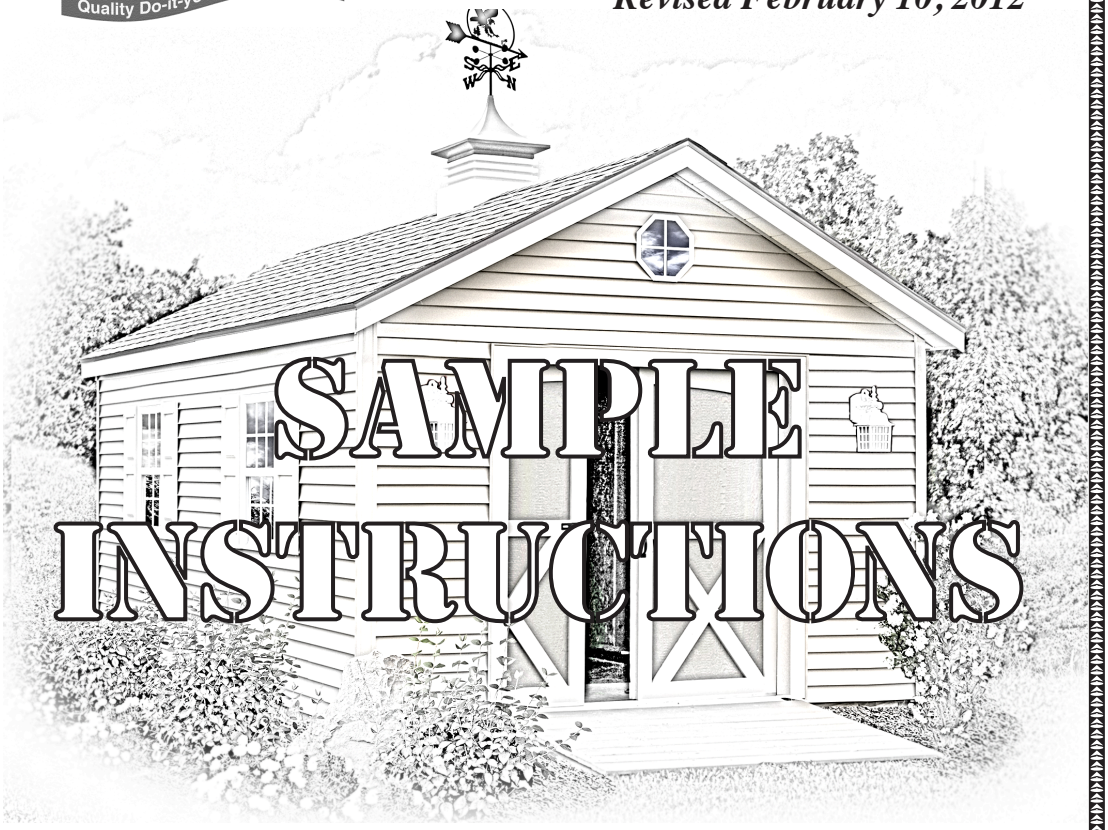
Best Barns USA

Assembly Book

Revised February 10, 2012



SAMPLE INSTRUCTIONS

the South Dakota

with pocket doors

12' x 24'

Manufactured by Reynolds Building Systems, Inc.

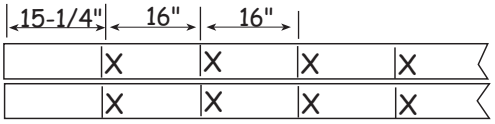
205 Arlington Drive Greenville, PA 16125 724-646-3775

Constructing Details for Deluxe Floor System

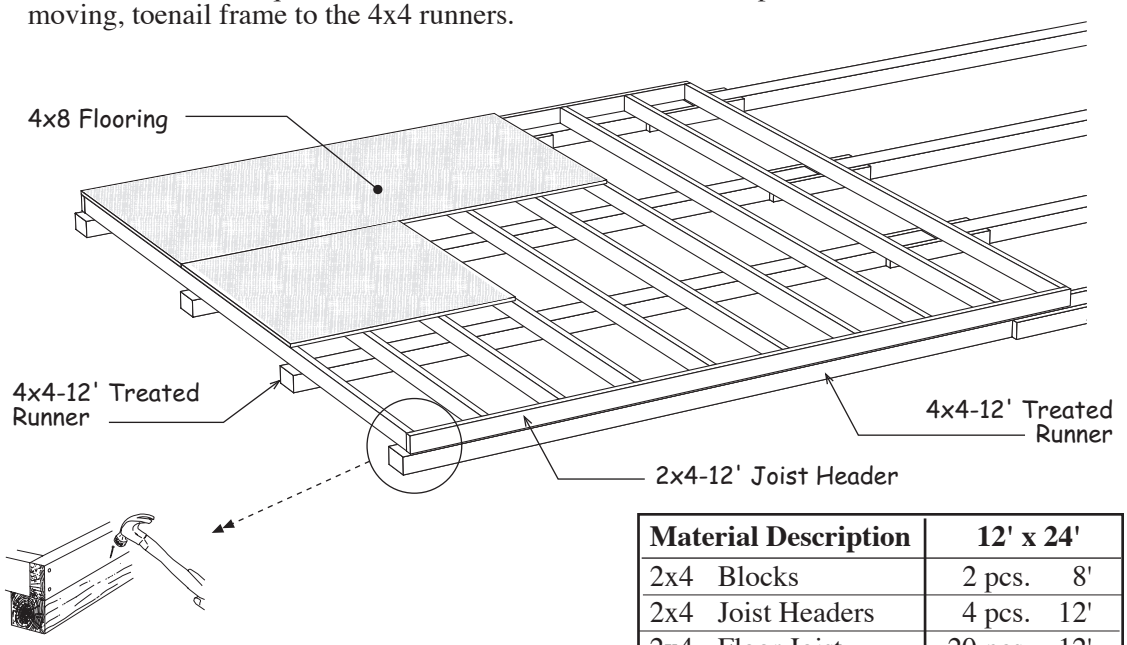
Deluxe floors include 4x4 runners, standard floors do not

Check local building codes in your area, the construction may have to change. Foundation size is 12'-0" x 24'-0". For a concrete slab, install foam sill sealer as a moisture barrier between the concrete and the wall plates. Foam sill sealer can be purchased at home centers in rolls 3-1/2" or wider.

1. Cut (20) twenty 2x4-12' treated boards to 11' 8-7/8". These will be the floor joists.
2. Place 4x4-12' treated timbers on the ground. Cut (2) two 2x4-8' boards into 2' long blocks to secure the 4x4s where they butt together.
3. Cut (4) four 2x4-12' to a length of 12' -0". They will be used for the joist headers. Layout, from left, for 16" on center joist spacing. 'X' marks where floor joist will be placed.



4. Install the floor joists cut above between the 12' joist headers. Build (2) two sections measuring 12' x 12'. Secure joist with 16d galv. deck nails.
5. Place floor sections over the 4x4s. Square floor assembly. Measure the floor diagonally (corner to corner). Then measure the opposite corners. These measurements will be the same if the floor is square. It should measure 203-5/8". To keep the 2x4 frame from moving, toenail frame to the 4x4 runners.



Material Description	12' x 24'
2x4 Blocks	2 pcs. 8'
2x4 Joist Headers	4 pcs. 12'
2x4 Floor Joist	20 pcs. 12'
4x4 Treated Runners	8 pcs. 12'
Flooring 5/8" or 3/4"	9 pcs. 4x8
Screw Floor Nails	4 lb. 8d
Galv. Box Nails	5 lb. 16d

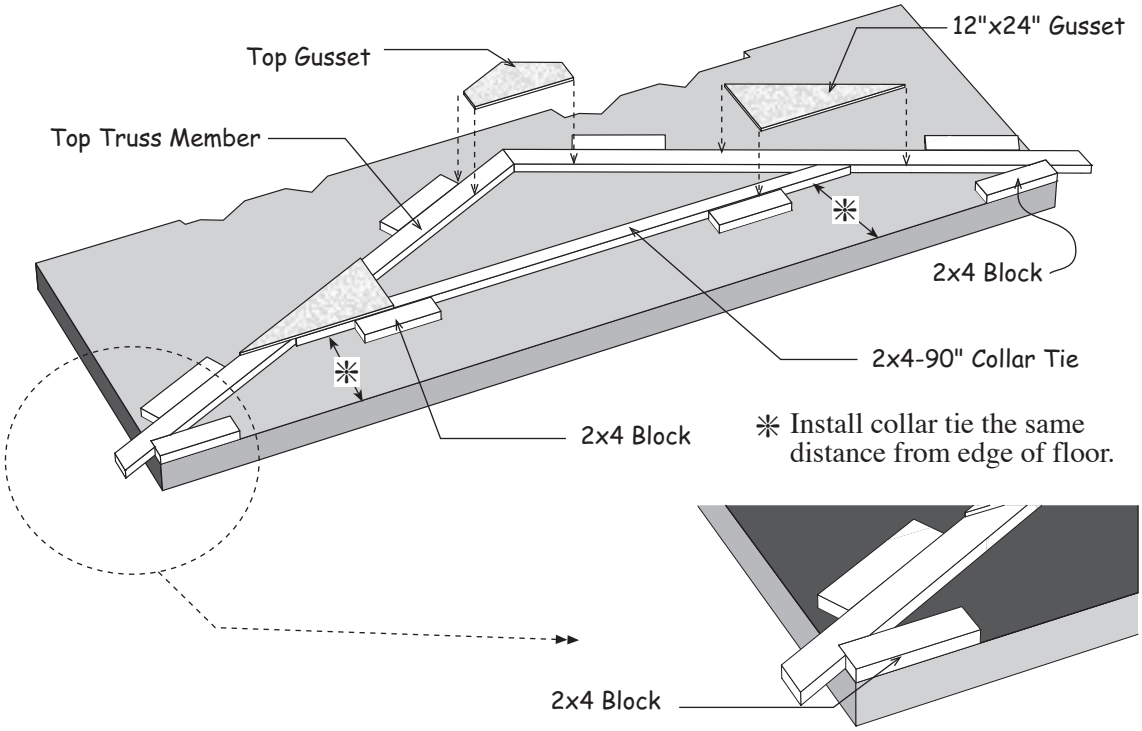
6. Install 4x8 flooring over the 2x4s. Use 8d galv. spiral nails.

Step 1 Assemble Trusses

☞ Building Tip: To aid in the assembly of the trusses, temporarily screw 2x4 blocks to the floor. There are short 2x4s, *that may have an angle on one end*, supplied in kit.

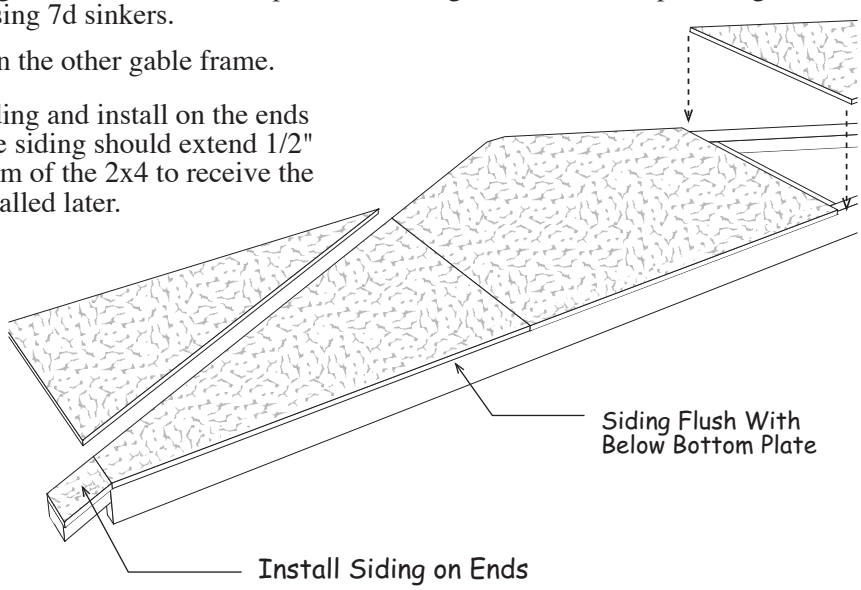
1. Screw (2) two 2x4 blocks to the 12' wide end of the floor at the top corner, *see below.*
2. Place two truss legs together. Position the notch in the 2x4s (called a bird's mouth) into the 2x4 blocks. **Important:** You must have 12'-0" between the bird's mouth. Affix more 2x4 blocks above the truss legs to hold the truss members in place.
3. Secure the tops together with a wood gusset. Apply wood glue between the 2x4 boards and the gusset. Nail the gusset to the 2x4s with 6d common nails. Use 14 nails per gusset.
4. Install a 2x4-90" collar tie between the 2x4 boards. Hold in place with 2x4 blocks. Install 12"x24" gussets to the ends of the collar tie. Glue and nail using 14 nails per gusset.
5. Turn this truss over and apply wood gussets to the opposite side.
6. Repeat 2 through 5 to assemble (10) ten more trusses.

Do Not remove blocks from floor until completing **Step 2**.

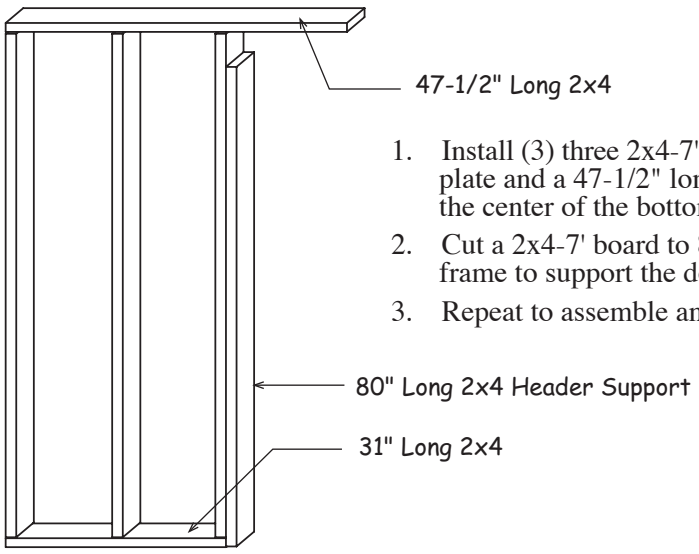


Step 3 Install Siding on Gables

1. Select one of the gable frames, Turn the gable over letting the bottom plate overhang the floor so the gable lays flat.
2. Cut a siding panel 40" in length. This will be used for the center of the gable. Cut the remaining siding panel in half for the ends of the gable.
3. Install the siding flush with the bottom plate. Cut siding flush with the top of the gable. Install siding using 7d sinkers.
4. Install siding on the other gable frame.
5. Cut leftover siding and install on the ends of the 2x4s. The siding should extend 1/2" below the bottom of the 2x4 to receive the soffit when installed later.



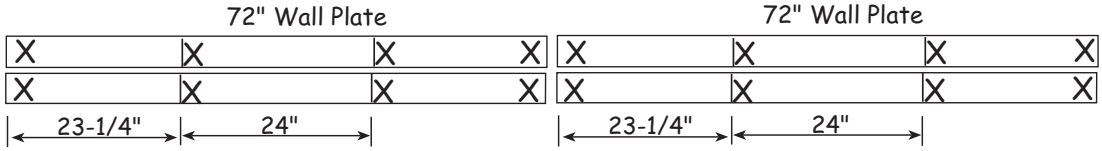
Step 4 Assemble Front Door Walls

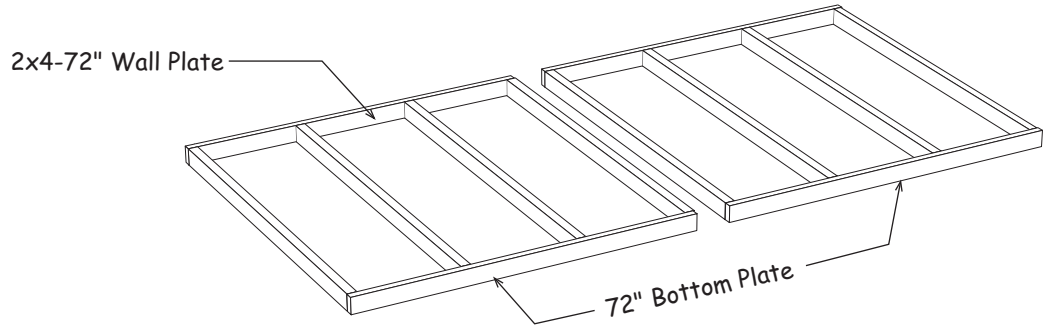


1. Install (3) three 2x4-7' wall studs between a 31" long bottom plate and a 47-1/2" long top plate. Install the middle stud in the center of the bottom plate.
2. Cut a 2x4-7' board to 80" and install on the end of the wall frame to support the door header.
3. Repeat to assemble another wall frame.

Step 6 Assemble 12' Sidewalls

1. Position 2x4-72" boards together and indicate with 'X' marks, where the wall studs will be located.

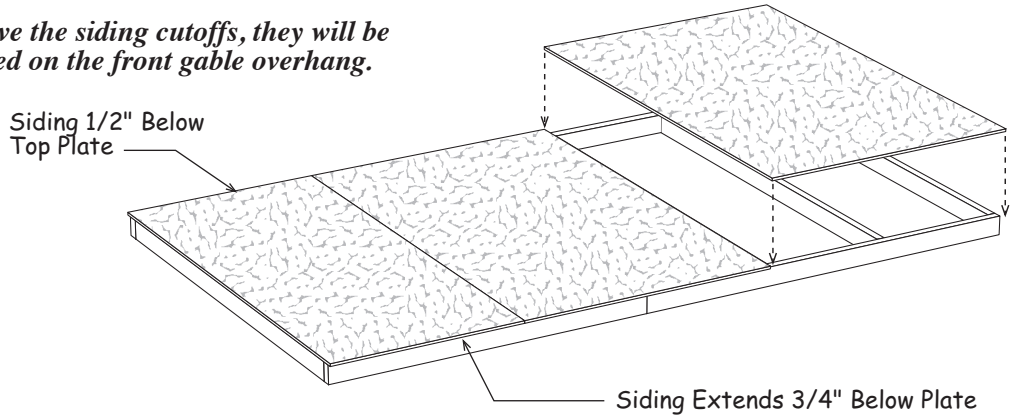




☞ If you are installing optional windows or walk-in door, see the instructions at the back of the book.

2. Install 2x4-7' wall studs between the top and bottom plates. Nail both wall frames together.
3. Assemble (3) three more 12' long sidewall frames.
4. Square wall frame. Cut (3) three siding panels to a length of 87-1/4".
5. Install the first siding panel flush the end of the wall and extending 3/4" below the bottom plate.
6. Install (2) two more siding panels.

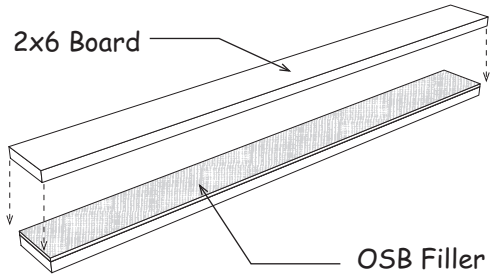
☞ ***Save the siding cutoffs, they will be used on the front gable overhang.***



7. Repeat to apply siding to (3) three more sidewall frame.

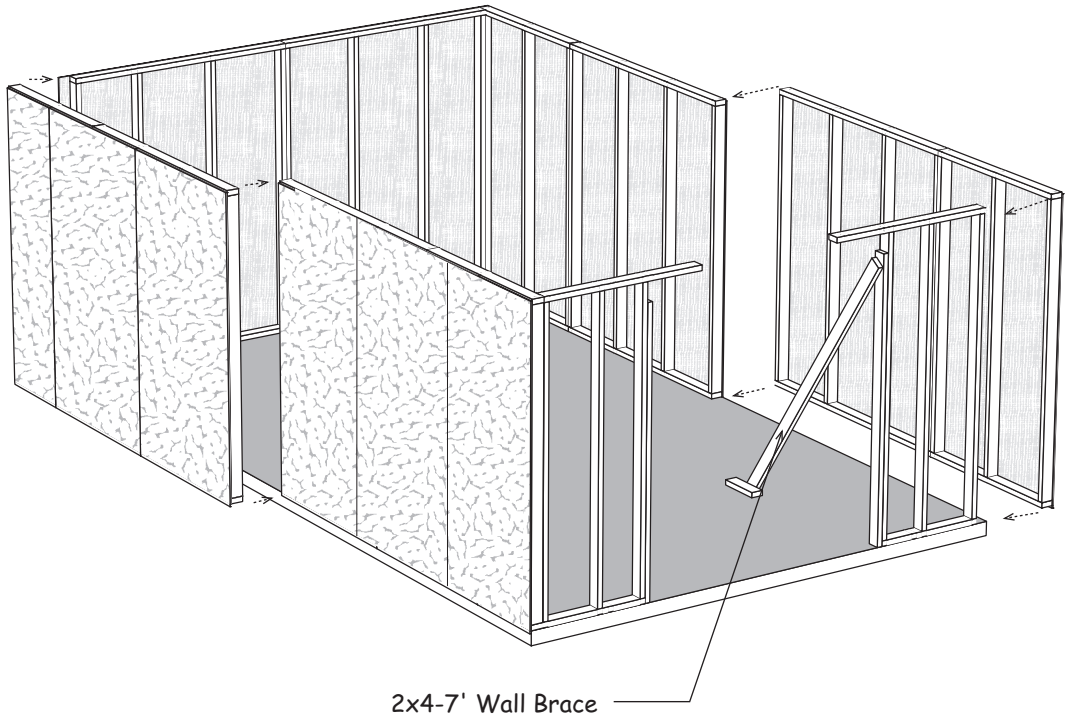
Step 7 Assemble Door Header

1. Locate (2) two 2x6 boards and an OSB filler 75" in length.
2. Assemble the door header using 10d sinkers.



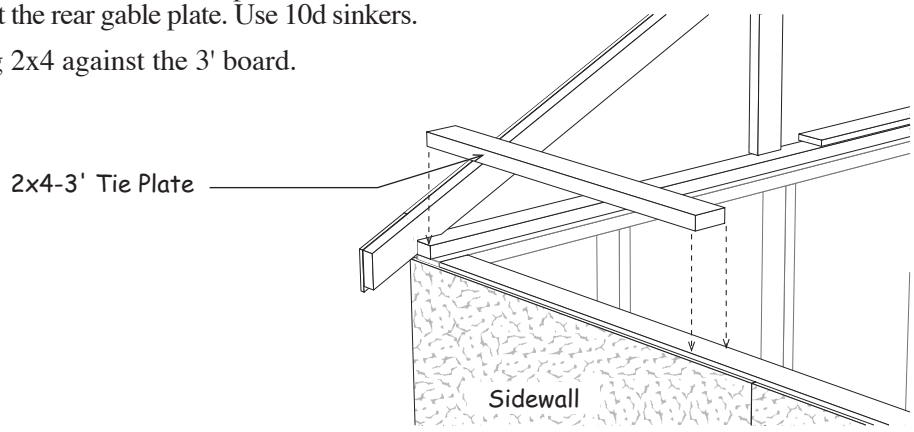
Step 8 Set Walls

1. Set the back wall panel between the sidewalls. Secure wall panels together at the corners. Use (4) four 10d coated nails per corner. Nail wall panels to the floor. Nail through the bottom plate. Space 10d sinkers 24" apart.
2. Install the front wall frames between the sidewalls.
3. Install a 2x4-7' board at the door opening to hold the wall straight.

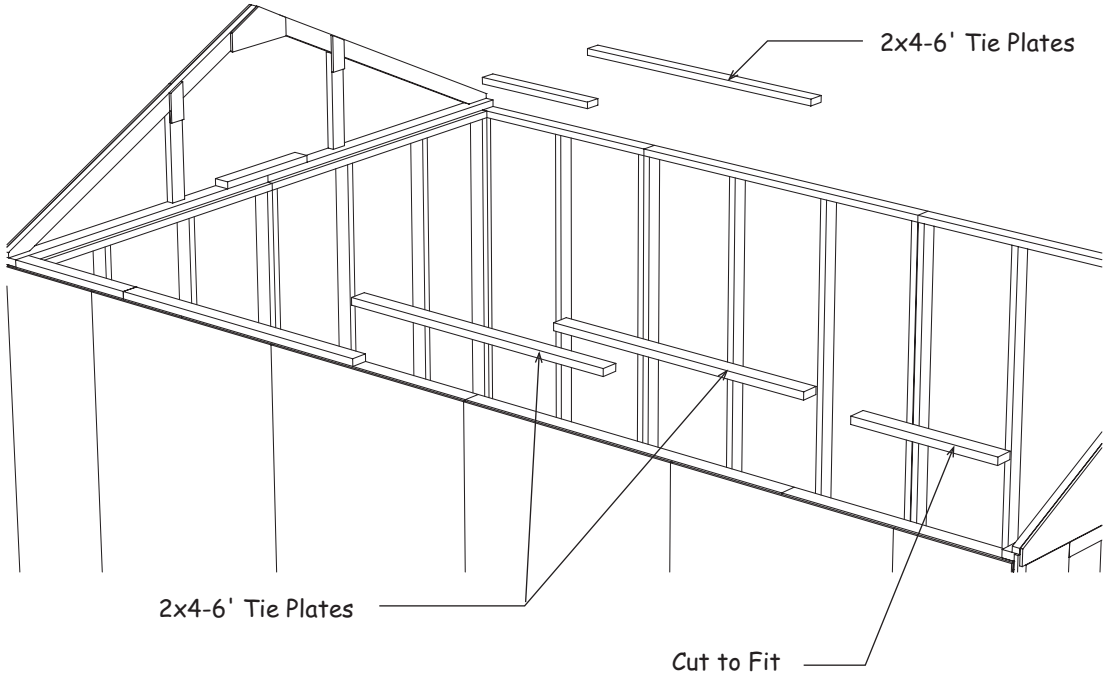


Step 11 Install 2x4 Tie Plates

1. Cut a 2x4-6' in half and install a 3' piece over the sidewall, against the rear gable plate. Use 10d sinkers.
2. Install a 6' long 2x4 against the 3' board.

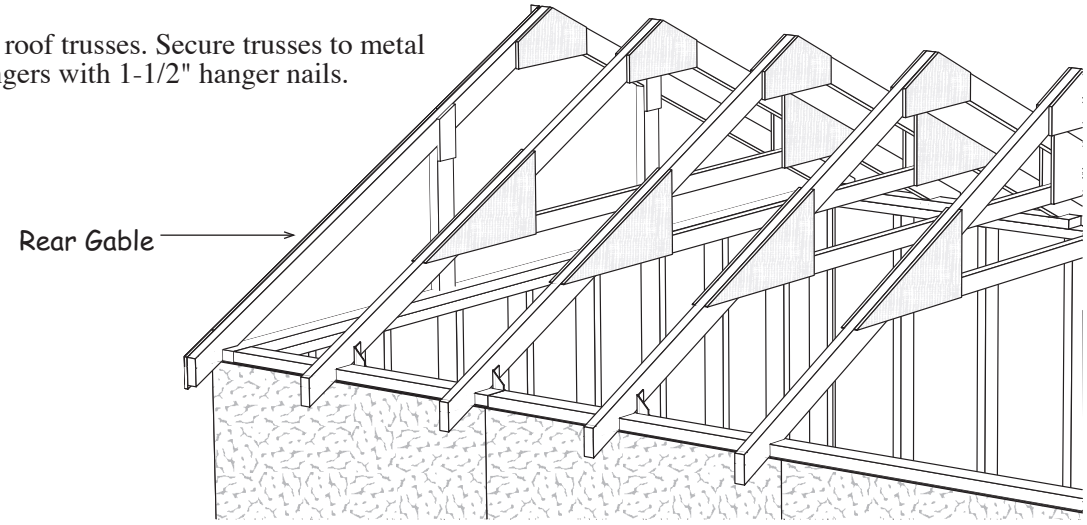


3. Install (2) two more 2x4-6' boards.
4 Cut the 3' long 2x4 cutoff from above to finish.
5. Install 2x4 tie plates on the opposite sidewall.



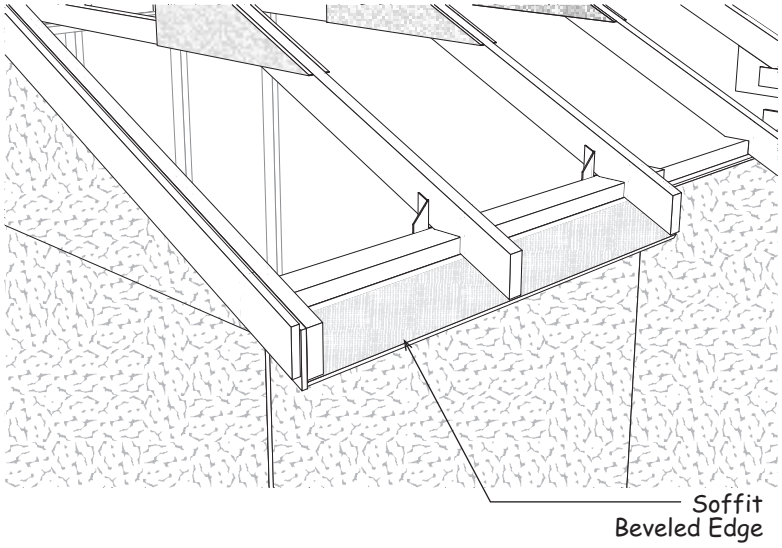
Step 13 Set Roof Trusses

Set roof trusses. Secure trusses to metal hangers with 1-1/2" hanger nails.



Step 14 Install Eave Soffit

Install 5" wide pre-cut siding as soffit under the truss overhang. Install soffit with the beveled edge flush with the end of the trusses. Use 6d galv. nails.

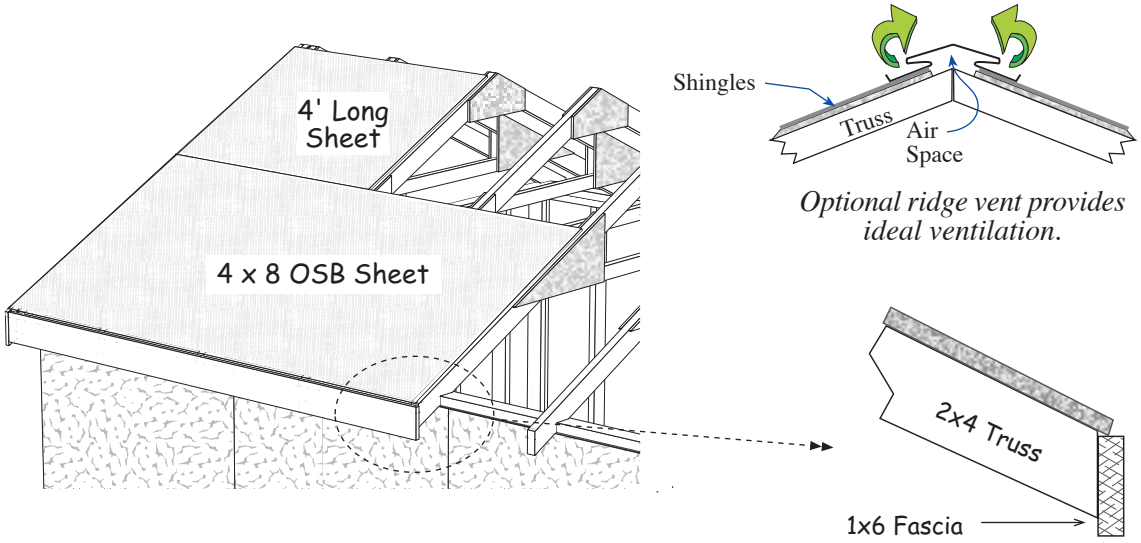


Step 15 Install Roof Sheathing

1. Starting at the rear of the building, install 4x8 OSB roof panels and 1x6-8' white pine fascia boards on each side. Install the roof sheathing and the 1x6 fascia boards flush with the face of the 1x4 sub-trim on the back gable. Install the fascia so the bottom edge of the roof sheathing will rest on the 1x6. See detail below.

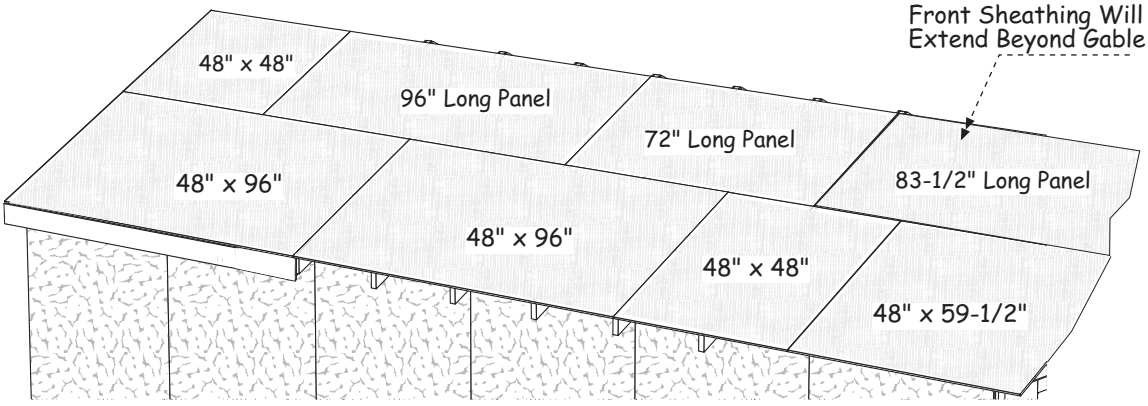
   Make sure the trusses are plumb and the roof sheathing meets the center of the truss. Use 7d sinkers spaced 12" apart. Cut a 6' long sheet for the top row. If you are installing ridge vent, cut the roof sheathing about 1" below the ridge to allow for ventilation.

2. Cut and install roof sheathing per layout below.



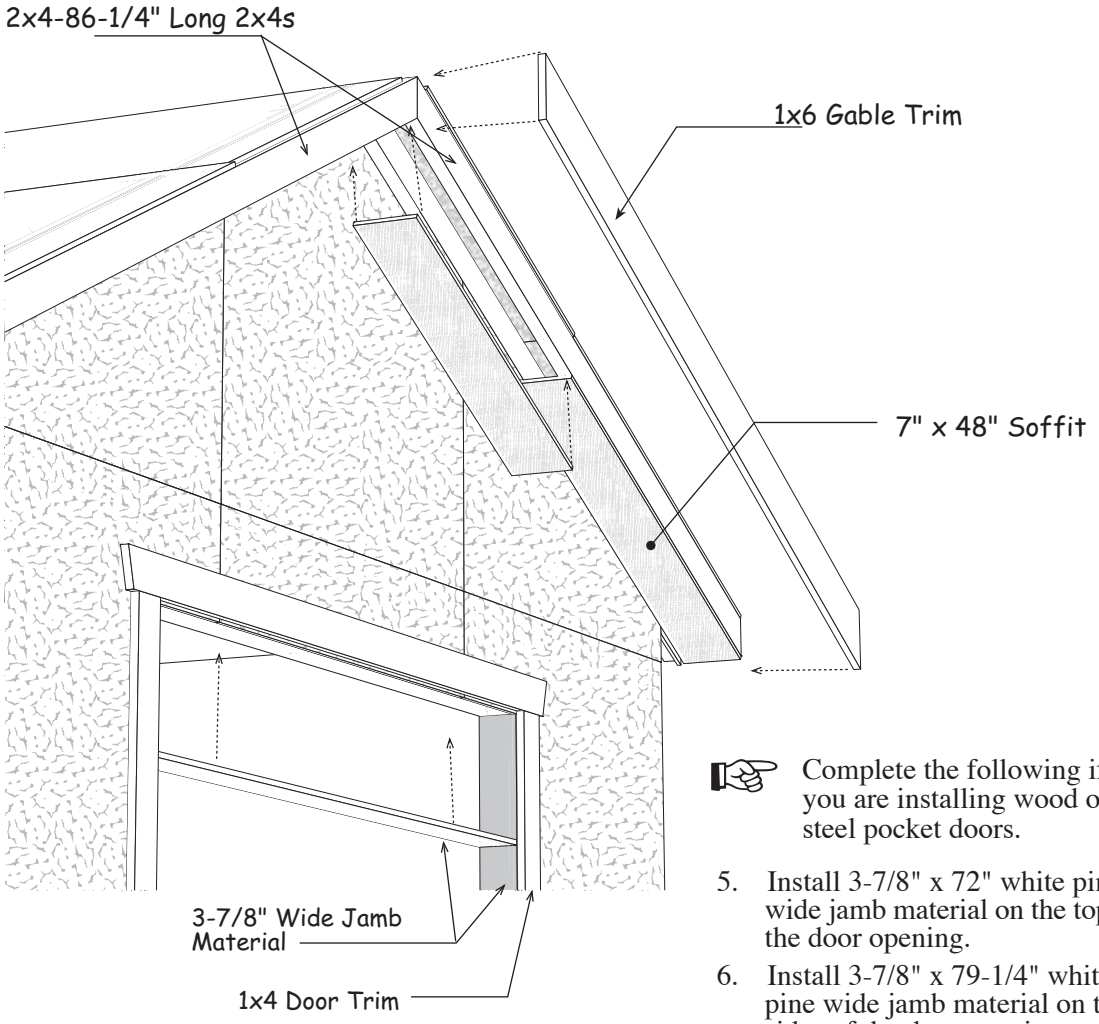
Optional ridge vent provides ideal ventilation.

3. Install 1x6-8' fascia in the center of the building. Cut a 1x6-10' trim board and install at the front. Use 8d galv. nails.



Step 16 Install Front Gable Soffit and Door Trim

1. Install 86-1/4" long 2x4s under the roof sheathing, against the front gable.
2. Install 86-1/4" long 2x4s under the front edge of the roof sheathing. Hold the 2x4s against the roof sheathing and screw through the sheathing into the 2x4 boards using 1-3/4" screws.
3. Install 7" x 48" primed soffit panels under the 2x4s. Use 6d galv. nails.
4. Install (2) two 87" long 1x6 trim boards over the 2x4 boards, flush with the top of the roof sheathing. Use 8d galv. nails.



Complete the following if you are installing wood or steel pocket doors.

5. Install 3-7/8" x 72" white pine wide jamb material on the top of the door opening.
6. Install 3-7/8" x 79-1/4" white pine wide jamb material on the sides of the door opening.

7. Install 80-3/4" long 1x4 trim boards on each side of the door opening. Install an 82" long 1x4 trim board, *this board has angle cuts on both ends*, across the top of the door opening.