

Best Barns USA Assembly Book

Revised April 30, 2012

the Sierra

12' x 16'

Manufactured by Reynolds Building Systems, Inc.

Greenville, PA 16125 **205 Arlington Drive**

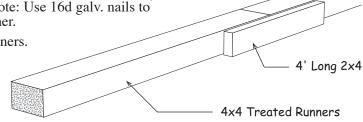
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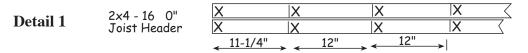
Optional Wood Floor System

Shown below is a typical wood floor. Depending on your area, the construction may have to be changed to meet local codes. The foundation size should be $12' - 0" \times 16' - 0"$.

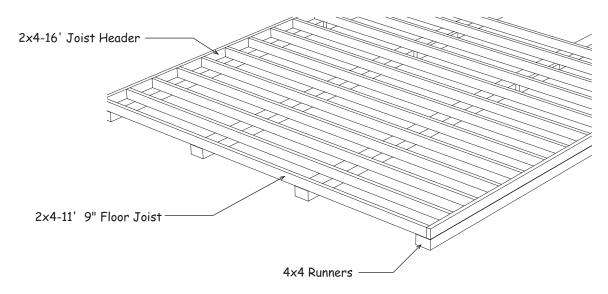
- 1. Cut (2) two treated 2x4-8' boards in half.
- 2. Butt 4x4-8' treated runners together. Use one of the 4' long 2x4s to secure them together. Note: Use 16d galv. nails to secure all treated framing together.
- 3. Repeat to join the other 4x4 runners.



- 4. Cut (2) two 2x4-16' joist headers to 16' 0".
- 5. Layout for 12" on center joist spacing. 'X' marks where floor joist will be placed.

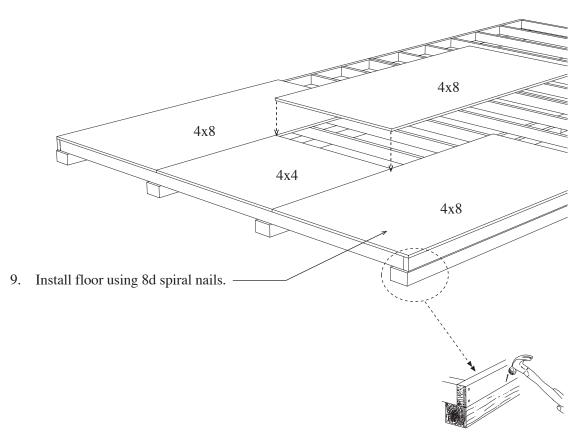


- 6. Cut all the 2x4-12' boards to 11'-9". These boards will be the floor joist. *Treated lumber may be thicker than 1-1/2*". *Take this into account when cutting the length of floor joists. Shorten joist measurements if necessary to obtain 12'-0" building width.*
- 7. Install floor joist boards between the joist headers. Install this section over 4x4s.



Optional Wood Floor System

8. It is important that the floor be level and square. Square the floor as follows: before nailing the flooring, measure the floor diagonally (corner to corner). Then measure the opposite corners. These measurements will be the same if the floor is square. The diagonal measurement should be 20' - 0". Nail several floor joist to the 4x4 runners to hold the floor frame in place.



Material Description	12' x 16' shed			
2x4 Treated	2 pcs. 8'			
2x4 Treated	17 pcs. 12'			
2x4 Treated	2 pcs. 16'			
4x4 Treated Runners	8 pcs. 8'			
Flooring - 3/4"	6 pcs. 4x8			
Screw Floor Nails	3 lb. 8d			
Galv. Box Nails	5 lb. 16d			

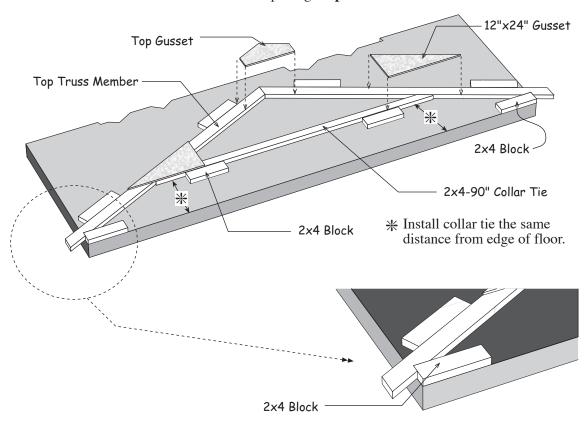
Step 1 Assemble Trusses

B

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. This will insure that all the trusses are assembled the same.

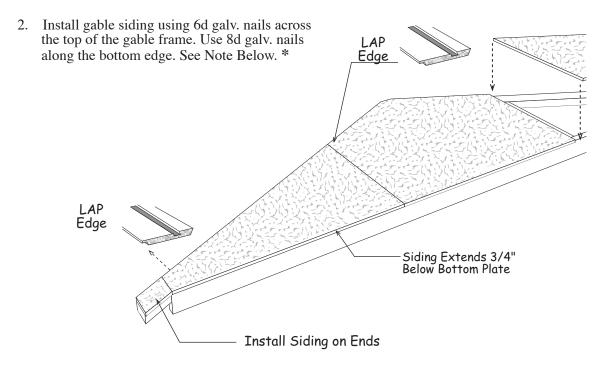
- 1. Screw (2) two 2x4 blocks to the 12' wide end of the floor at the corner, see below.
- 2. Place two truss legs together. Position the notch in the 2x4s (called a bird's mouth) into the 2x4 blocks. **Important:** You must have 12'-0" between the bird's mouth. Affix more 2x4 blocks above the truss 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 (6) six 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.

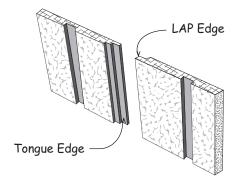


3. Install siding on the other gable frame.

* Exterior Siding

The siding is made in 4x8 sheets with grooves cut into the face, the long edge is beveled so that the siding overlays where they butt.

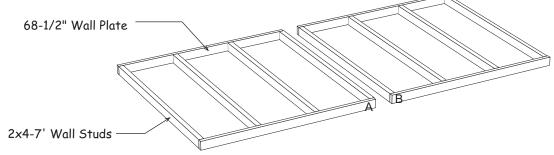
To identify which edge we want you to use, we will refer to the edge as either the 'LAP' Edge or the Tongue Edge. Nail siding with 8d galv. nails, spaced 12" apart.



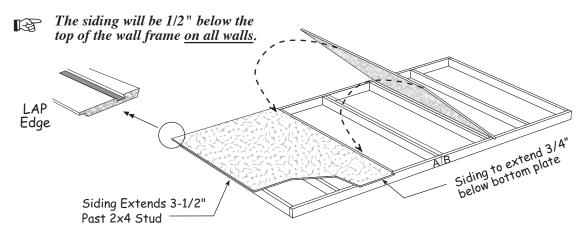
Step 4 Assemble 12' Back Wall

1. Position 2x4-68-1/2" 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'.

68-1/2" Wall Plate				68-1/2" Wall Plate				
X	X	X	Α	В	X		X	X
X	X	X	Α	В	X		X	X
 	← 19-3/4" → ← 24" →			< 23-1/4" → < 24" →				

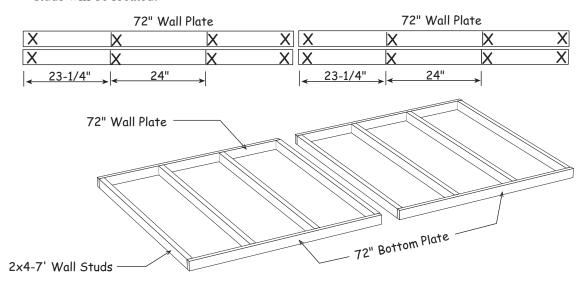


- 2. Install 7' wall studs between the top and bottom plates. Assemble wall frames with 10d sinkers, two (2) nails at each stud end. Nail both wall frames together.
- 3. Square wall frame. Measure diagonally (corner to corner). The measurements will be the same when the wall is square.
- 4. Install the first siding panel with the 'LAP' edge extending 3-1/2" past the wall frame. The bottom will extend 3/4" below the bottom plate. Tip: Use 3/4" trim board as a gauge.
- 5. Install the other siding panels. Cut the last panel to extend 3-1/2" beyond the wall frame.



Step 5 Assemble 12' Long Sidewalls

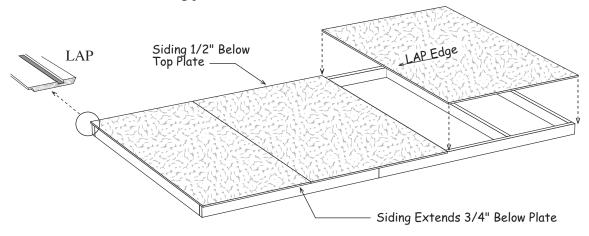
1. Position 2x4-72" boards together and indicate with 'X' marks, where the wall studs will be located.



2. Install 7' wall studs between the top and bottom plates. Nail both wall frames together.

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

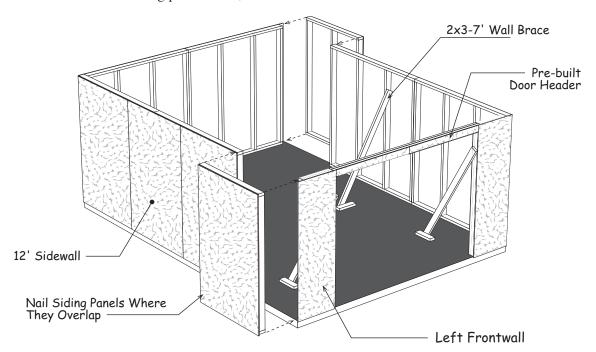
- 3. Square wall frame. Install the first siding panel with the 'LAP edge' flush with the end of the wall and extending 3/4" below the bottom plate.
- 4. Install (2) two more siding panels.



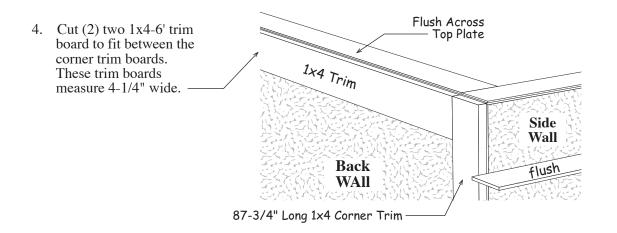
5. Repeat to assemble the another sidewall.

Step 8 Set Walls & Install Rear Trim

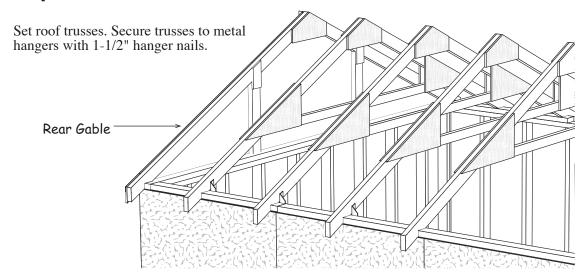
- 1. Set wall panels. Secure at corners with 10d sinkers (4 nails per corner). Secure to floor with 10 sinkers. Disassemble shipping pallet and use the 2x3s to brace the front wall and the sidewalls.
- 2. Install the pre-built door header between the front wall panels. Note: The trim boards will hide where the siding panels meet, the fit does not have to be exact.



3. Install 87-3/4" long 1x4 corner trim boards to the rear wall. Install trim flush with the 2x4 top plate and flush with the siding on the sidewalls. Use 8d galv. nails, spaced 12" apart.

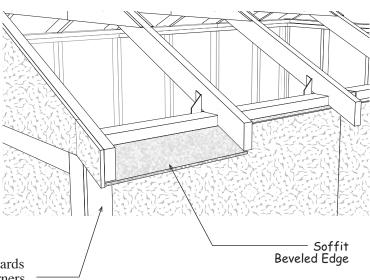


Step 12 Set Roof Trusses



Step 13 Install Eave Soffit & Corner Trim

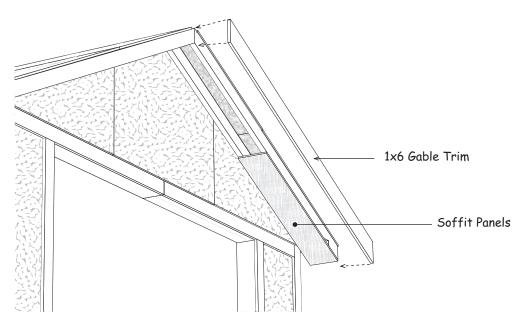
- 1. Locate a 5" wide x 24" siding panel that has a 'tongue' edge. Install this panel under the truss overhang at the rear of the building. Install the siding/soffit panel with the beveled edge flush with the end of the trusses and the cut edge against the gable siding. Use 6d galv. nails.
- 2. Install (4) four more full length siding panel under the trusses. Cut the last panel to fit.
- 3. Install soffit panels on the opposite side. Start with a 24" long panel that has a 'LAP' edge.



4. Cut 87-3/4" long 1x4 trim boards to length and install at the corners.

Step 15 Install Front Soffit

- 1. Install 86-1/4" long 2x4s under the roof sheathing, against the front gable.
- 2. Install 86" 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. Use 1-5/8" long screws.
- 3. Install 8-1/2" wide siding under the gable overhang as the soffit. 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.
- 5. Install 83-1/2" long 1x6 fascia boards flush with the 2x4 boards at the front of the building.
- 6. Install 1x6 trim on the back gable.



Install Optional Door Sill

