the siding panels butt together in the center.

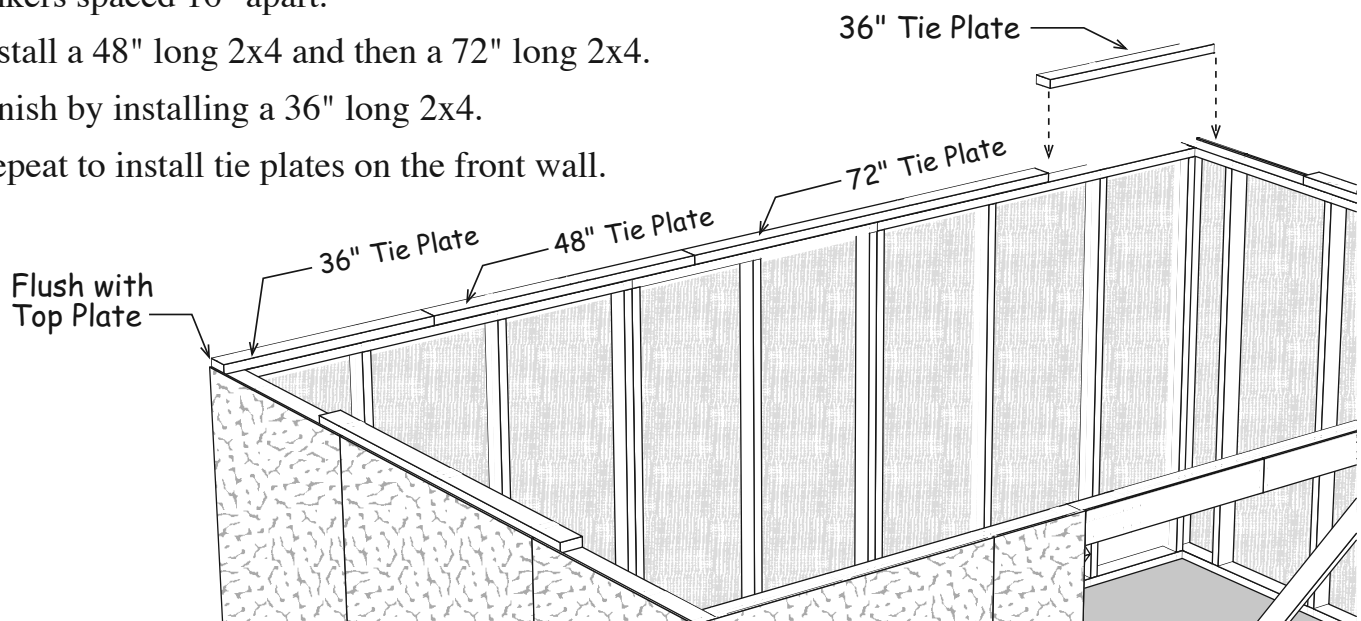
4-3/4" x 32-1/4" Panels

4. Select and install a 16-1/2" siding panel next. Cut edge should be flush with door opening.
5. Install last siding panel.



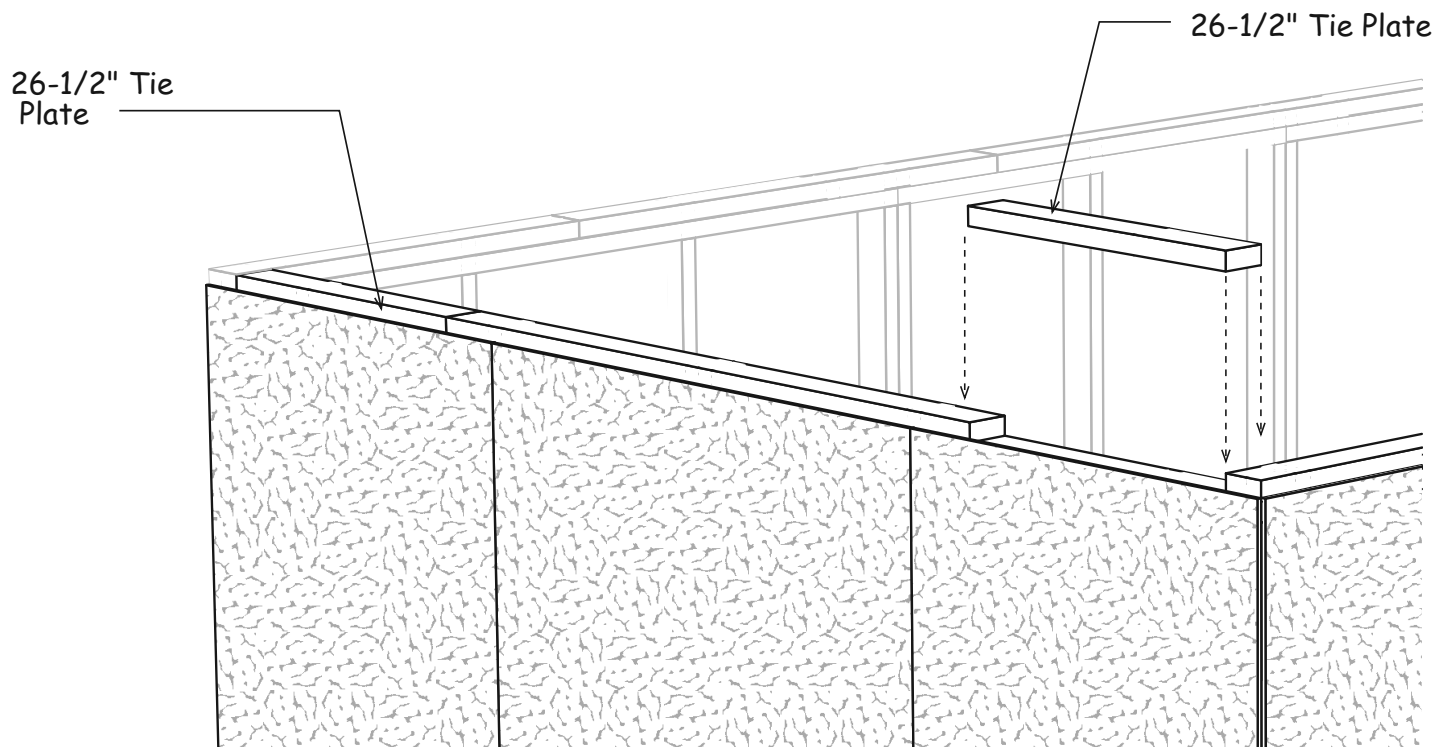
Step 7A Install Tie Plates

1. Remove a 2x4-72" board used to brace front wall. Cut board in half to make (2) two 36" long boards. Install this 2x4 on back wall flush with the 2x4 wall plate on the end wall. Use 10d sinkers spaced 16" apart.
2. Install a 48" long 2x4 and then a 72" long 2x4.
3. Finish by installing a 36" long 2x4.
4. Repeat to install tie plates on the front wall.



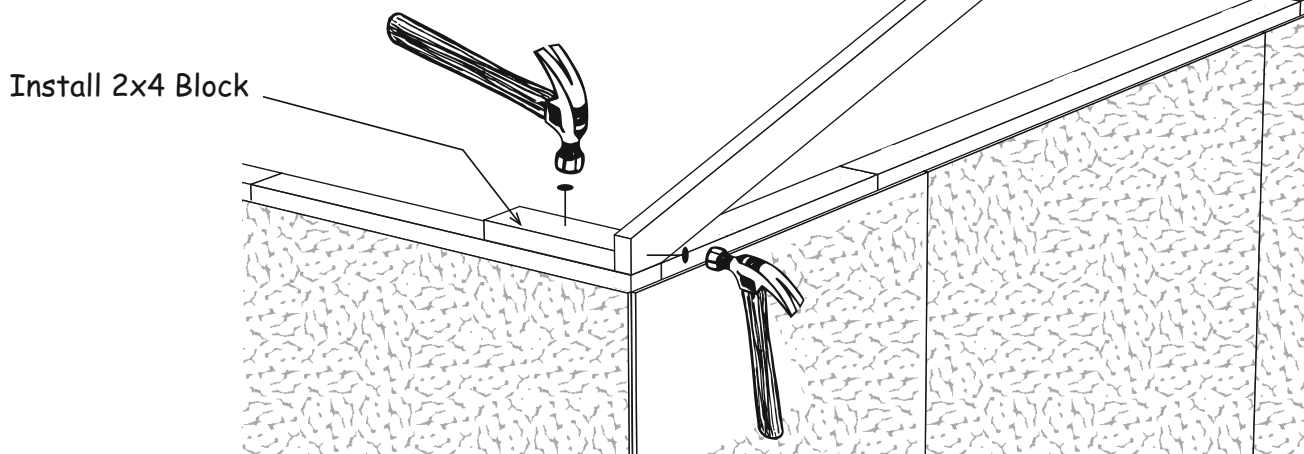
Step 7B Install Tie Plates Continued

5. Cut (4) four 26-1/2" long 2x4s from (2) two 60" long 2x4 boards.
6. Install the 26-1/2" boards on both end walls, see below.



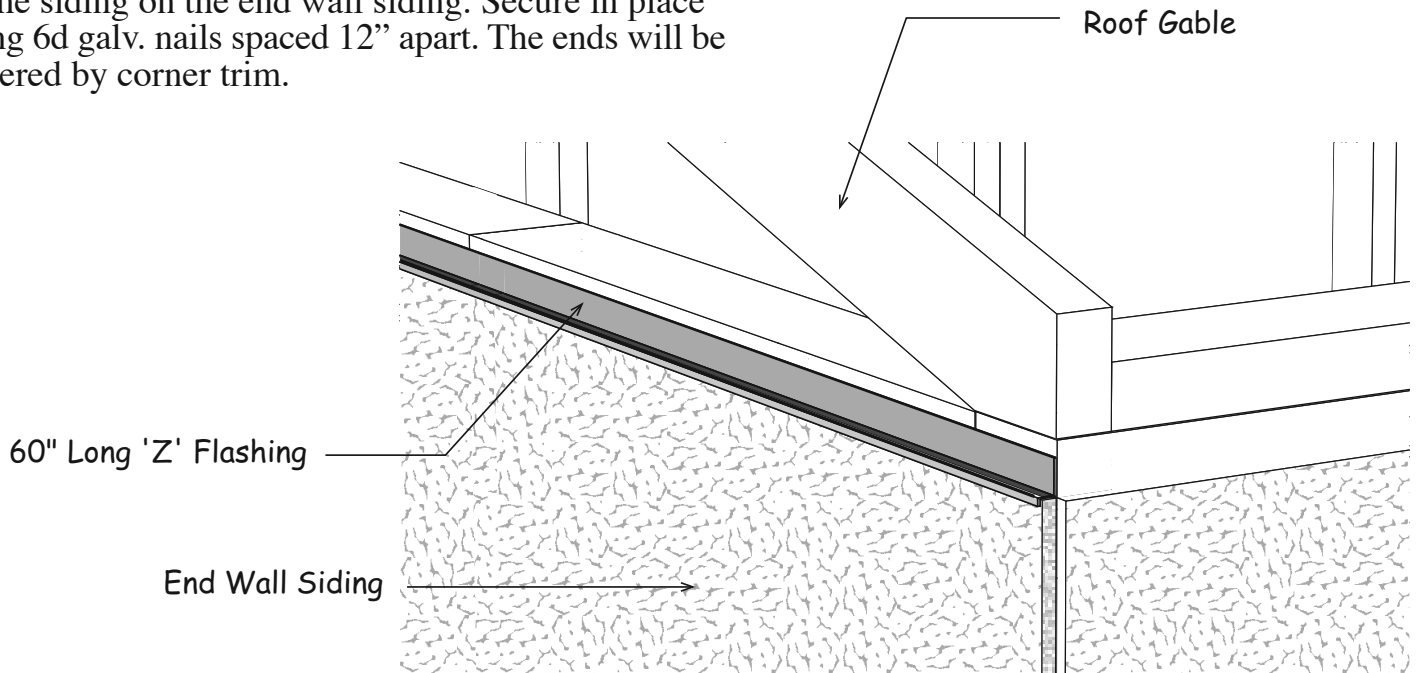
Step 8 Install Roof Gable

1. Select a truss with a gusset installed on one side. Position this truss with the gusset facing towards the inside of the building and flush with 2x4s on end wall.
2. Install a 10" to 12" long 2x4 block on the back wall using 10d sinkers. Secure the truss to the 2x4 block with (2) two 10 sinkers.
3. Install a 2x4 block on front wall and secure the truss.



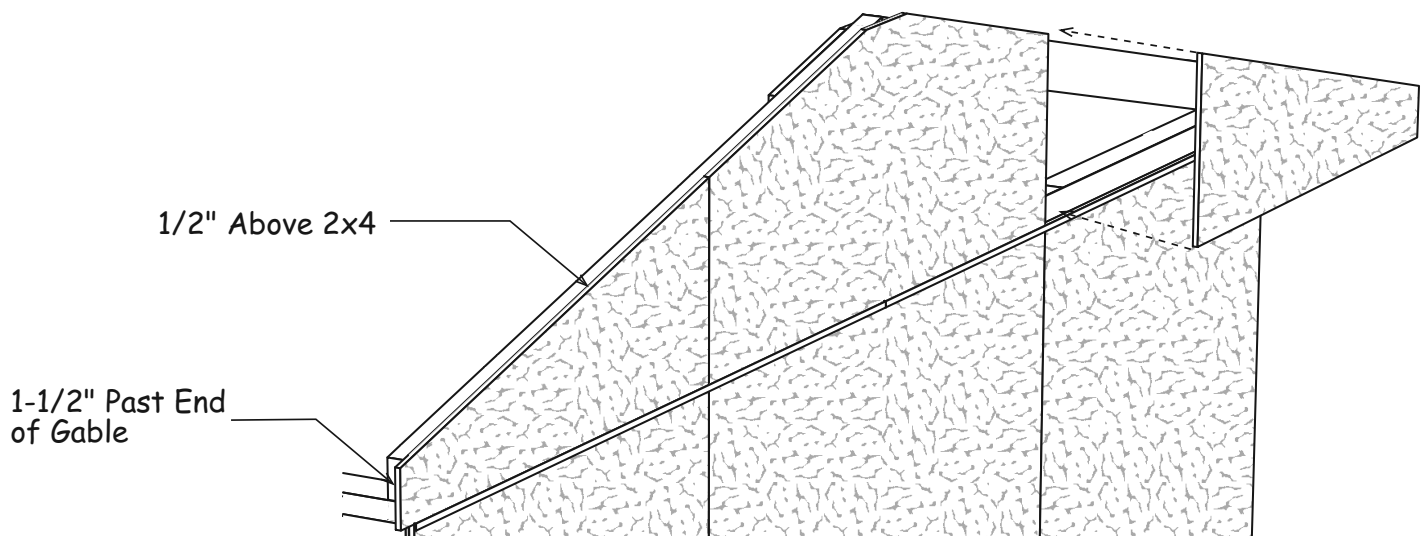
Step 9 Install 'Z' Flashing

Install (2) two 60" pieces of 'Z' flashing across the top of the siding on the end wall siding. Secure in place using 6d galv. nails spaced 12" apart. The ends will be covered by corner trim.



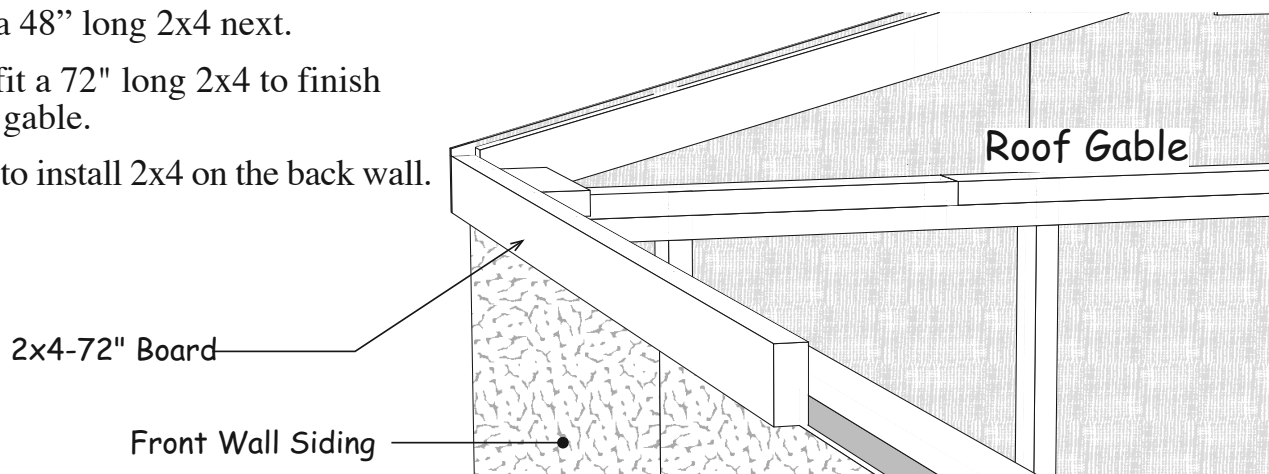
Step 10 Install Roof Gable Siding

1. Install gable siding on the roof gable using 6d galv. The gable siding should extend no more than 1/2" above the 2x4 frame and 1-1/2" past gable ends.
2. Repeat **Steps 8** thru **10** to install the opposite gable.



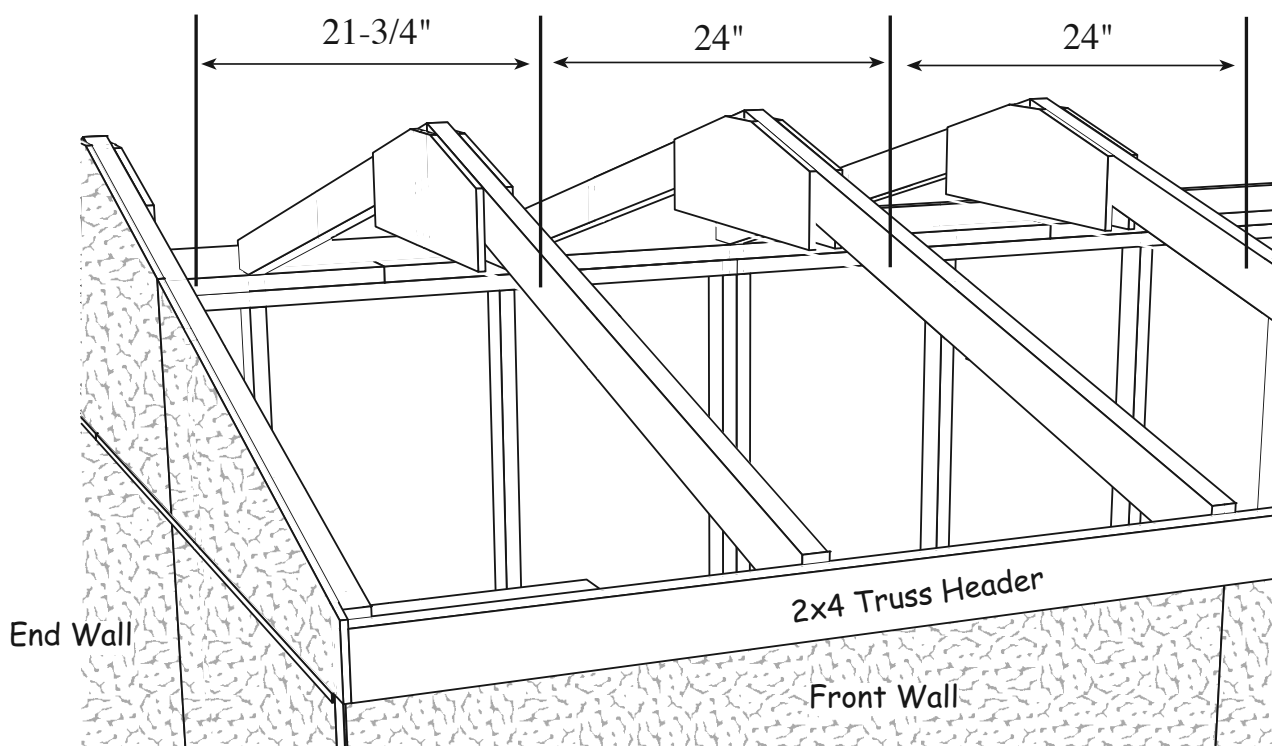
Step 11 Install 2x4 Truss Headers

1. Place a 72" long 2x4 on top of the siding on the front wall. It will butt against the siding on the roof gable. Nail this 2x4 to the 2x4 tie plate with 10d sinkers.
2. Install a 48" long 2x4 next.
3. Cut to fit a 72" long 2x4 to finish against gable.
4. Repeat to install 2x4 on the back wall.



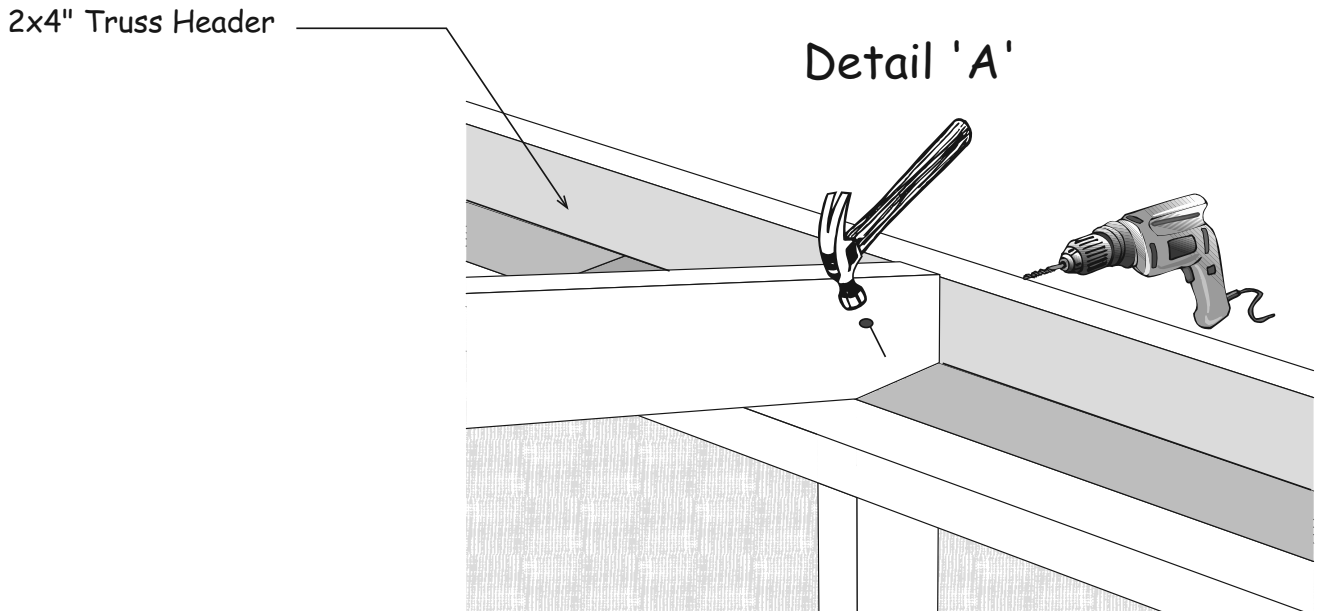
Step 12A Install Trusses

1. Starting from left end wall install the first truss measuring 21-3/4" from the face of the 2x4 on back gable and the face of 2x4 truss. Secure the trusses using 2-1/2" screws and 10d sinkers, See Detail 'A' on next page.
2. Install the remaining trusses 24" on center, *see detail below*.



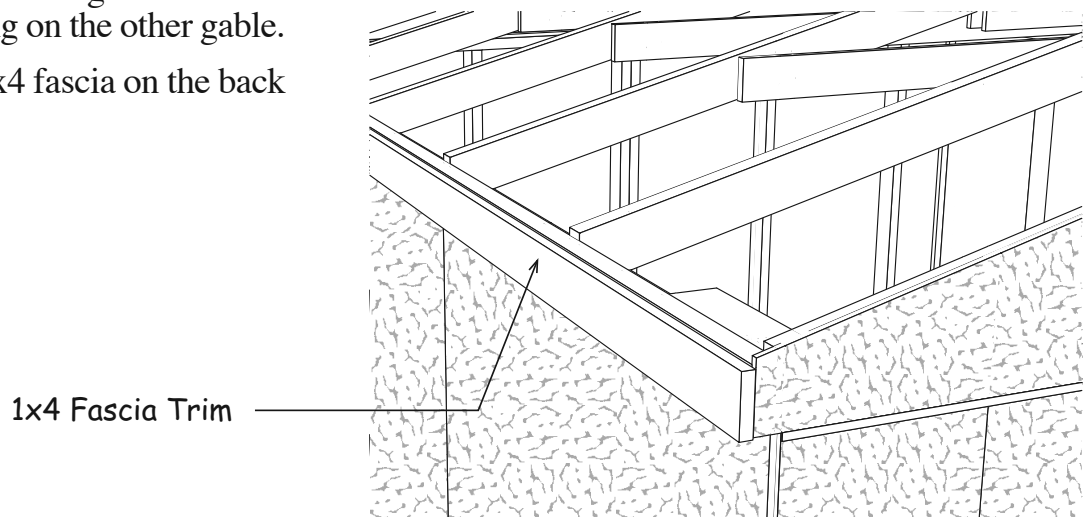
Step 12B Install Trusses Continued

Using a 2-1/2" screw, secure all trusses to 2x4 Truss Header installed in Step 11. Toe nail truss into 2x4 tie plate using 10d sinkers.



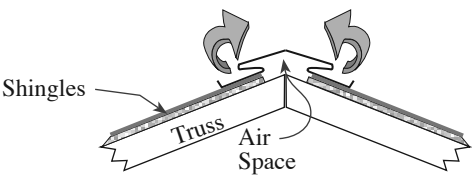
Step 13 Install 1x4 Fascia

1. Install 72" long 1x4 fascia trim over the 2x4 Truss Header on the front wall. Install 1x4 trim boards flush with the bottom of the 2x4 Truss Header and the face of the siding on the gable. Use 6d galv. nails spaced 12" apart.
2. Install a 48" long 1x4 next.
3. Cut a 74" long 1x4 to length and install flush with the siding on the other gable.
4. Repeat to install 1x4 fascia on the back wall.



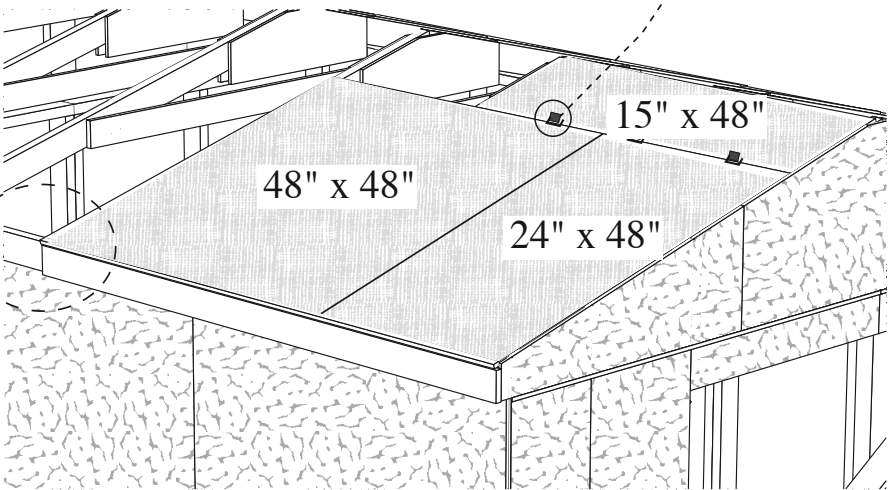
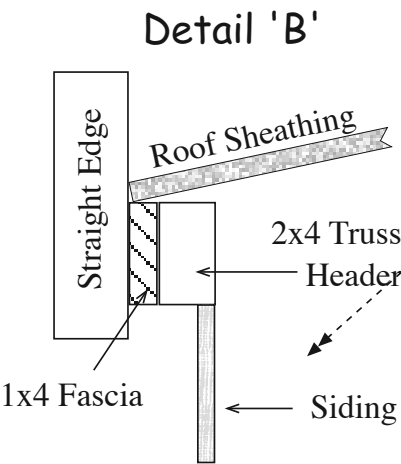
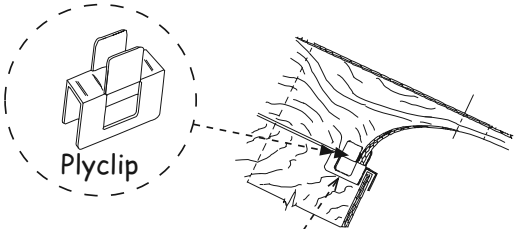
Step 14 Install Roof Sheathing

 Install roof sheathing with 6d common, space nails 12" apart. When installing sheathing across the top, insert a plyclip into the roof sheathing between each truss. The top row of sheathing will be about 1" below the ridge to allow for optional ridge venting. See detail below.



See supplier of shingles to purchase ridge venting.

- 1. Install a 24"x48" roof sheathing panel against the back of of gable siding. Note: Using a straight edge install the top edge of the roof sheathing flush with the face of the 1x4 fascia. See Detail 'B'.
- 2. Install a 48"x48" sheet next to the 24"x48" sheet.
- 3. Install a 15" x 48" sheathing panel at the top.
- 4. Continue to install sheathing per layout below.
- 5. Repeat on opposite side.

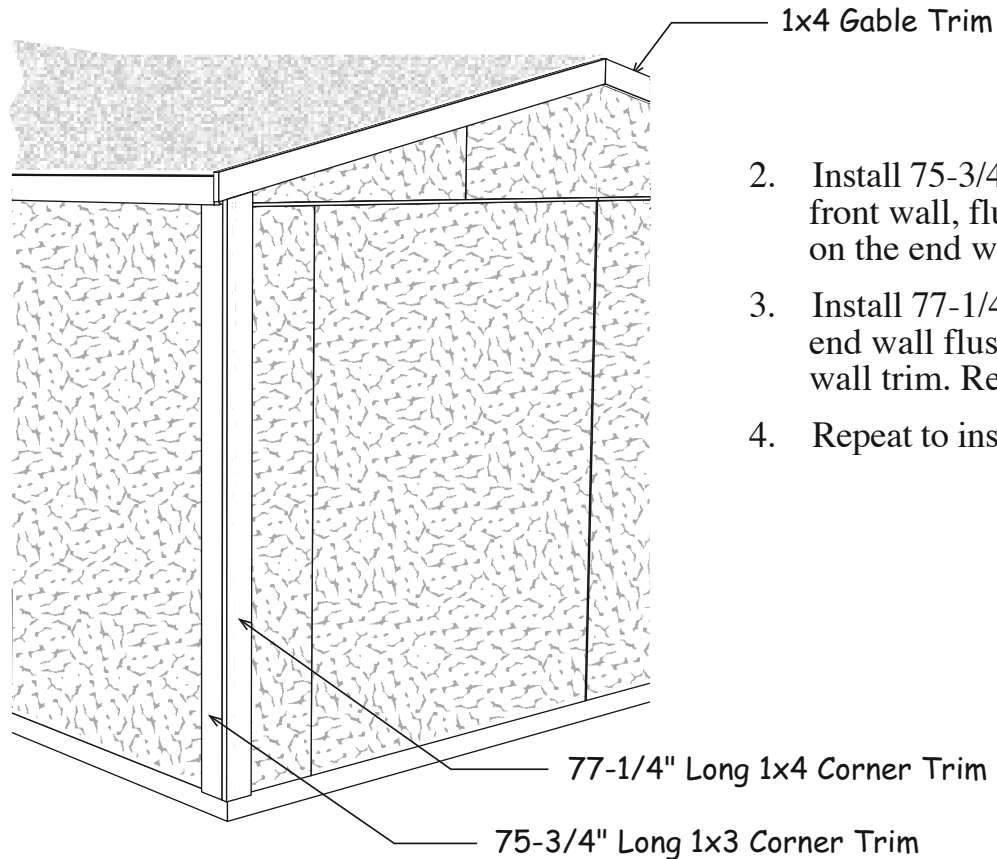


Roof Ridge

15" x 48"		15" x 48"		15" x 48"		15" x 48"	
24" x 48"	48" x 48"		48" x 48"		48" x 48"		24" x 48"

Step 15 Install Trim

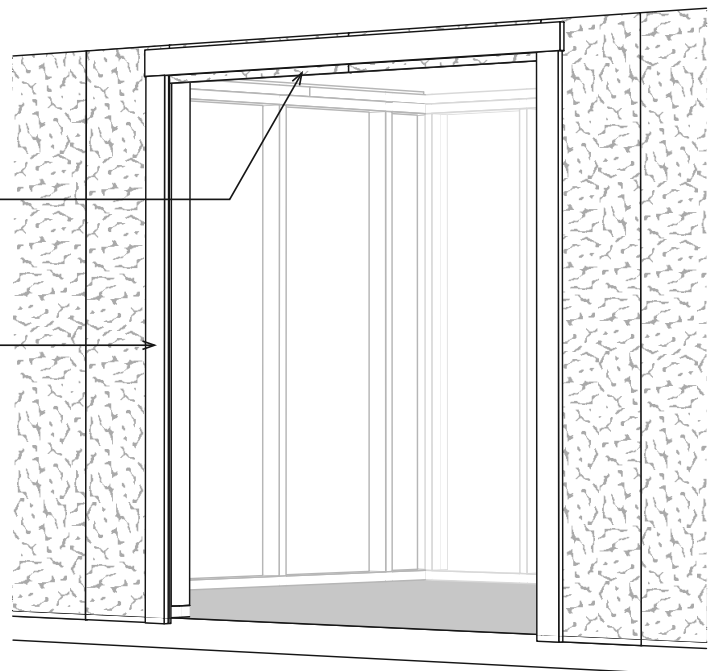
1. Install 64-3/8" long 1x4 gable trim flush with the top of the roof sheathing on both end walls. Use 6d galv. nails spaced 12" apart.



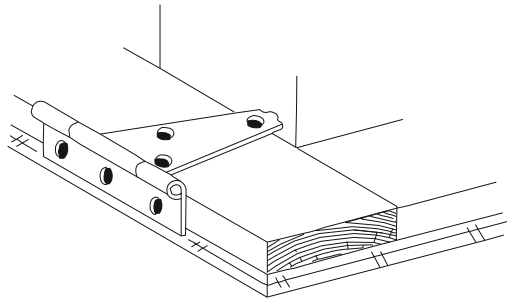
2. Install 75-3/4" long 1x3 corner trim, on the front wall, flush with the face of the siding on the end walls. Repeat for back wall.
3. Install 77-1/4" long 1x4 corner trim on the end wall flush with the face of the front wall trim. Repeat for back wall.
4. Repeat to install trim on opposite end wall.

Siding Will Extend Below Trim

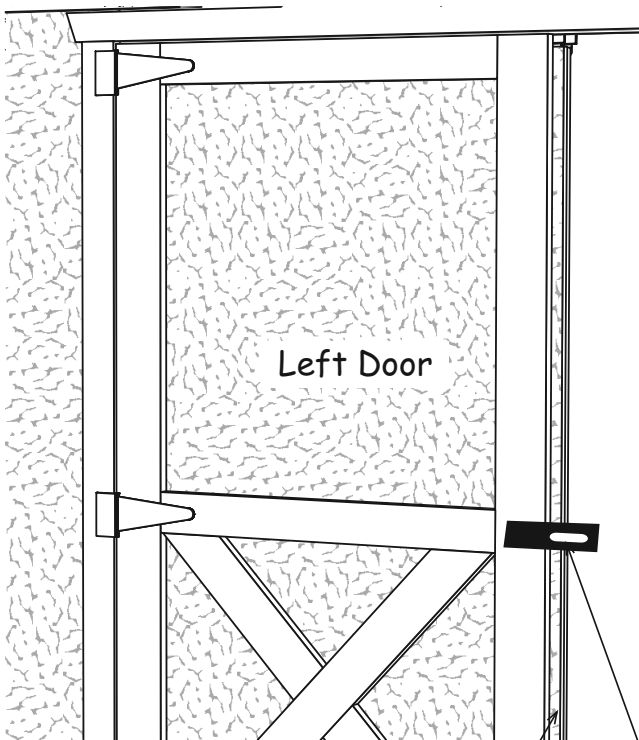
5. Install (2) two 72" long 1x3 trim boards, *with top edge 3/4" above door opening*, along each side of the door opening. Use 6d galv. nails. Tack these boards with a couple nails; you may want to move the trim later when you install the doors.
6. Install a 72" long 1x3 trim board centered across the top of the vertical trim. 3/4" of siding will be revealed at top of door.



Step 16 Install Doors & Hardware



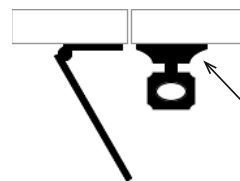
1. Lay the left door with the trim facing up. The siding on the left door extends past the door trim. See detail below.
2. Install 5" hinges to the left side of the door frame. To position the hinge properly, hold the rectangular plate against the frame. Use 1-1/4" black screws.
3. Install hinges to the right side of the other door.



4. Before fastening the hinges to the side trim, temporarily prop the doors in the opening. Leave a space at the top and bottom of the doors and between the doors and the side trim to allow room for the doors to expand due to humidity.

If your door opening is out of square, the space around the doors will not be even. You can remove and re-position the side trim to make allowances for this. The side trim does not have to be flush with the frame of the door opening. You can move the trim in or out to make the door spacing equal.

5. Determine position of hinges and install to side trim with 2" screws.
6. Install door hasp on double doors. When properly installed the hasp will fold in half to receive locking latch and the screw heads will be covered.

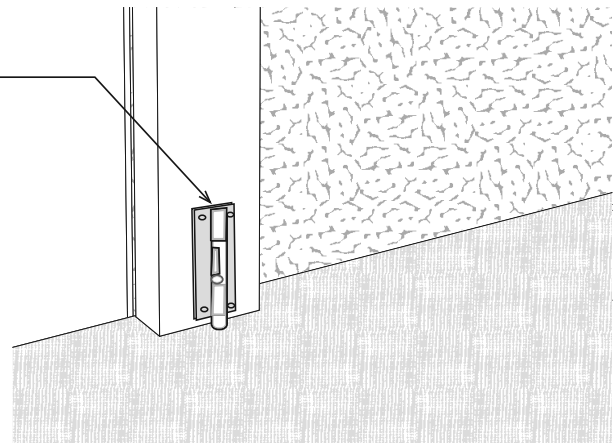


Fold Hasp to Cover Screws

Siding Extends Past Trim

Barrel Bolt on the back of left door

7. Install a barrel bolt on the lower back of the door to secure this door in place when closed. You will need to drill a hole for the round shaft to drop into.
8. Install another barrel bolt at the top of the door.



10'x16' Packing List

Qty.	Description		
18	2x4	62"	Truss Rafters
46	2x4	72"	Studs & Plate Boards
8	2x4	68-1/2"	Plate Boards
12	2x4	60"	Plate Boards
6	2x4	48"	Plate Boards
6	2x4	10"-12"	Blocks for Truss Jig
2	2x4	67-1/2"	Door Header
4	1x4	64-3/8"	Gable Trim
4	1x4	77-1/4"	Corner Trim
4	1x3	75-3/4"	Corner Trim
3	1x3	72"	Door Trim
2	1x4	74"	Fascia Trim
2	1x4	72"	Fascia Trim
2	1x4	48"	Fascia Trim
2	Pre-built Barn Doors		
7	48"x75-3/4"	Primed Wall Siding	
2	36"x75-3/4"	Primed Wall Siding	
2	16"x75-3/4"	Primed Wall Siding	
2	12-1/2"x75-3/4"	Primed Wall Siding	
2	4-3/4"x32-1/4"	Primed Wall Siding	
2	48"x19-3/4"	Primed Gable Siding	
4	38"x14-1/4"	Primed Gable Siding	
6	48"x48"	OSB Roof Sheathing	
4	24"x48"	OSB Roof Sheathing	
8	15"x48"	OSB Roof Sheathing	
1	3-1/2"x67-1/4"	Header Filler	
16	8"x24"	OSB Wood Gussets	

Qty.	Hardware Description		
3	lbs.	10d	Coated Sinkers
3	lbs.	6d	Galvanized Nails
4	lbs.	6d	Common Nails
6		5"	Hinges
1		4"	Door Hasp
2		6"	Barrel Bolts
25		1-1/4"	Hinge Screws
25		2"	Hinge Screws
50		2-1/2"	Deck Screws
18		7/16"	Ply-clips
16		3/4"	Pan Head Screws
4		60"	'Z' Flashing

Material Purchased By Owner

7	bdl.	Roof Shingles
7	pcs.	Roof 'drip' edge