![BEST BARNS USA — Quality Do-it-yourself Barn Kits]

Best Barns USA
Assembly Book
Revised June 25, 2011

SAMPLE INSTRUCTIONS
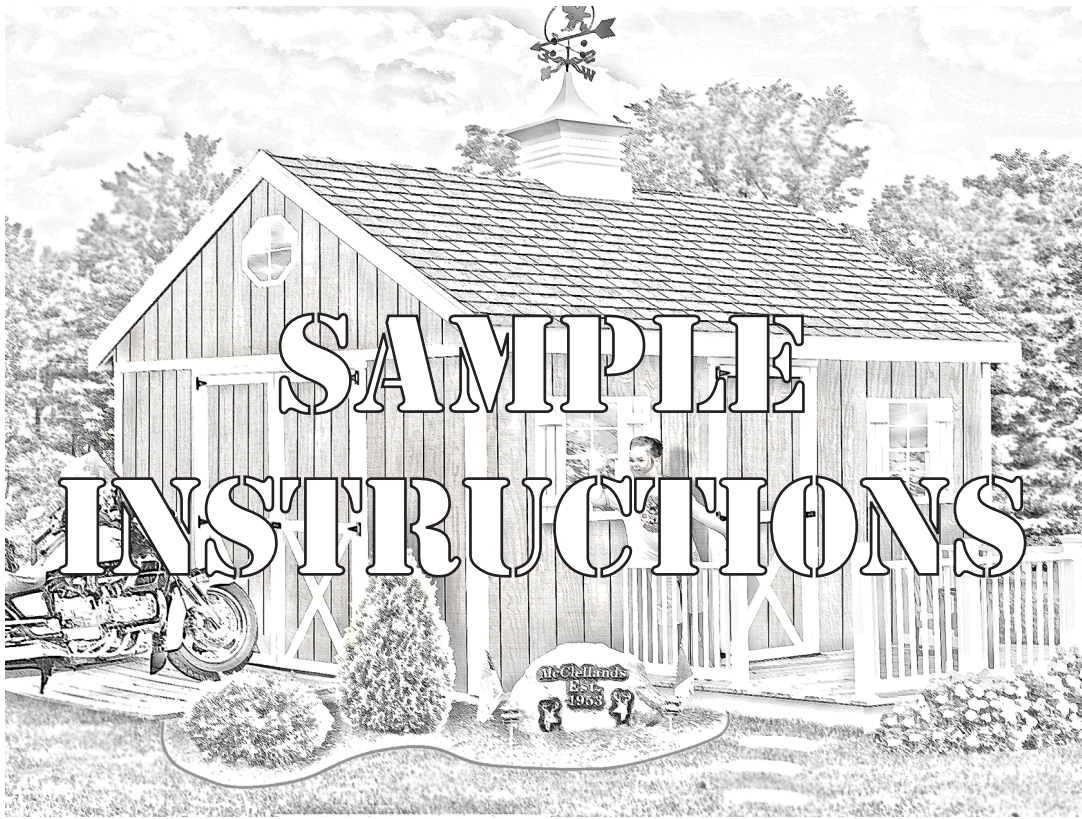
the Easton DLX 16'x 12'

Manufactured by Reynolds Building Systems, Inc.
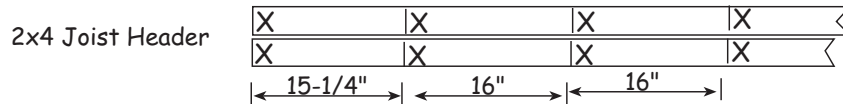
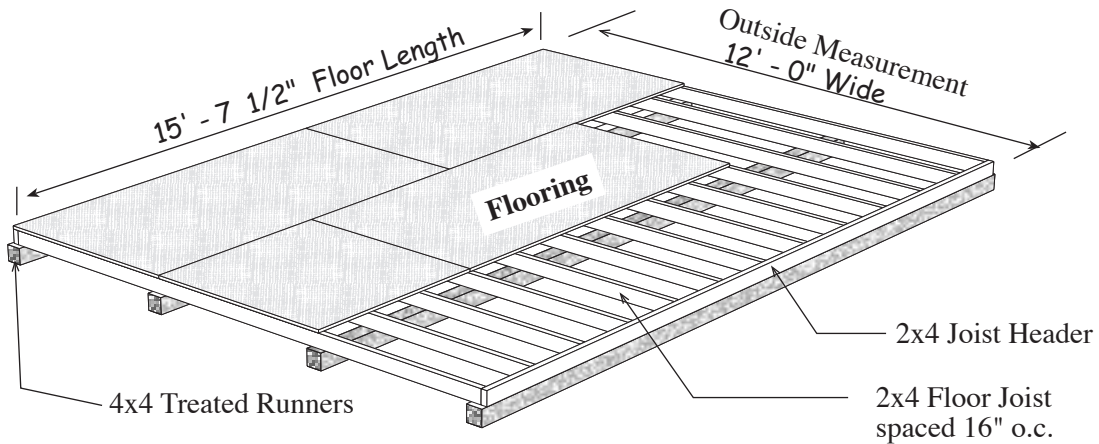205 Arlington Drive   Greenville, PA 16125   724-646-3775

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.
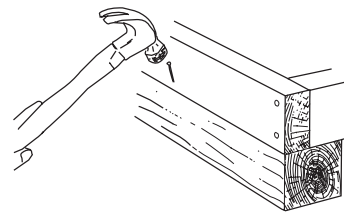
2x4 Joist Header

| X | X | X | X |
| X | X | X | X |

|← 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.*

15' - 7 1/2" Floor Length

Outside Measurement
12' - 0" Wide

Flooring

2x4 Joist Header

4x4 Treated Runners

2x4 Floor Joist
spaced 16" o.c.

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.

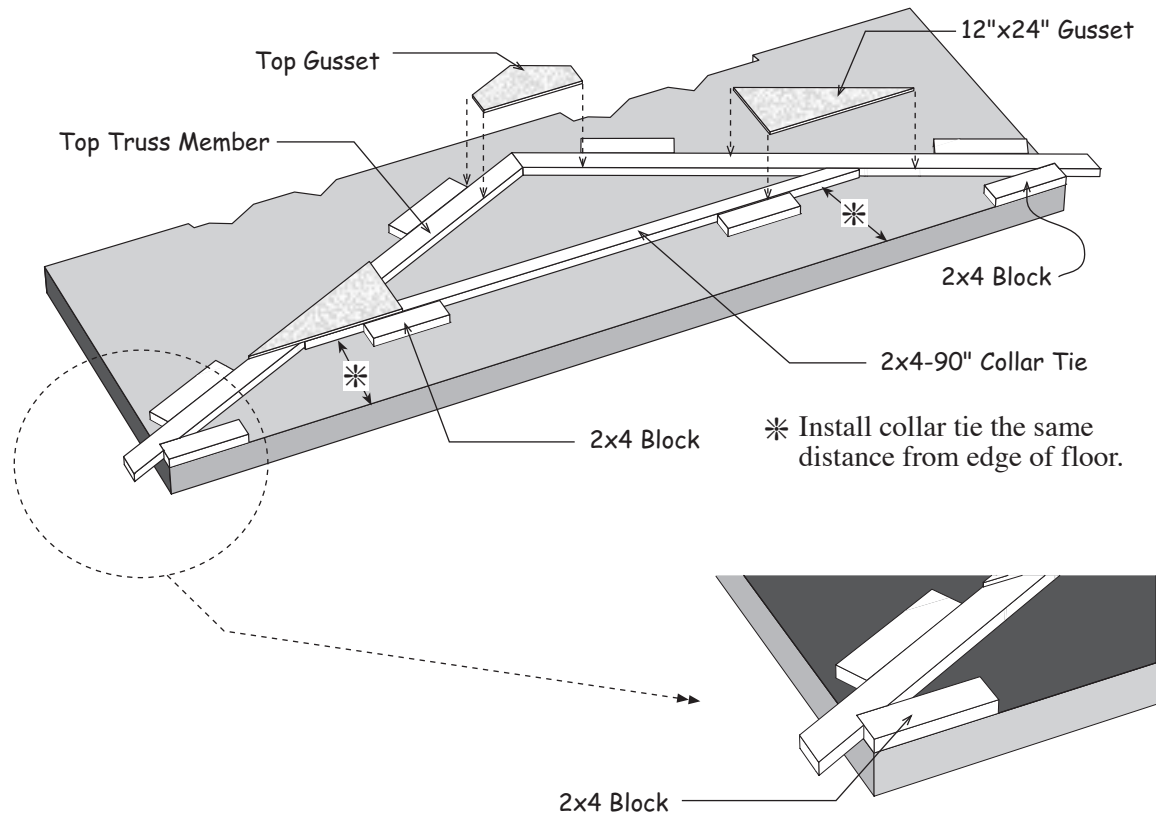| Material Description	12' x 16' shed
2x4 Joist Headers	2 pcs. 16'
2x4 Floor Joist	13 pcs. 12'
4x4 Treated Runners	8 pcs. 8'
Flooring 5/8" or 3/4"	6 pcs. 4x8
Screw Floor Nails	2 lb. 8d
Galv. Box Nails	2 lb. 16d

Nail 2x4 joist headers and floor joist to 4x4.

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 (6) six trusses, (8) eight more for a 20' long building.

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

Top Gusset

12"x24" Gusset

Top Truss Member

2x4 Block

2x4-90" Collar Tie

2x4 Block

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

2x4 Block

Step 3 Assemble 12' Sidewall

1. Position 2x4-72" 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'.

72" Wall Plate   72" Wall Plate

| X | X | A | B | X | X |
| X | X | A | B | X | X |

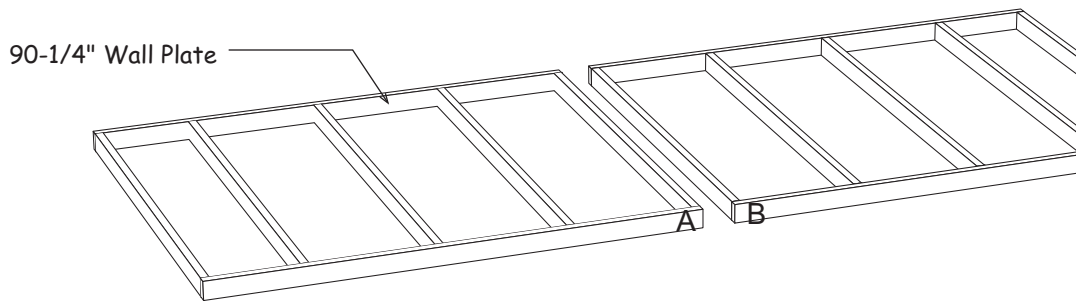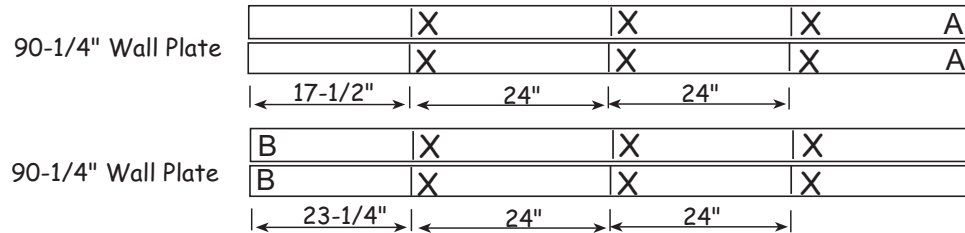23-1/4"   24"   23-1/4"   24"

A   B
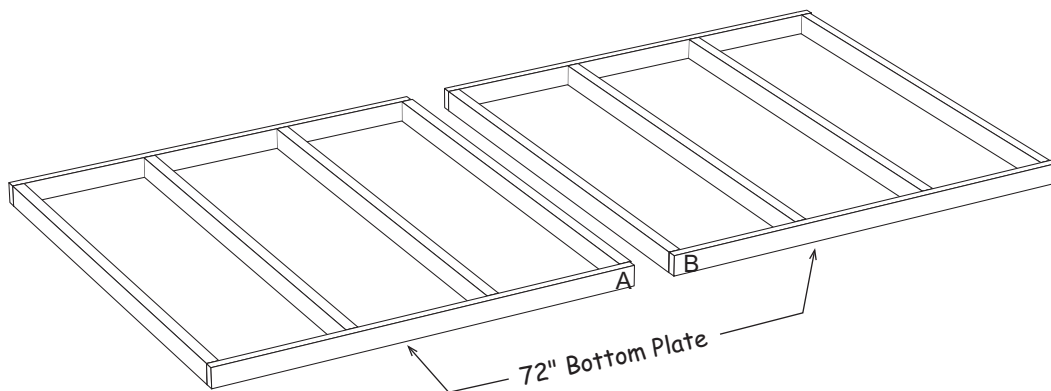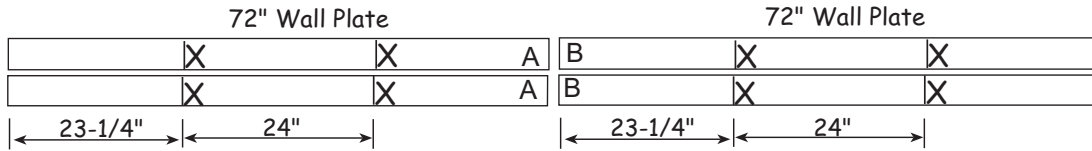
72" Bottom Plate

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. *Measure diagonally (corner to corner). The measurements will be the same when the wall is square*. Cut (3) three siding panels to a length of 75-3/4". Install the first panel flush with the wall stud and top plate. The siding should extend 3/4" below the bottom plate. Tip: Use a 3/4" trim board as a gauge.

4. Cut the last siding panel flush with the end of the wall frame.

LAP Edge

LAP Edge

Siding Extends Below Plate

Siding Gauge - 1x4 Trim Board
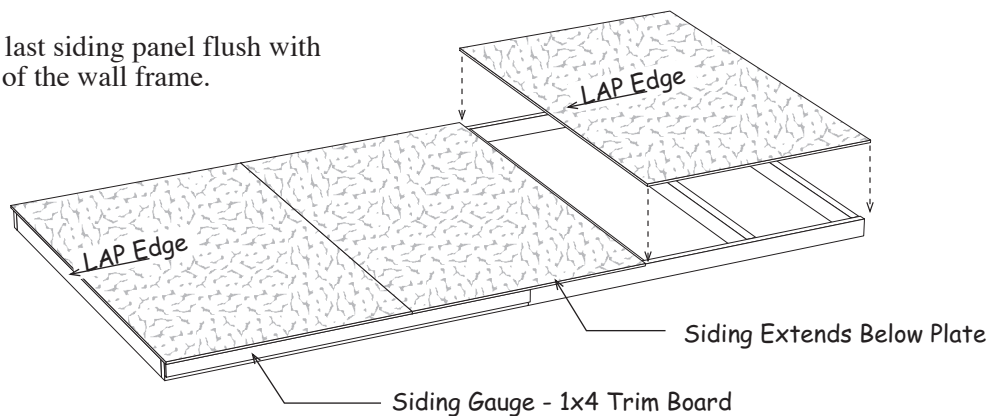
Step 6   Assemble Back Wall

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'.

90-1/4" Wall Plate

X   X   X   A

X   X   X   A

17-1/2"   24"   24"

90-1/4" Wall Plate

B   X   X   X

B   X   X   X

23-1/4"   24"   24"

90-1/4" Wall Plate

A   B

2. Cut (4) four siding panels to a length of 75-1/4". Install a 46-1/2" siding panel with the cut edge extending 3-1/2" past the wall stud. The siding will extend 3/4" below bottom plate. Install a full width siding panel next to the first panel.

3. Install another full width siding panel but DO NOT nail the long edge that overlaps the 2nd siding panel. You can nail this edge after the wall panels are installed later. This will enable you to separate the wall panels making them easier to handle. Install the last siding panel. Cut the width to extend 3-1/2" past the wall frame.

Do Not Nail Along This Edge

46-1/2" Wide
Siding Panel

Cut
Edge

Siding Extends
3-1/2" Past Frame
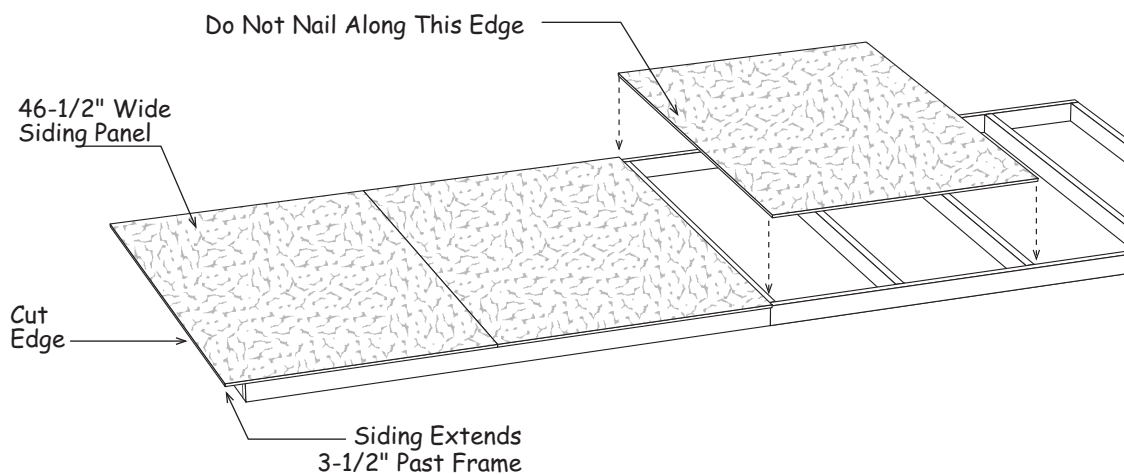
Step 7   Set Wall Panels

1. Secure wall panels together at the corners and to the floor with 10d sinkers.

2. Brace front wall with a 90-1/4" long 2x4.

Cut 2x4 From Opening

Cut 2x4 From Opening
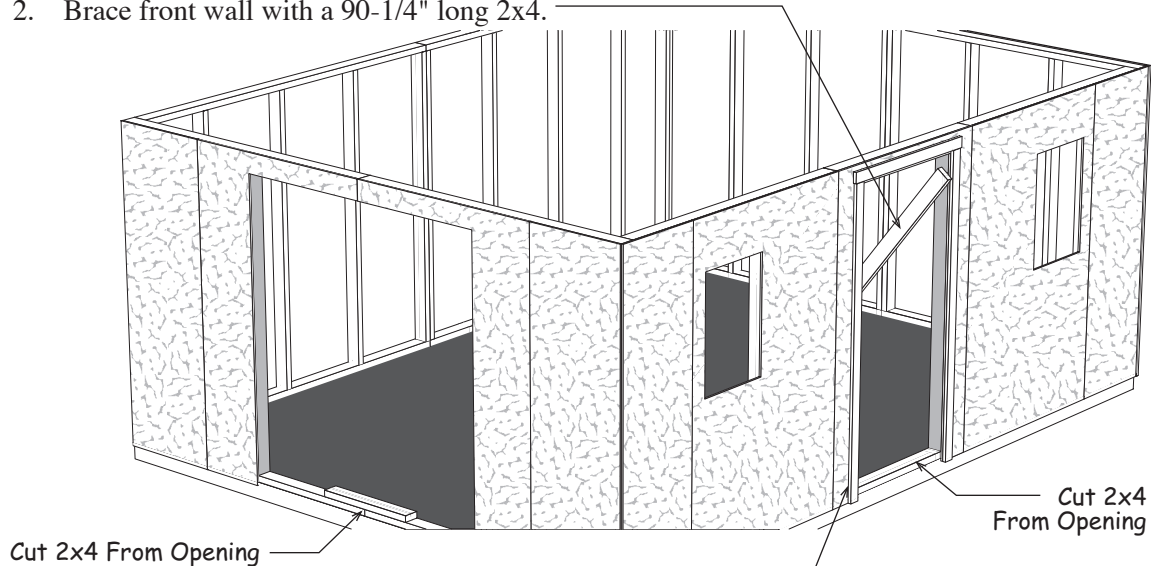
3. Install (2) two 1x4x72-1/4" boards along each side of the front door opening. Tack these boards with a couple nails; you may want to move the trim later when you install the doors.

4. Install a 1x4x41-1/2" board, *that has angle cuts on both ends*, over the door opening.

Step 8   Install End Wall Trim

1. Install 75-3/4" long 2x4 trim boards at the corners of the 12' end walls. Install the trim flush with siding on the front and back walls. Use 8d galv. nails.

2. Cut (2) two 1x4-70" trim boards to fit between the corner trim, flush with the top of the wall.

Siding Extends Below Trim
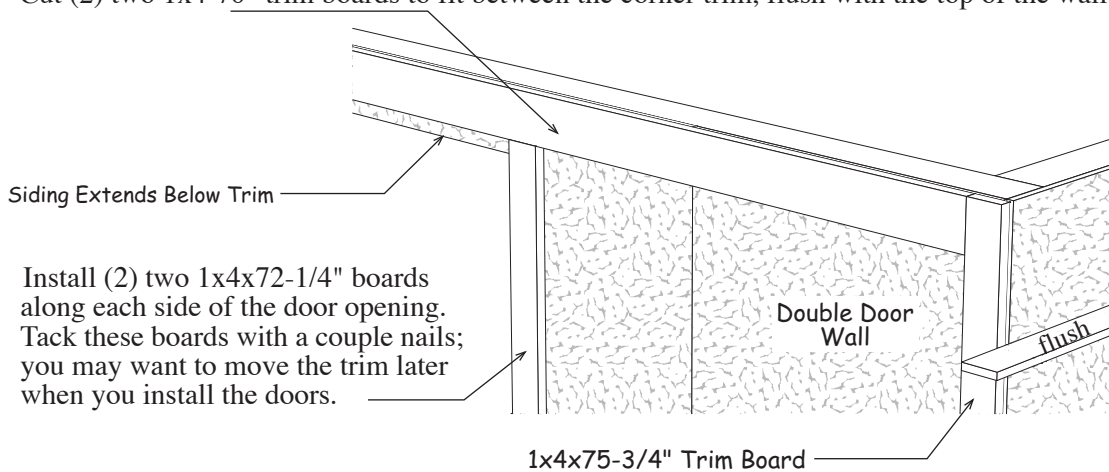
3. Install (2) two 1x4x72-1/4" boards along each side of the door opening. Tack these boards with a couple nails; you may want to move the trim later when you install the doors.

Double Door Wall

flush

1x4x75-3/4" Trim Board

Step 11   Install Roof Trusses

1. Layout the truss spacing. Measure from the <u>outside face of the gable siding</u> 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.

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

Detail 'D'

Inside of Building

22-1/2"

24"
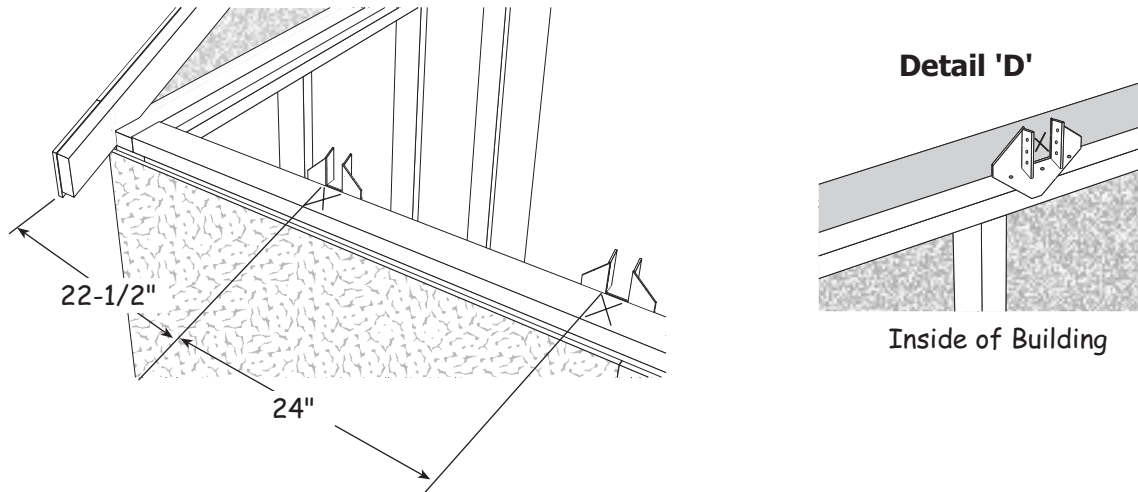
3. Install trusses over the 'X' marks. Secure to metal hangers using 1-1/2" hanger nails.

4. Install 1x6-87" trim boards flush with the top of the gables. Use 8d galv. nails
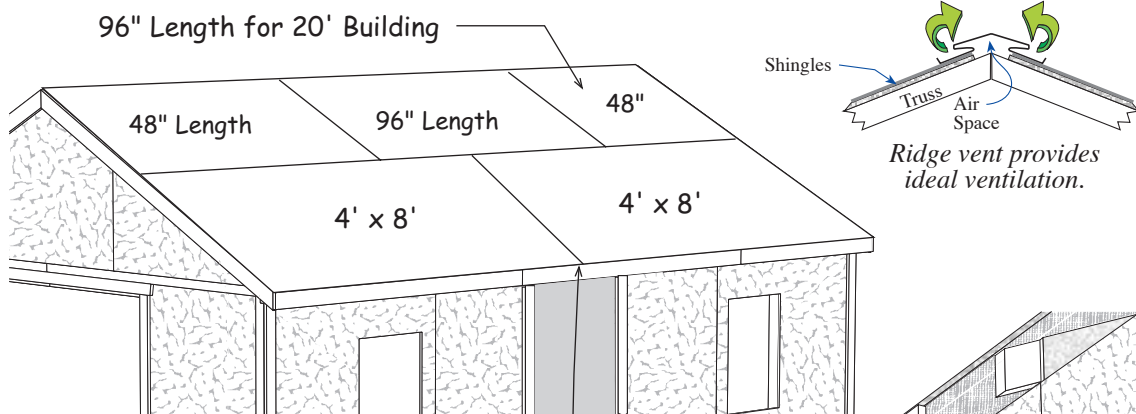
1x6 Gable Trim
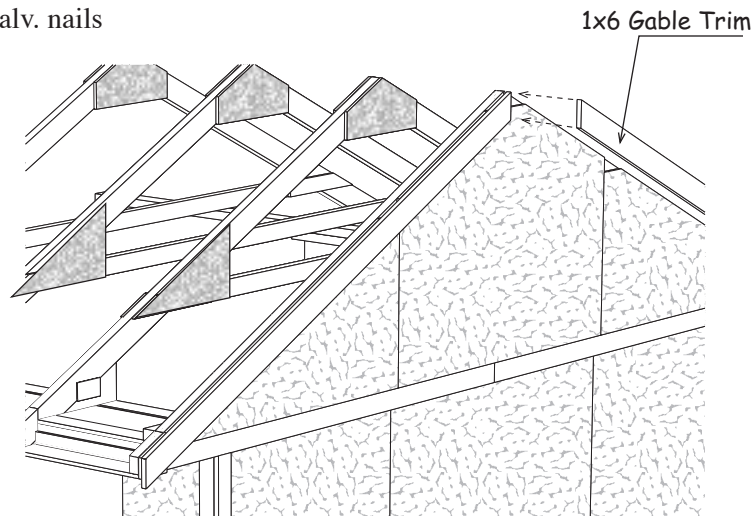
Step 12   Install 1x6 Fascia & Roof Sheathing

1. Install 1x6-80" fascia boards to the 2x4 trusses. Use 8d galv. nails. Install the fascia so the bottom edge of the roof sheathing will rest on the beveled edge. Install 22-1/2" long 2x4s between the trusses to support the fascia boards where they butt. *See detail below.*

2. Cut the last 1x6 fascia board to fit.

4; × 8'

1x6 Fasica

22-1/2" Block
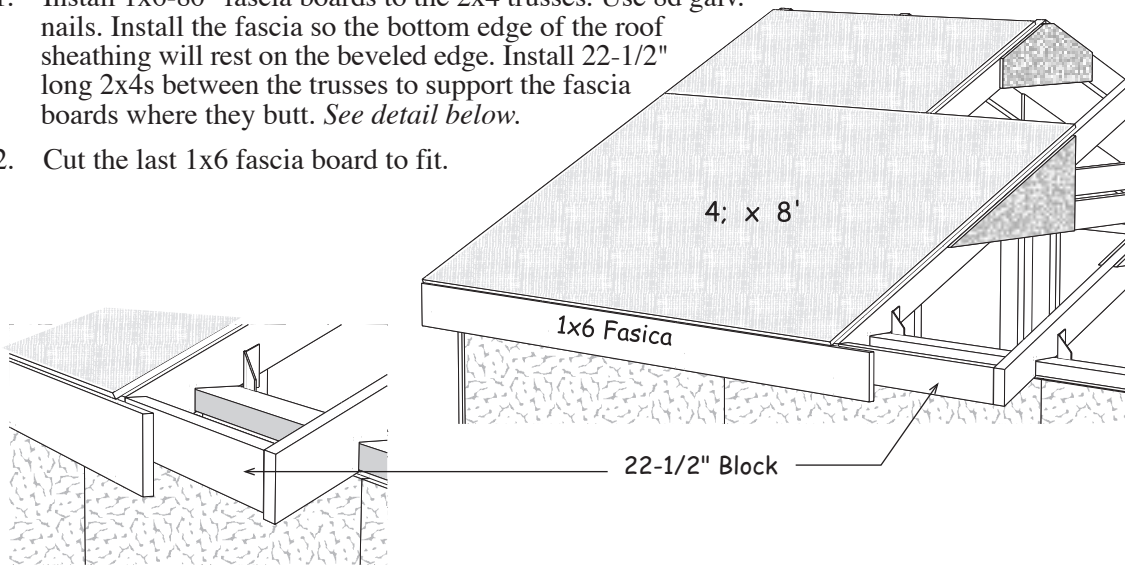
3. Cut roof sheathing to fit across the top of the roof. If installing ridge vent, cut sheathing 1" below the peak of the trusses. Install sheathing with 7d sinkers. Space nails 12" apart.

96" Length for 20' Building

48" Length

96" Length

48"

4' × 8'

4' × 8'

Shingles

Truss   Air
Space

*Ridge vent provides
ideal ventilation.*

Insert 4x4' Sheathing for 20' Building

4. Cut leftover exterior siding and install as soffit under the truss overhang.

5. Install 75-3/4" 1x4 corner trim. If necessary, cut trim to fit under the soffit.

1x6 Fascia

Soffit
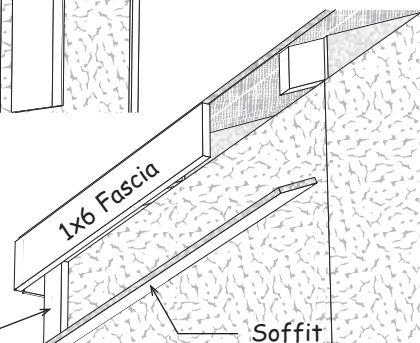
Step 13   Install Doors & Hardware

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 the hinges on the left or right side of the door. To position the hinge properly, hold the rectangular plate against the frame.
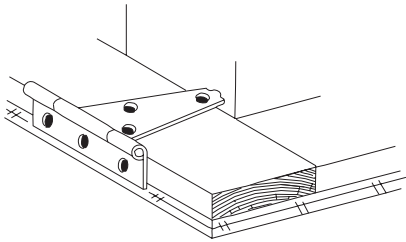
2. Lay the <u>left door</u> with the trim facing up. The siding on the left door <u>extends past the door trim</u>. See detail below.

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

4. Install hinges to the right side of the other door.
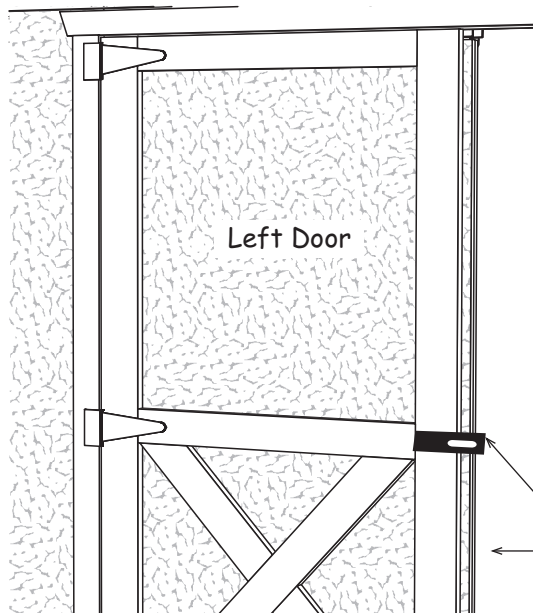
5. Temporarily prop the doors in the opening. Leave a space at the top of the doors and between the doors and the side trim to allow room for the doors to expand when they absorb moisture.

    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" screws.

Left Door

Install Door Latch

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.

OSB Shim