BEST BARNS
USA
Quality Do-it-yourself Barn Kits

Assembly Book

Revised October 31, 2012

SAMPLE INSTRUCTIONS

EZ up
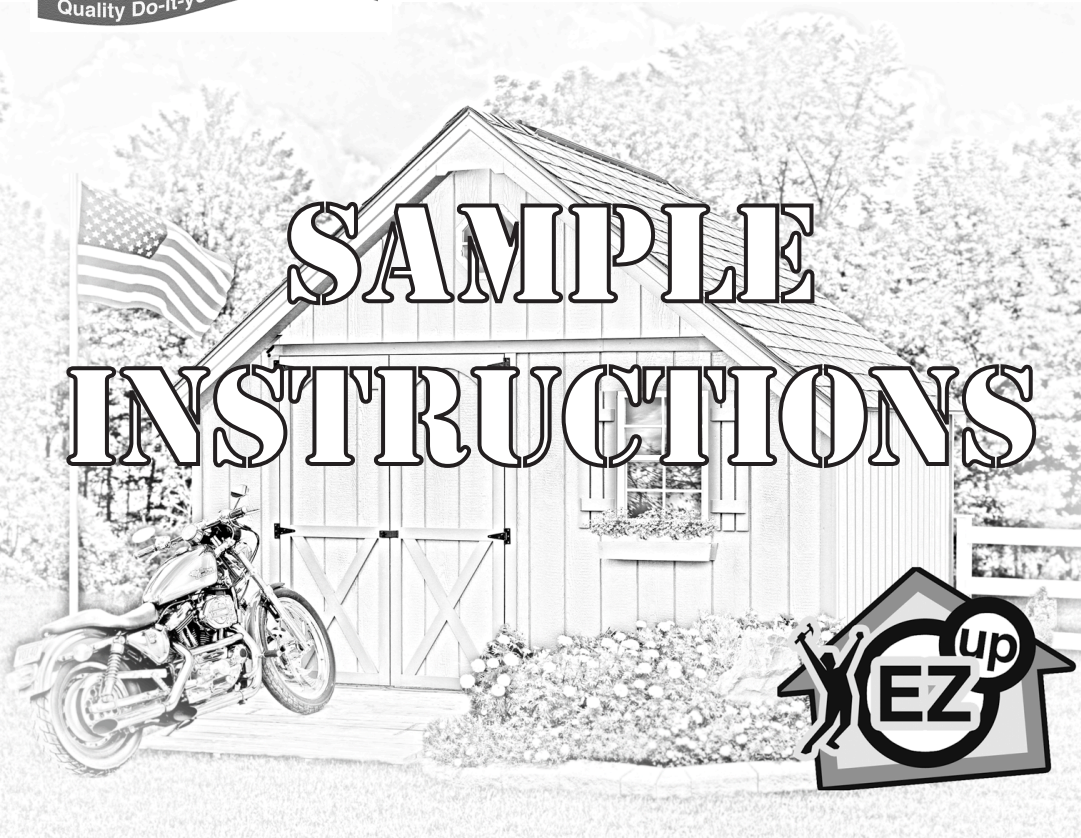
the Riviera 12' x 12'

Manufactured by Reynolds Building Systems, Inc.

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

IMPORTANT INFORMATION ABOUT YOUR SHED KIT

Thank you for purchasing our Riviera kit. These instructions will construct a 12'x12' building. **If you received two books, use the one with the latest revision date.**

The material that is included in our kit is listed on the back page. The optional floor package, *if ordered*, will be supplied by a local lumber supplier.

Our kit does not include the shingles, the quantity needed is listed on the back page. The siding is primed. You will need to apply a finish coat using latex acrylic paint.

Our framing lumber is imported to provide you the highest quality available. However, if you need to replace any lumber for any reason please do so and we will reimburse you.

Our '*Deluxe Riviera*' includes pre-built barn doors, pre-cut siding and roof sheathing for EZ assembly.

IMPORTANT: The 2x3's used to make the shipping pallet will be used for wall bracing. The OSB sheathing will be used for roof sheathing. Unpack the material from the pallet, then disassemble the pallet. The pallet is secured together with square head screws. The bit for the screws is packed in the hardware bag containing the screws for the door hinges.

Stacking the boards, according to size, will make them easier to find when needed. Some boards have colored ends. All the wall studs have black ends, stack these boards together**. Do Not** discard any material until your building is complete.

If you have any questions about assembling the kit, call 800-245-1577. If you are calling after normal business hours, call 724-866-HELP (4357) or email to help@barnkits.com.

Before you begin construction, be sure to study this assembly manual. Also, obtain a building permit and check all pertinent building code regulations.

Thank you for your purchase.   Bill & Linda Rinella, owners

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.
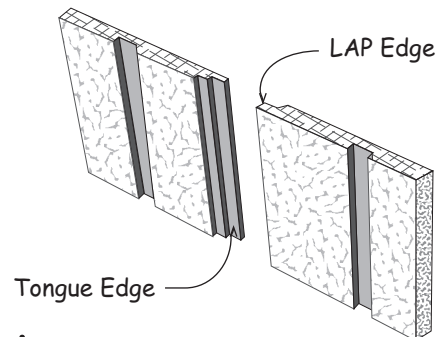
Tool List

- ☐ Hammer & Hand Saw
- ☐ Framing Square & Level
- ☐ Power Circular Saw
- ☐ Power Drill/screwdriver
- ☐ Measuring Tape
- ☐ 2 - 8' Step Ladders

Always wear safety glasses when cutting or nailing!

Constructing Details for Deluxe Floor System
Deluxe floors include 4x4 runners, standard floors do not

Shown below is a typical wood floor. Depending on your area, the construction may have to be changed to meet local codes. When using a concrete slab, use the same overall foundation measurements. 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 (2) two 2x4-12' joist headers to a length of 12 '- 0". Layout for 16" on center spacing. 'X' marks where floor joist will be placed.

2x4 Joist Header

15-1/4"   16"   16"
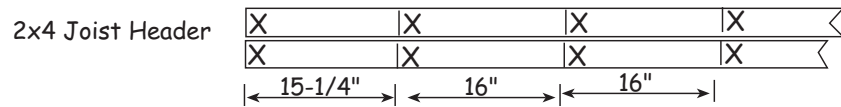
2. Cut 2x4-12' floor joist to 11'-9". *Treated lumber may be thicker than 1-1/2". Take this into account when cutting the length of floor joists. Shorten joist measurements if necessary to obtain 12'-0" building width.*

12' - 0" Building Width

12' - 0" Floor Length

4x8 Flooring

4x4 Treated Runners

2x4 Joist 11' - 9" Long
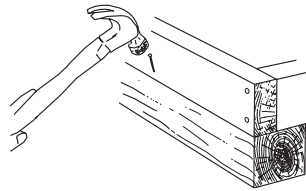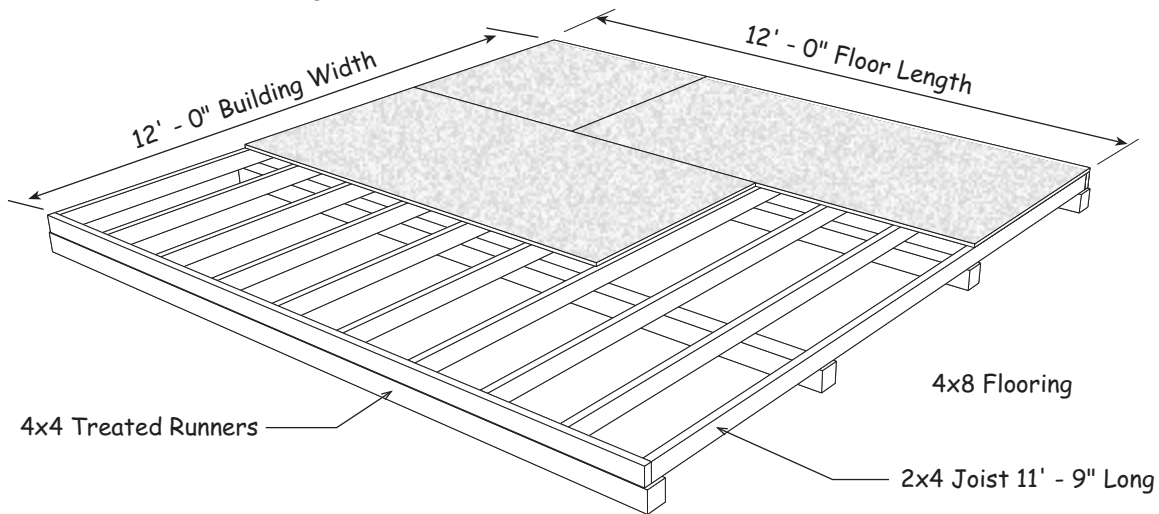
To keep 2x4 frame from moving, toe nail to 4x4.

Material Description	12' x 12' shed
2x4 Joist Headers	2 pcs. 12'
2x4 Floor Joist	10 pcs. 12'
4x4 Treated Runners	4 pcs. 12'
Flooring 5/8" or 3/4"	5 pcs. 4x8
Screw Floor Nails	2 lbs. 8d
Galv. Box Nails	1 lb. 16d

It is important that the floor be level and square. 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
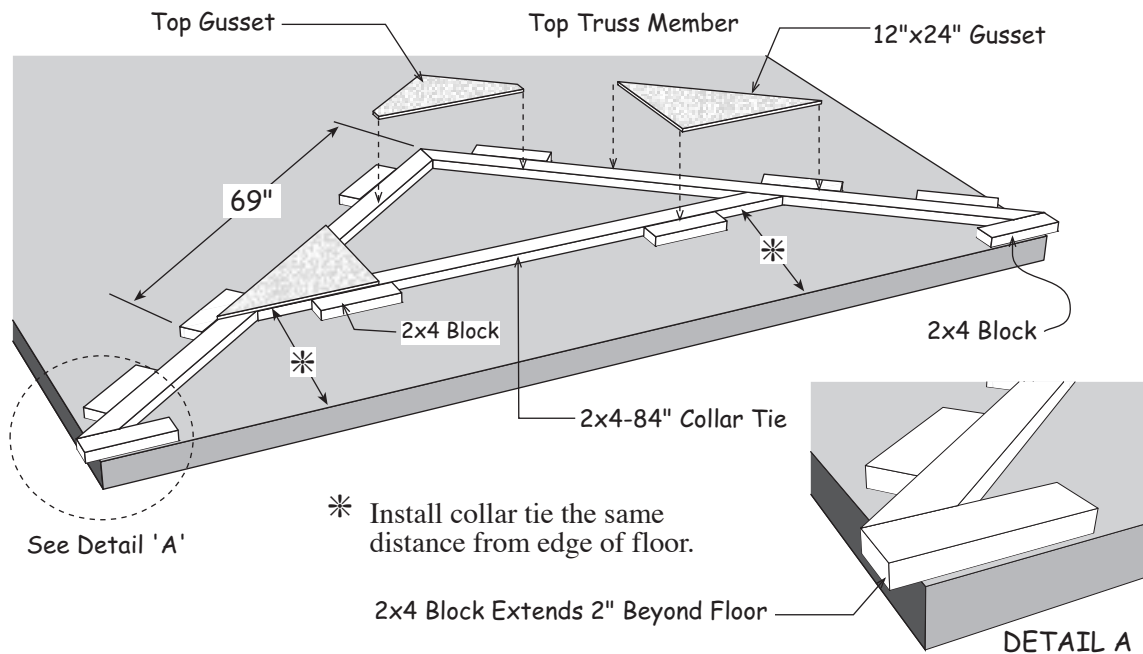
measure from here ←——→
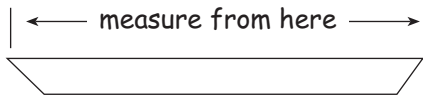
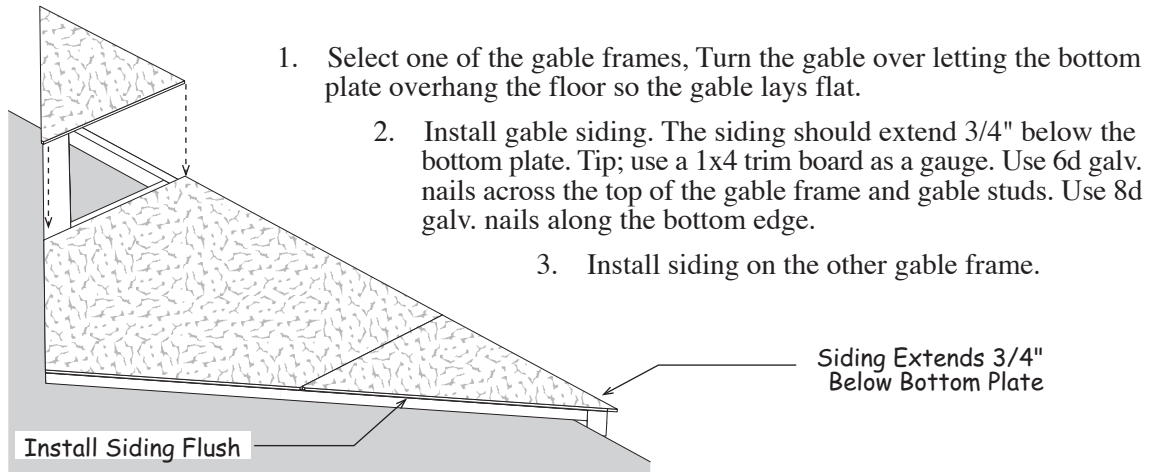When measurements are given for a board length or width, it is from the longest side.

Building Tip: If you are installing the building on a wood floor, temporarily screw 2x4 blocks to the floor as described below. 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 part of the floor, see below. The 2x4 blocks should extend 2" beyond the outside edge of the floor, see detail 'A'. Use 2-1/2" screws provided.

2. Place (2) two 96" long truss legs together at peak. Important: Bottom of truss legs must measure 12'-4" as measured from tip to tip. Affix (3) three 2x4 blocks along top edge of each truss leg. Place middle block 69" from peak, see below.

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 2x4-84" collar tie between the 2x4 boards. Insure collar tie is parallel with edge of work surface, see below. Hold collar tie from moving with 2x4 blocks. Install 12"x24" gussets to the ends of the collar tie. Glue and nail using 14 nails per gusset.

5. Turn truss over and apply wood gussets to the opposite side.

6. Repeat 2 through 5 to assemble to assemble (4) four more trusses.

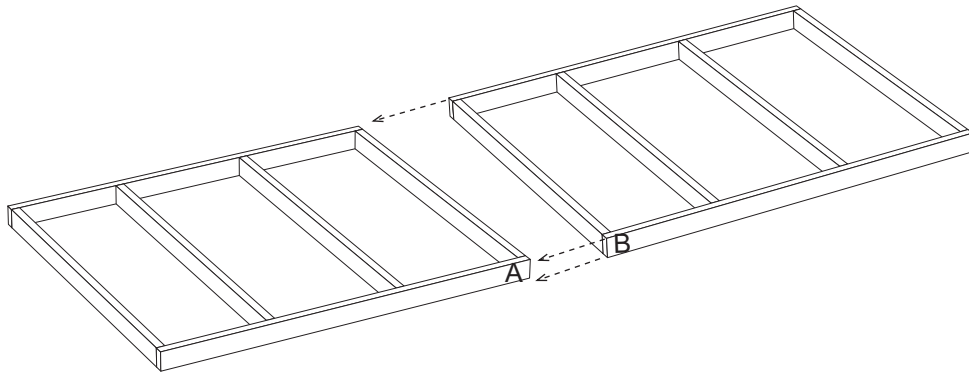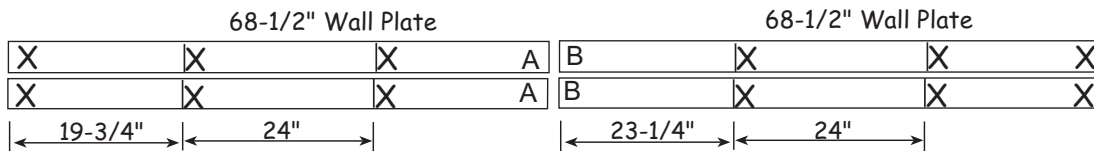Do Not remove blocks from floor until completing Step 2.

Top Gusset

Top Truss Member

12"x24" Gusset

69"

2x4 Block

2x4 Block

2x4-84" Collar Tie

See Detail 'A'

✳ Install collar tie the same distance from edge of floor.

2x4 Block Extends 2" Beyond Floor

DETAIL A

Step 4　　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. Install gable siding. The siding should extend 3/4" below the bottom plate. Tip; use a 1x4 trim board as a gauge. Use 6d galv. nails across the top of the gable frame and gable studs. Use 8d galv. nails along the bottom edge.

3. Install siding on the other gable frame.

Siding Extends 3/4"
Below Bottom Plate

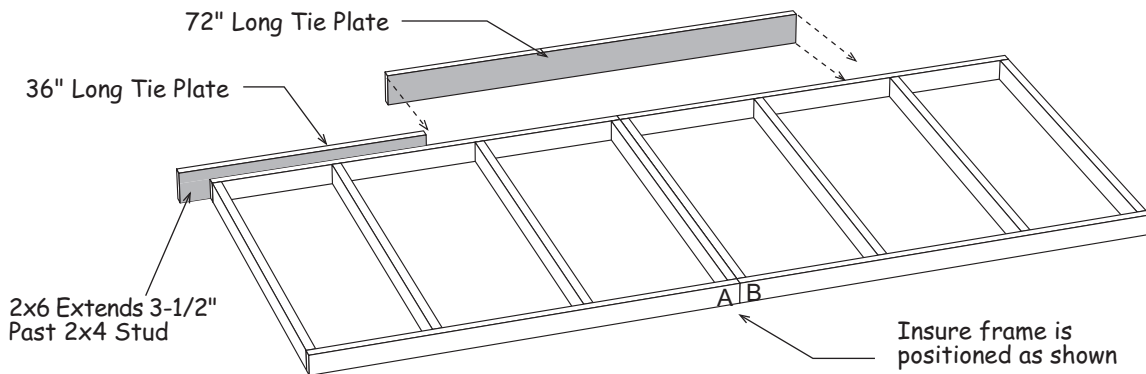Install Siding Flush

Step 5　　Assemble Sidewall Frames

1. Position (4) four 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 | A | B | | X | | X | | X |
| X | | X | | X | A | B | | X | | X | | X |

19-3/4"　　24"　　　　　23-1/4"　　24"

A

B

2. Install 55-1/2" wall studs (red ends) between the top and bottom plates. Assemble wall frames with 10d sinkers, two (2) nails at each stud end. Nail both wall frames together. Use 10d sinkers.

3 Repeat to assemble another sidewall frame.

Step 6   Install Siding on Left Sidewall

1.   Square wall frame. Measure diagonally (corner to corner). The measurements
     will be the same when the wall is square.

2.   Install a 36" long 2x6 board on the left end of the wall frame. The plate needs to
     extend 3-1/2" past the end of the wall frame. Use 10d sinkers.

3.   Install a 72" long 2x6 board in the center of the wall frame. The third tie plate will
     be installed later.

72" Long Tie Plate

36" Long Tie Plate

2x6 Extends 3-1/2"
Past 2x4 Stud

A B

Insure frame is
positioned as shown

4.   Square wall frame. Install the first full width siding panel with the 'LAP' edge extending
     3-1/2" past the wall frame. Work from left to right. The siding will extend 3/4" below the
     bottom plate Use 8d galv nails, spaced 12" apart.

5.   Install the two (2) more full width siding panels. Cut the last
     panel to extend 3-1/2" beyond the wall frame.

LAP Edge

LAP
Edge

A B

Siding Extends 3-1/2"
Past 2x4 Stud

Siding Extends 3/4" Below Plate
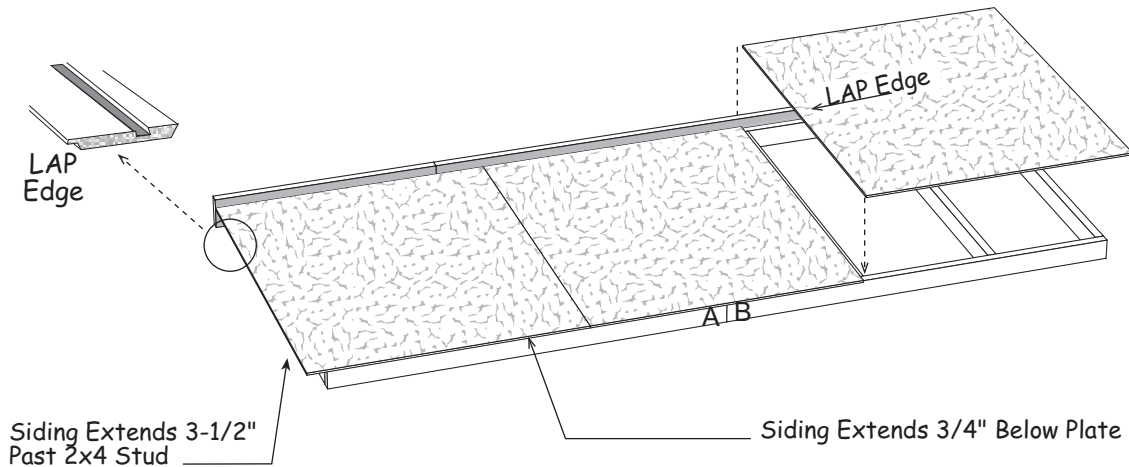
Step 8   Assemble 4' Wide Back Wall Center Frame

1. Locate (2) two 48" long 2x4s.

2. Install (3) three 2x4-74-1/2" wall studs between
    the boards. Install third stud in the center of the
   wall frame.

48" Wall Plate
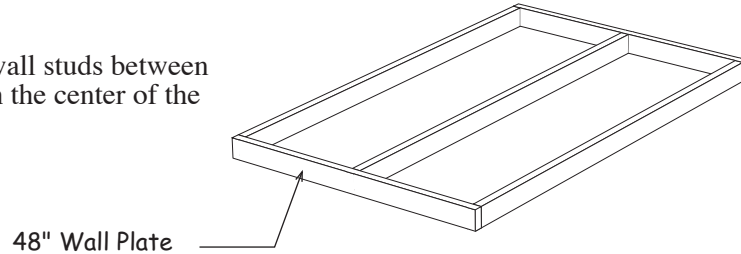
Step 9   Attach Center Back Wall to End Wall

1. Locate the 48" wide pre-assembled end wall panel that has an angled corner on the left when
    face of siding is up.

2. Install the wall frame assembled above next to this wall. Nail the frame to the end wall with
    10d sinkers.

LAP
Edge

3. Install a 48" wide siding panel
    over the center wall frame.

Pre-assembled End Wall
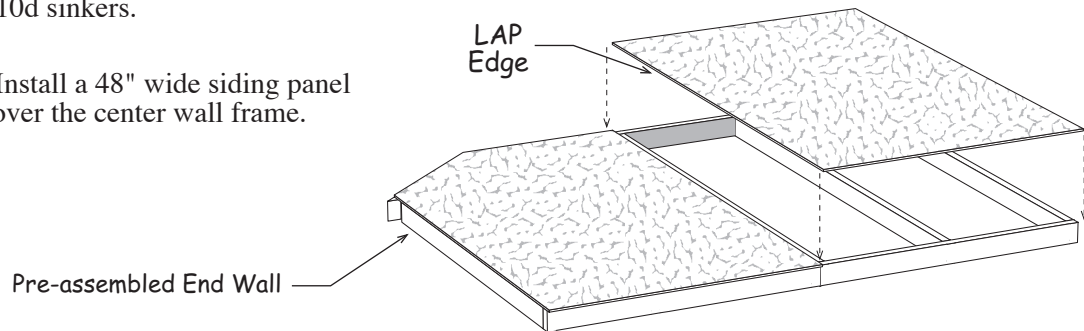
Step 10   Assemble Front Wall Frames

1. Locate 22" wide partially assembled front wall panel with angled corner and a 43-3/4" long
    2x4.

2. Cut the 2x4 board to a length of 21" and nail to bottom of studs of the wall panel. The left end
    will be flush edge of short stud. The right end will extend beyond long stud by 1-1/2" to receive
    header support. Siding will extend 3/4" below 2x4 plate. Use 10d sinkers. See below.

3. Install a 69-1/2" long 2x4 to the side of the wall frame
    nailing to long stud and 21" 2x4. Use 10d sinkers.

4. Cut the siding flush with the edge of the 2x4 header
    support.

5. Using 8d galv. nails finish nailing
    panel to studs.

21" long 2x4 Plate

69-1/2" long 2x4
Header Support
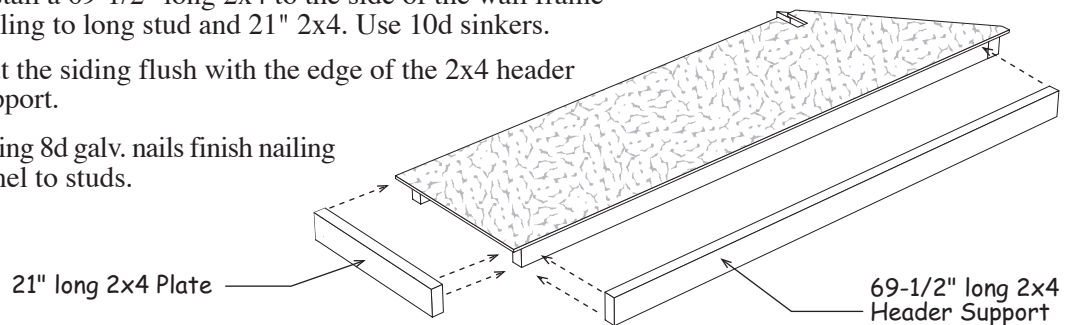
Step 11　Set Walls

1. Secure wall panels together at the corners. Use (4) four 10d coated nails per corner. Nail wall panels to wood floor. Nail through the bottom plate. Space 10d sinkers 24" apart.

2. Locate 2x3-7' boards that were used to make shipping pallet. Install at door opening and back wall panel to hold the walls straight. Use 2x4 blocks from truss jig to secure at bottom.

3. Install the pre-built 67-1/2" door header between the front wall panels. Nail through the wall stud, on the larger panel, into the end of the header. Nail through the top wall plate that extends over the door header. Use 10d sinkers.

2x3-7' Support Board
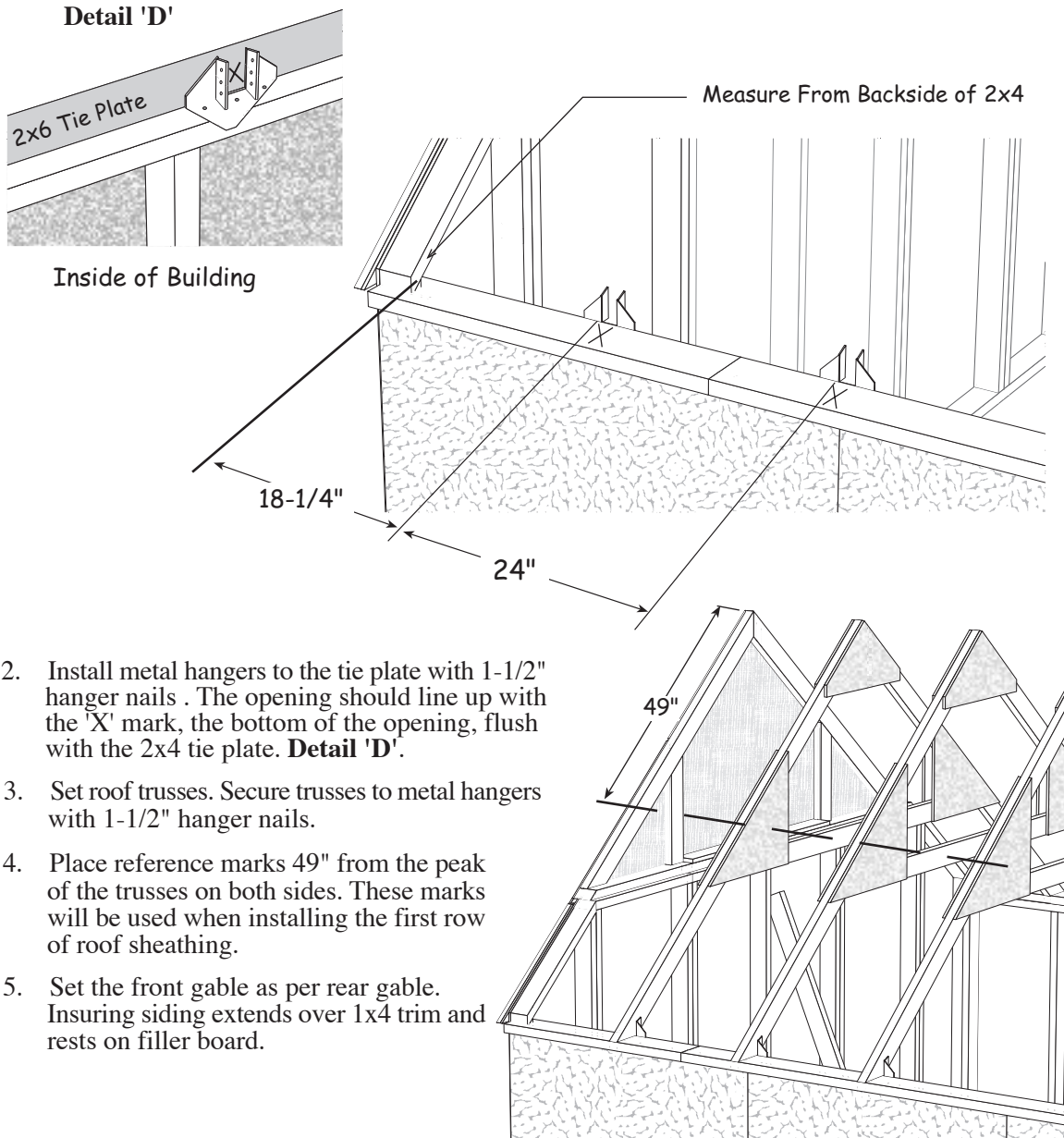
2x4-33" Wall Plate

2x3-7' Support Board
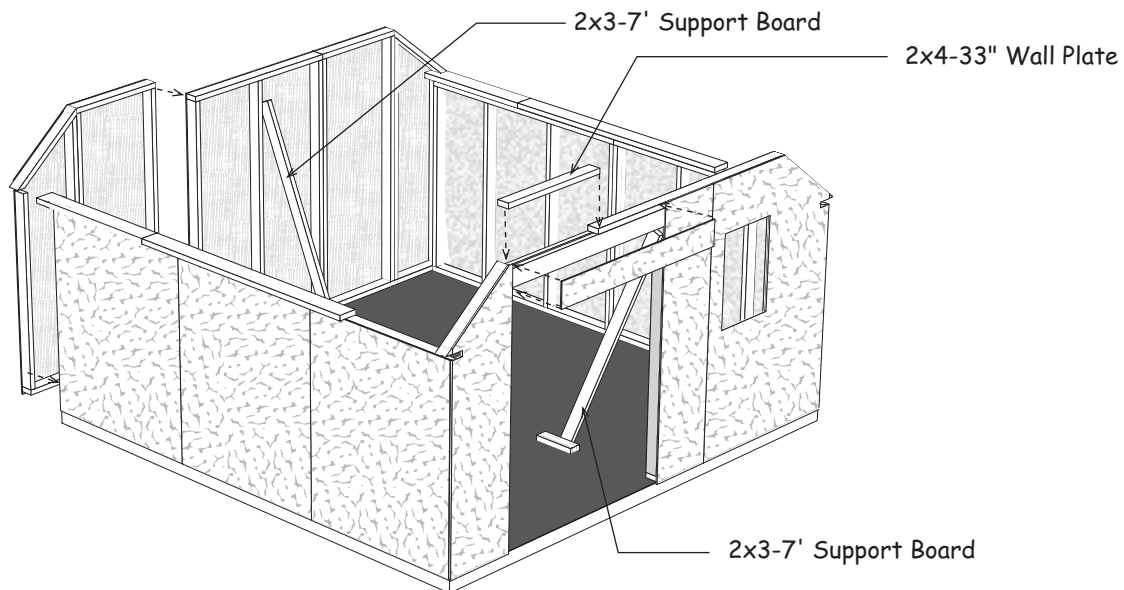
4. Install a 33" long 2x4 over the door header on the left side.

5. Secure the door header at the bottom by nailing through the 2x4 header support, at an angle, into the door header. Use 10d sinkers.

6. Install 6-3/4" x 56-1/2" siding panels over the door header. The door trim will cover where the siding butts together.
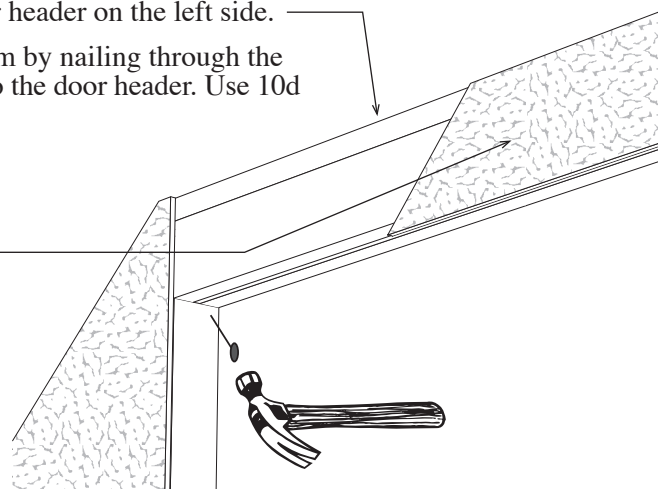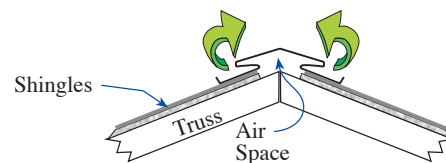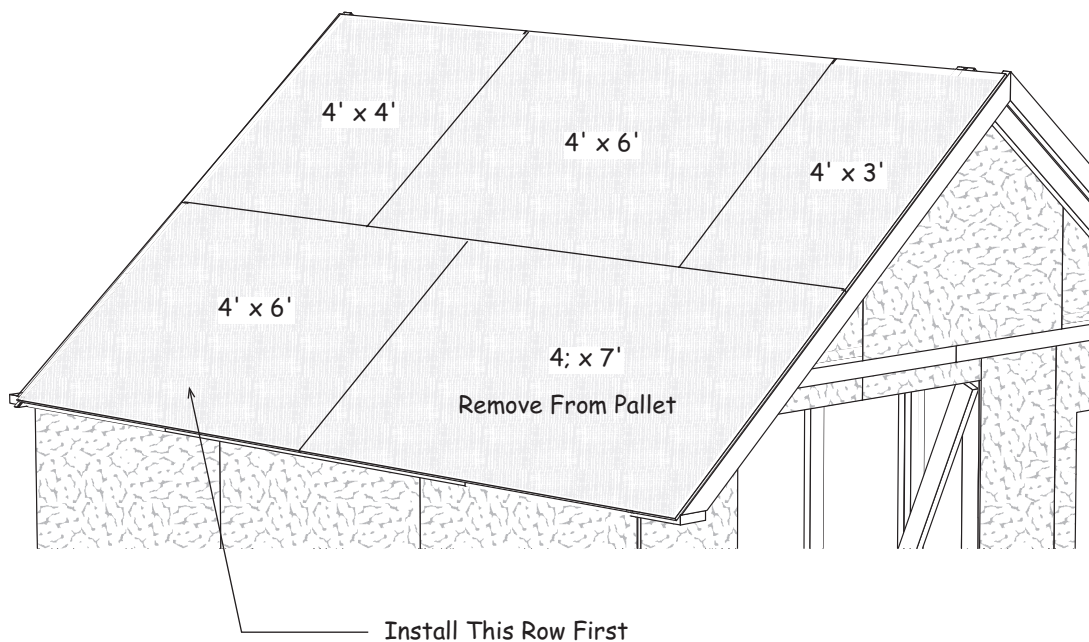
Step 15 Set Roof Trusses

1. Layout the truss spacing from the rear of the building as shown below. Measure from the <u>backside</u> of the 2x4 gable frame when marking the location of the first truss. Continue 24" spacing to front wall. **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.

Detail 'D'

2x6 Tie Plate

Inside of Building

Measure From Backside of 2x4

18-1/4"

24"

2. Install metal hangers to the tie plate with 1-1/2" hanger nails . The opening should line up with the 'X' mark, the bottom of the opening, flush with the 2x4 tie plate. **Detail 'D'**.

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

4. Place reference marks 49" from the peak of the trusses on both sides. These marks will be used when installing the first row of roof sheathing.

5. Set the front gable as per rear gable. Insuring siding extends over 1x4 trim and rests on filler board.

49"

Step 16   Install Roof Sheathing

1. Install roof sheathing per layout below. Make sure the gables and trusses are plumb. Working from back to front start first row of at the 49" mark and flush with rear gable siding. Insure sheathing meets the center of the truss at the break. Use 7d sinkers spaced 12" apart. The top row of roof sheathing will be about 1" below the ridge to allow for ventilation.

    Important: Make sure the front gable is plumb and the roof sheathing extends 9" past the siding along the face of the gable.

4' x 4'

4' x 6'

4' x 3'

4' x 6'

4; x 7'

Remove From Pallet

Install This Row First

Shingles

Truss   Air
Space

Optional ridge vent provides ideal ventilation.

## Step 17   Install Front Gable Soffit

Locate (4) four 96" long 2x4's with angled cuts at both ends, (2) two 10-1/8" wide x 26-1/2" long and (2) two 9" wide x 62-1/2" long primed soffit panels. These will be used to frame in the roof sheathing overhang.

1. Install (1) one 96" long 2x4s, *against the siding and under roof sheathing*, on the front gable. Use 10d sinkers to nail to gable siding.

2. Install (1) one 96" long 2x4's under the front edge of the roof sheathing, screw the sheathing to the 2x4 with 1-1/2" long screws.

3. Install 10-1/8" wide primed soffit panel under the lower portion of the overhang. This panel will slide in the gap between the filler board and 1x4 trim and rest on the 2x6 tie plate. Use 6d glav. nails.

4. Install a 9" wide soffit panel under the upper portions to the peak.

5. Repeat steps 1-4 for opposite side.
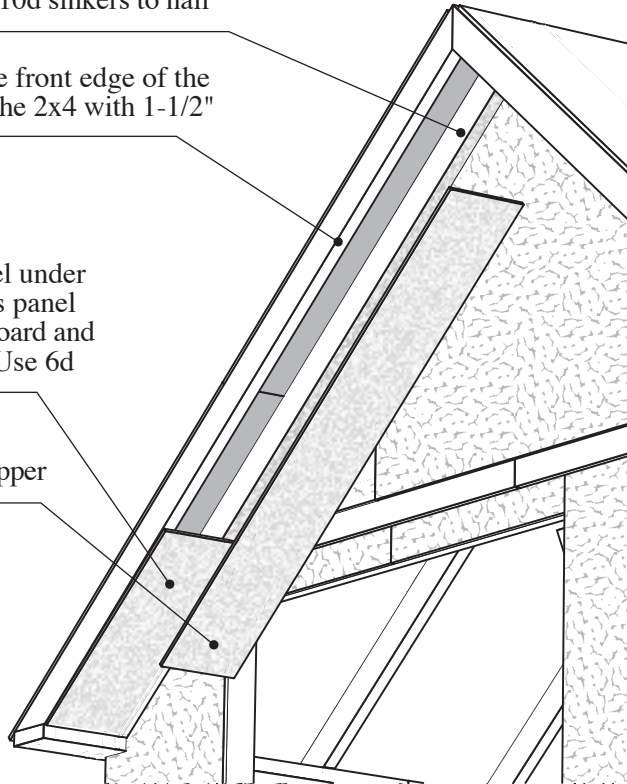
Step 21   Install Doors & Hardware
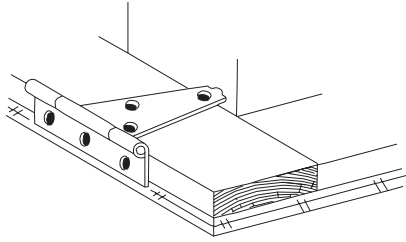
1. Lay the <u>left door</u> with the trim facing up. The siding on the left door <u>extends past the door trim</u>. See detail below.

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 1-3/4" black screws.

3. Install hinges to the right side of the other door.
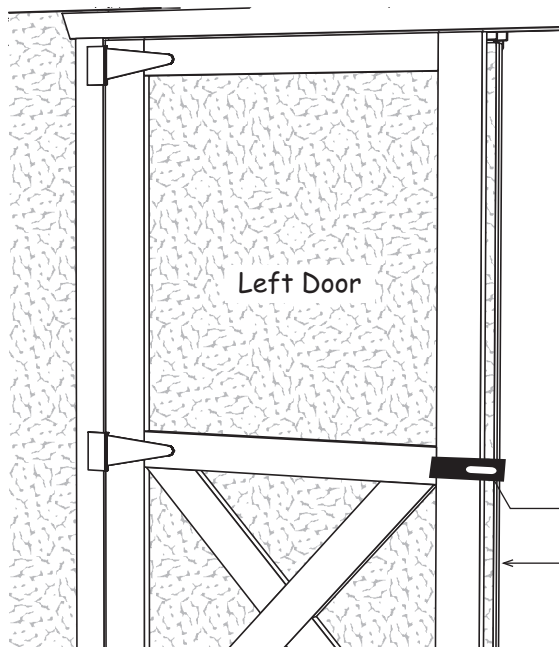
4. Before you fasten the hinges to the door trim, temporarily prop the doors in the opening. Leave a space at the top of the doors and between the doors and the side trim to allow room for the doors to expand when they absorb moisture.

   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.
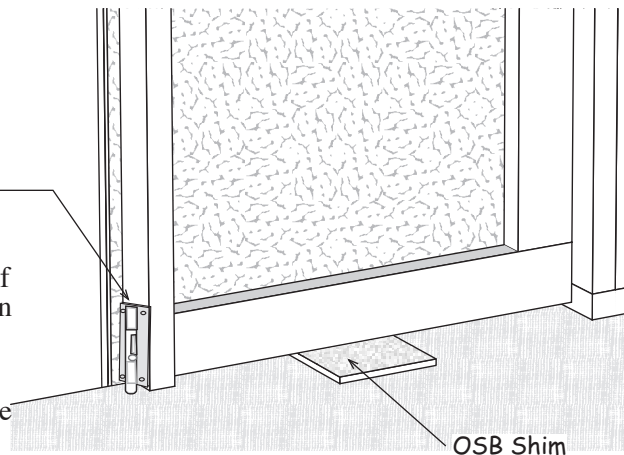
5. Install hinges to trim with 2" screws.

Left Door

Install Door Latch

Siding Extends Past Trim

Barrel Bolt on the back of left door

6. 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.

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

OSB Shim