**Typical Wood Floor System  12' x 16'**

Shown below is a typical wood floor. Depending on your area, the construction may have to be changed to meet local codes.

1. Cut (2) two 2x4 joist headers to 15'-7 1/2". Layout for 16" on center joist spacing. 'X' marks where floor joist will be placed.

   ![2x4 Joist Header](image)

   **Material Description**

<table>
<thead>
<tr>
<th>Material Description</th>
<th>12' x 16' shed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x4 Joist Headers</td>
<td>2 pcs. 16'</td>
</tr>
<tr>
<td>2x4 Floor Joist</td>
<td>13 pcs. 12'</td>
</tr>
<tr>
<td>4x4 Treated Runners</td>
<td>8 pcs. 8'</td>
</tr>
<tr>
<td>Flooring 5/8&quot; or 3/4&quot;</td>
<td>6 pcs. 4x8</td>
</tr>
<tr>
<td>Screw Floor Nails</td>
<td>2 lb. 8d</td>
</tr>
<tr>
<td>Galv. Box Nails</td>
<td>2 lb. 16d</td>
</tr>
</tbody>
</table>

2. Cut 2x4-12' floor joist to 11'-9". *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.*

   ![2x4 Floor Joist spaced 16" o.c.](image)

When using a concrete slab for a floor, use the same overall foundation measurements. Install foam sill sealer as a moisture barrier between the concrete and the wall plates. Foam sill sealer is available in rolls 3-1/2" or wider.

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.
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. 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 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 (6) six trusses.

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

1. Butt (2) two 72" long 2x4s together and secure by nailing a 3-1/2" x 31-3/4" long plywood gusset across the top where they butt together. Use glue and 6d common nails.

![Diagram of 3/4" Plywood Gusset](image1)

2. Assemble (2) two more 12' long plate assemblies. The third assembly will be used later.
3. Place (2) two truss members in the jig. Secure the top together with a barbed metal plate.
4. Remove the 2x4 blocks at the corners of the floor and insert the gable plate assembled above into the bird's month. Make sure the 2x4 gable plate is straight. If necessary, tack 2x4 blocks to hold plate straight.

![Diagram of Barbed Metal Plate](image2)

5. Remove the (2) two 2x4 blocks that held the collar tie in position.
6. Install (2) two 4x23-1/2" gable studs. Nail through the bottom plate with 10d sinkers and secure the top with barbed metal drive-on plates.
7. Repeat steps 3-6 to assemble another gable. Remove 2x4 blocks.
Step 6 Assemble Double Door Wall

1. Assemble sidewall, with door opening, using the 2x4s shown below.

2. Locate a 16” wide siding panel that has a 'LAP' edge. Position this panel on left side of door opening with the 'cut' edge flush with the 2x4 header support and extending 3/4” below the bottom plate. Do not nail along the LAP edge until the end siding panel is installed.

3. Cut a siding panel in half lengthways.

4. Select the panel with the 'tongue' edge. Install this panel with the cut edge flush with the end of the frame. The siding should extend 3/4' below the bottom plate.

5. Install siding panels over the door opening even with top of full length siding. The siding will extend below the door header. Trim will hide butt joint between siding panels.

6. Install the other 16” wide siding panel. Cut last siding panel flush with end of the wall frame.
Step 7  Assemble 12' Sidewall

1. Position (2) two 2x4-72" boards together and indicate with 'X' marks, where the wall studs will be located.
2. Install 72" wall studs between the top and bottom plates using 10d sinkers.
3. Repeat steps 1-2 to assemble another 72" wall frame.
4. Nail both wall frames together using 10d sinkers.
5. Square wall frame. Install the first panel flush with the end wall stud. Siding extends 3/4" below bottom plate.
6. Cut the last siding panel flush with the end of the wall frame.

Step 8  Assemble Back Wall

1. Position (4) four 2x4-90-1/4" boards together and indicate where the wall studs will be located. Mark the ends that butt together with the letters 'A' and 'B' as shown below.
Step 11  Install End Gable & Layout Roof Trusses

1. Install gables on the 12' end walls. The siding will extend over the 1x4 trim on the lower wall. **NOT behind the trim.** Secure gable to wall by nailing through the gable plate with 10d sinkers. Nail siding along the overlapped 1x4 trim board with 6d galv. nails.

2. Center and install 90-1/4" long 2x4s on the top of back and front walls as tie plates. Cut (4) four 2x4-6' boards to fit between gable plate and 90-1/4" tie plates and install on ends. Use 10d sinkers.

3. Layout the truss spacing. Measure from the outside face of the gable siding when marking the location of the first truss. **Important:** When marking the opposite wall, place the 'X' mark on the same side of the line so your trusses are parallel when they are installed.

4. Using 1-1/2" hanger nails, install metal hangers to the 2x4 tie plate. Align the opening center of the 'X' mark and bottom of the opening flush with the 2x4 tie plate. See **Detail 'D'**.
Step 13  **Install 1x6 Fascia & Roof Sheathing**

1. Install (2) two 1x6-6' and a 1x6-4' fascia board on the ends of the trusses, between the gable trim. Use a straight edge to align the 1x6 boards with the top of the trusses. Trim last board to fit. Use 8d galv. nails.

2. Install 4’x6’ roof sheathing flush with the face of the gable trim on the left gable and bottom edge touching top of fascia. Make sure the trusses are plumb and the roof sheathing meets the center of the truss. Use 7d sinkers spaced 12” apart.

3. Install roof sheathing per layout below. The top row of roof sheathing will be about 1” below the ridge to allow for optional ridge venting.
Step 14  Install Doors & Hardware

1. Locate the door marked (Single) on the back door frame. Lay this door on a level surface with the trim facing up. Depending on which way you want the door to swing, install (3) three 5" hinges on the left or right side of the door. To position the hinge properly, hold the rectangular plate against the frame. Use 1-3/4" black screws.

2. Lay the left door with the trim facing up. The siding on the left door extends past the door trim. See detail below.

3. Install 5" hinges to the left side of the door frame.

4. Install hinges to the right side of the other door.

5. Temporarily prop the doors in the opening. Leave a space at the top of the doors and between the doors and the side trim to allow room for the doors to expand when they absorb moisture. Use OSB shinto support bottom of doors.

   If your door opening is out of square, the space around the doors will not be even. You can remove and reposition 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.

6. Install hinges to trim with 2" black screws.

7. Install a barrel bolt on the bottom of inside of left door to secure this door in place when closed. You will need to drill a hole in the floor for the round shaft to drop into.

8. Install another barrel bolt at the top of the door.