![Best Barns USA logo]

Best Barns USA
Assembly Book
Revised on December 19, 2011
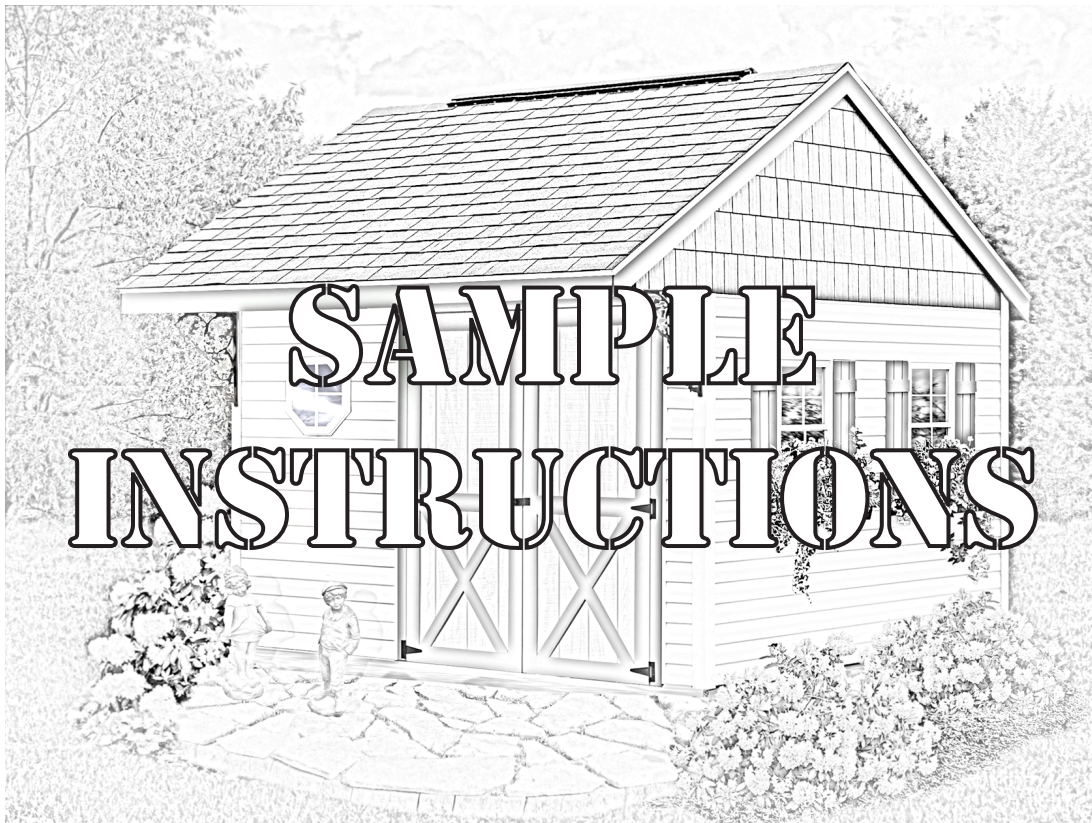
SAMPLE INSTRUCTIONS

the Clarion 10'x10'

Constructing Details for Deluxe Floor System

Deluxe floors include 4x4 runners, standard floors do not

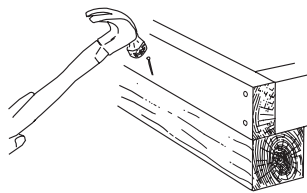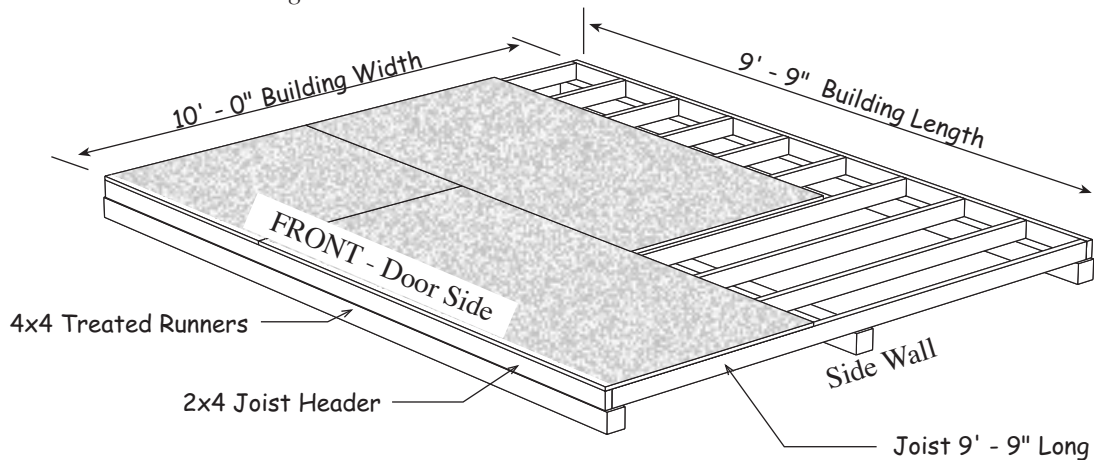Check local building codes in your area, the construction may have to change. For a concrete slab, install sill sealer as a moisture barrier between the concrete and the wall plates. Foam sill sealer can be purchased at home centers in rolls 3-1/2" or wider.

1. Cut joist headers to floor length. See Below.
    Layout for 16" on center joist spacing. 'X' marks where floor joist will be placed.

Joist Header

| X | X | X | X |

|← 15-1/4" →|← 16" →|← 16" →|
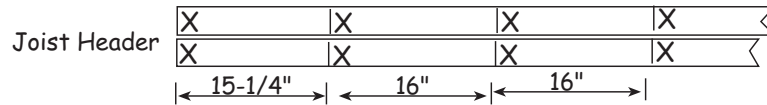
2. Cut 2x4-10' floor joists to 9'-9". *Treated lumber may be thicker than 1-1/2". Take this into account when cutting the length of floor joists. Shorten joist measurements if necessary to obtain 10'-0" building width.*

10' - 0" Building Width

9' - 9" Building Length

FRONT - Door Side

4x4 Treated Runners

Side Wall

2x4 Joist Header

Joist 9' - 9" Long

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

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.

If installing building on a concrete slab, install sill sealer between concrete and bottom wall plate.

| Material Description	10' x 10' shed	
2x4 Joist Headers	2 pcs.	10'
2x4 Floor Joist	9 pcs.	10'
4x4 Treated Runners	3 pcs.	10'
Flooring 5/8" or 3/4"	4 pcs.	4x8
Screw Floor Nails	1 lb.	8d
Galv. Box Nails	1 lb.	16d

Step 1   Assemble Trusses

☞ Building Tip: To aid in the assembly of the trusses, temporarily tack 2x4 blocks to the floor. There are short 2x4s, *that may have an angle on one end*, supplied in the kit for this purpose. This will trap the truss parts and insure that all the trusses will be assembled the same.

1. Position a 138" long 2x4 and (2) two 79-5/8" long 2x4s diagonally across the floor. The shorter 2x4s will rest on a flat spot on the bottom 2x4. *See Detail 'A' below.*

2. Affix 2x4 blocks around the truss members to hold them in place. Tack a 3" wide gauge block, *in hardware bag*, at both ends of the bottom 2x4 to maintain the correct overhang.

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 12"x12" wood gussets to the ends of the trusses, flush with the end of the bottom 2x4. Glue and nail the gusset. Use 8 nails per gusset.

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

6. Assemble (3) three more trusses.

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

79-5/8" Long Top Member

3" Wide Gauge Block

DETAIL 'A'

Top Gusset
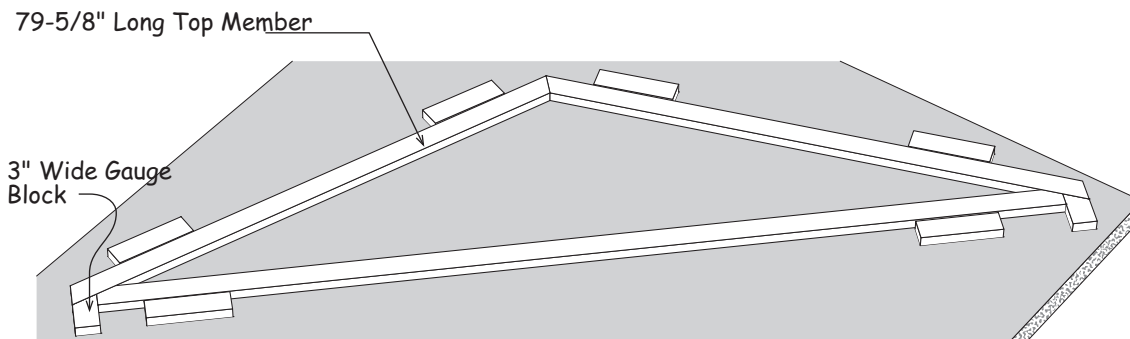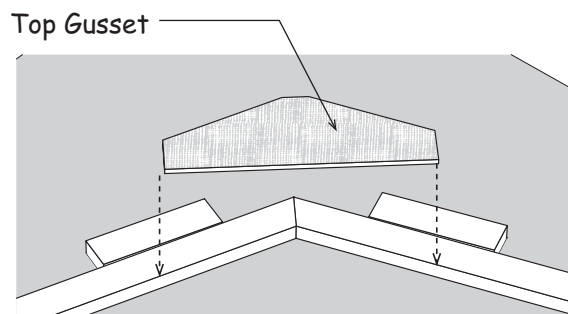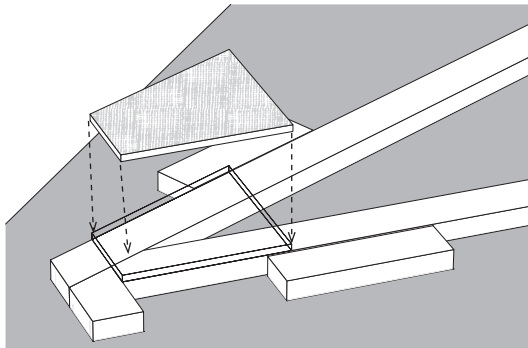
Step 2 Assemble Roof Gables Continued

6. Locate (4) four 58-1/2" long 1x4 white pine trim boards. Cut these boards into shorter pieces and install as sub-trim across the top of the gable. Install these boards extending 1/2" above the gable frame to receive the roof sheathing. Use 8d galv. nails. Finish gable trim boards will be install later over this sub-trim. *Tip; you can use 79-5/8" long 1x4 boards as a pattern to cut the angles on the shorter 1x4 boards.*
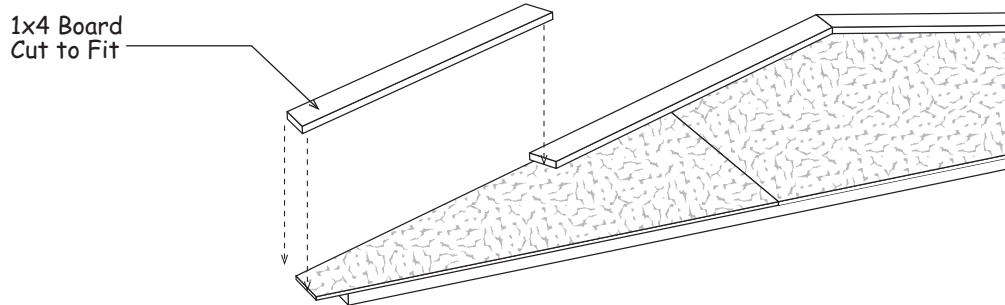
1x4 Board
Cut to Fit

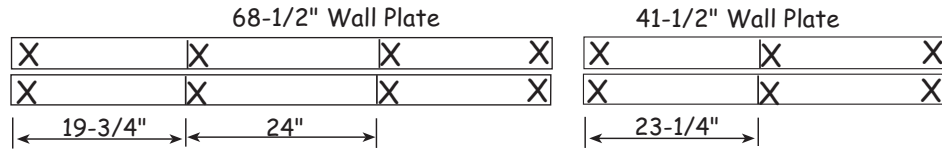7. Install 79-5/8" long 1x4 boards over the sub-trim. Use 8d galv. nails.
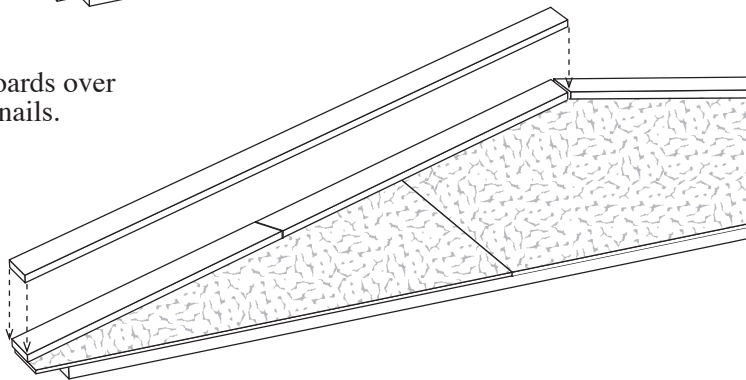
8. Turn gable frame over and install 18" long 2x4 blocks to the bottom of the gable frame. Install blocks 21" from each end and one in the center. Use 2-1/2" long screws.

2x4 Blocks
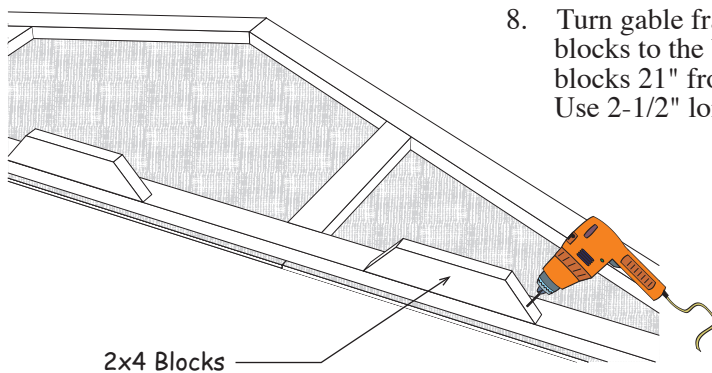
9. Assemble another gable frame. Cut 77-1/4" long 1x4 boards as sub-trim.

Step 3   Assemble Back Wall

1. Locate (2) two 2x4 boards 68-1/2" long and (2) two boards 41-1/2" in length. Position these boards together and indicate with 'X' marks, where the wall studs will be located.

68-1/2" Wall Plate   41-1/2" Wall Plate

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

|← 19-3/4" →|← 24" →| |← 23-1/4" →|

2. Install 72" wall studs [**black ends**] between the top and bottom plates. Assemble the frames with 10d sinkers, two nails per stud. Nail both wall frames together.

3. Install 45" and 72" long 2x4s as tie plates over the top plate. The 2x4 tie plates will extend 3-1/2" beyond the wall frame.

72" Tie Plate

45" Tie Plate

68-1/2" Top Plate

3-1/2"

Wall Stud

133   133"
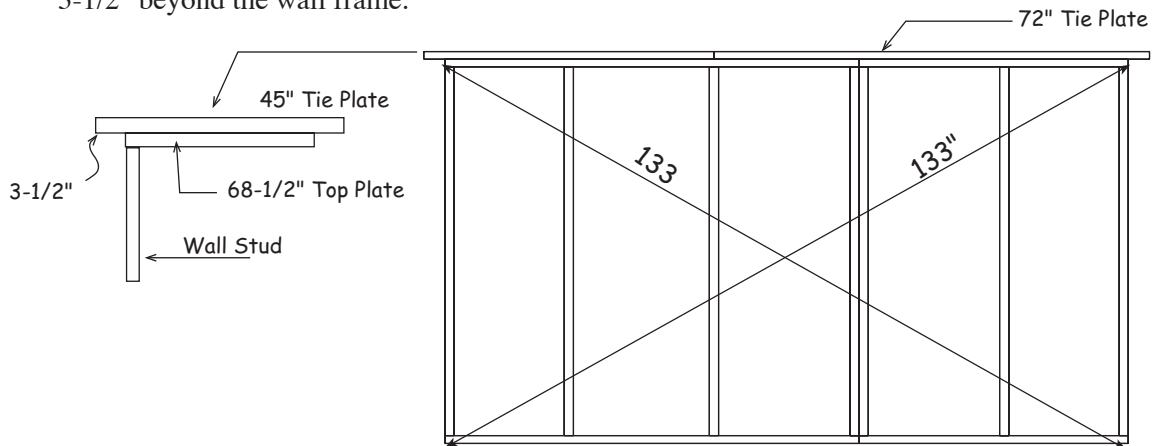
4. Square wall frame. Cut (3) three siding panels to a length of 79". Install the first panel with the siding flush with the 2x4 tie plate. The siding should extend 3/4" below the bottom plate. Siding will extend above the top wall pale. Use 8d galv. nails. Space nails 12" apart.

5. Cut and install a 21" wide siding panel last. It will extend 3-1/2" beyond the wall frame.

Mark the cutoff siding '**Step 7**' and set aside.

Siding Extends Above Plate

21" Siding Panel

Siding Flush with 2x4

Siding Extends 3/4" Below Plate
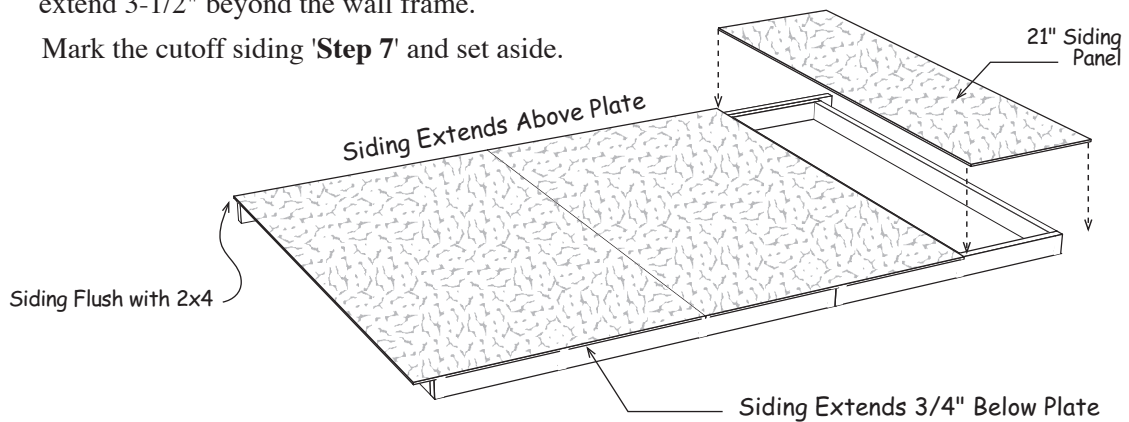
Step 5   Install Siding on Sidewalls

1.   Cut (5) five siding panels to a length of 77-1/4".

2.   Square wall frame. Install a 48" panel flush with the end of the wall
     and the top plate. Install another siding panel.

Siding Extends 3/4" Below Plate
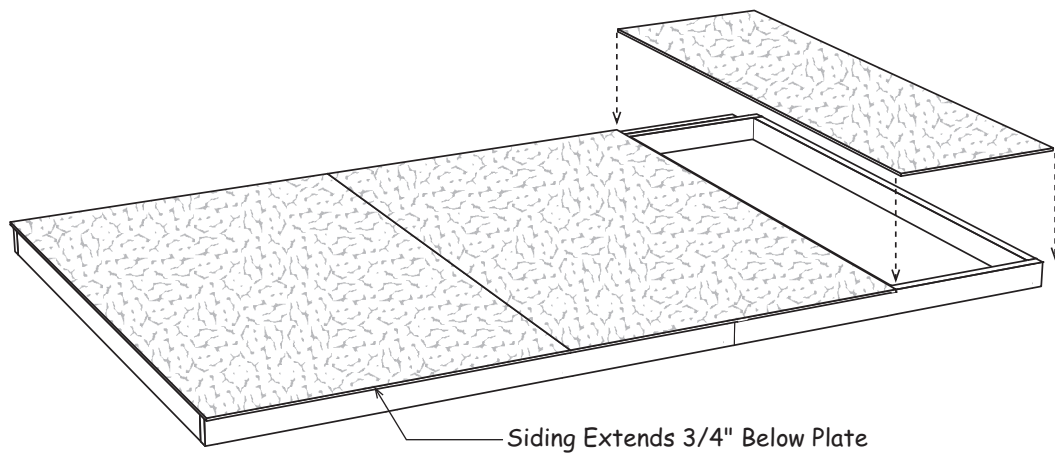
3.   Cut the last siding panel flush with the end of the frame.
4.   Assemble another sidewall. Use the leftover siding panels.

Step 8   Set Lower Walls

1. 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 2x4 door header between the front wall panels. The siding extends 1-1/2" above the top of the door header to receive 2x4 tie plate. Nail through the wall stud into the ends of the header. Toenail into the top wall plates. Wall trim, installed later, will hide where the siding butts the front wall panels.

3. Install a 2x4-6' board at the door opening to hold the wall straight.

Siding Extends 1-1/2" Above Header

Door Header
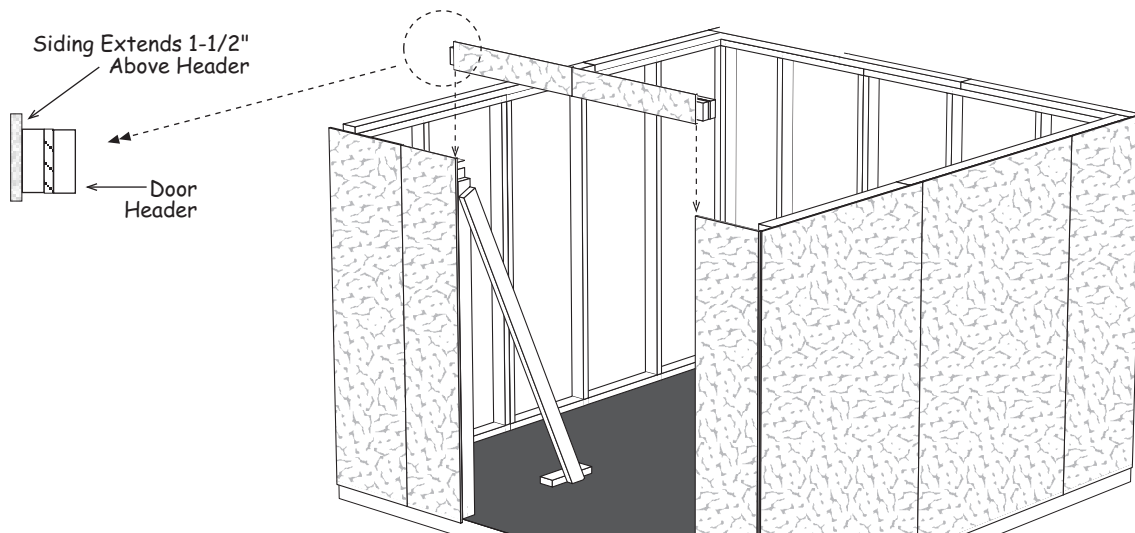
Step 9   Install 2x4 Tie Plates

4. Install a 45" and 72" long 2x4s across the top of the front wall as tie plates. Use 10 d sinkers

2x4-45"

2x4-72"

View From Inside
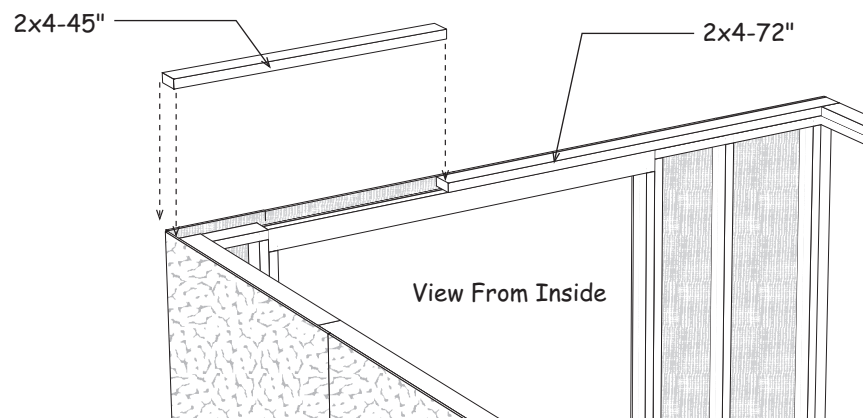
Step 10   Install Gable on Right Sidewall

1. Install a gable on the right sidewall. Secure gable to wall by nailing through the gable blocks with 10d sinkers.

Right Gable

1x3-71-3/4" Door Trim

Right Sidewall

1x3-72" Door Trim
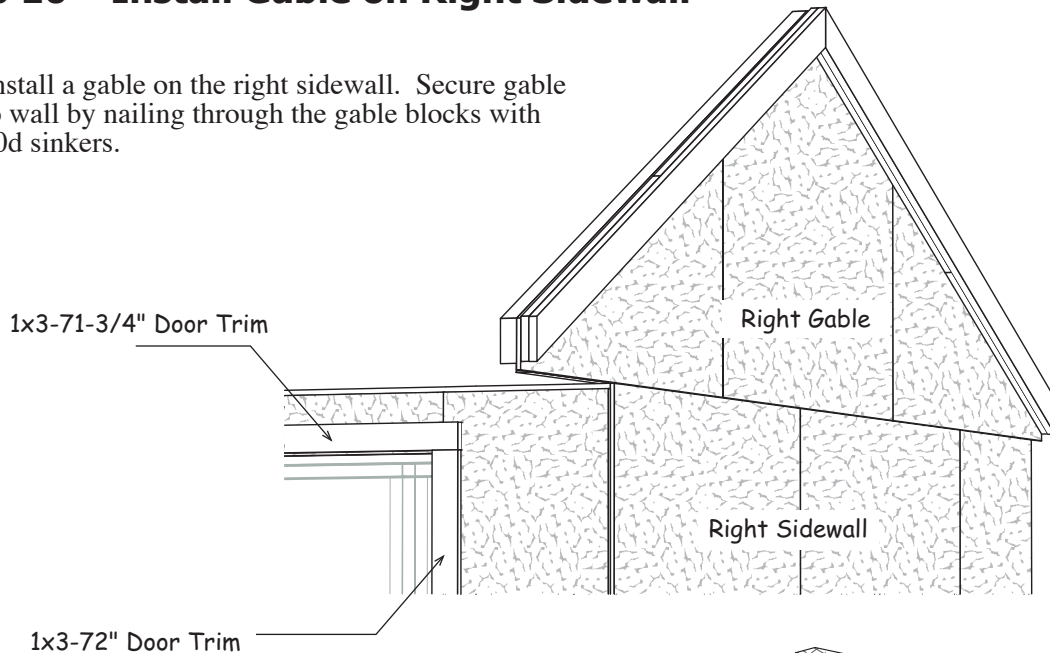
2. Install lx3x72" trim boards along each side of the door opening. Tack these boards with a couple nails; you may want to move the trim later when you install the doors.

3. Locate a 1x3x71-3/4" board with angle cuts on both ends. Cut both ends, *removing the angle cut*, this will make it easier to apply J-Channel around the door trim.

Door Trim

J-Channel
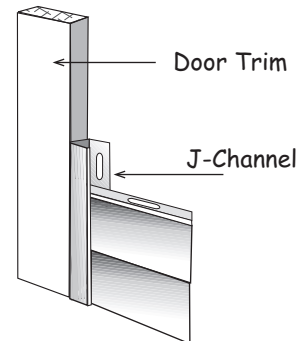
Vinyl Siding Overview

Install the siding according to the manufacturer's instructions.

Starter Strip is installed along the bottom of the building.

Center the nail in the nailing slots. DO NOT nail the siding tight. The panels should float on the nails to provide for expansion and contraction. Nail into wall studs wherever possible. If it is necessary to nail between the studs, cutoff the tips of nails that protrude through the siding.

When installed, the siding panels should have 1/4" free space at each end of the siding panel. This will allow the panel to expand with changes in temperature.

Starter Strip
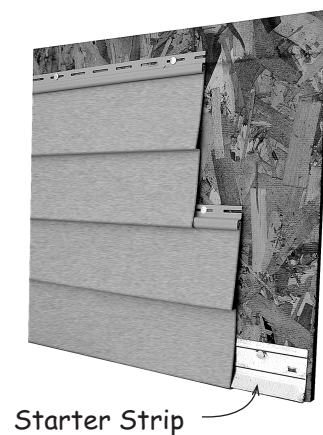
Step 15B Install Roof Sheathing

1. Install 1x6 - 73-1/2" long fascia board to the 2x4 trusses, flush with the trim on the gable. Install the fascia so the bottom edge of the roof sheathing will rest on the beveled edge. *See detail below.* Use 8d galv. nails.

2. Install a 48" x 96" roof panel on the lower right corner. Use 7d sinkers, spaced 12" apart.

48" x 96"

1x6   73-1/2" Fascia

Roof Sheathing

Beveled Edge

2x4 Truss

1x6 Fasica
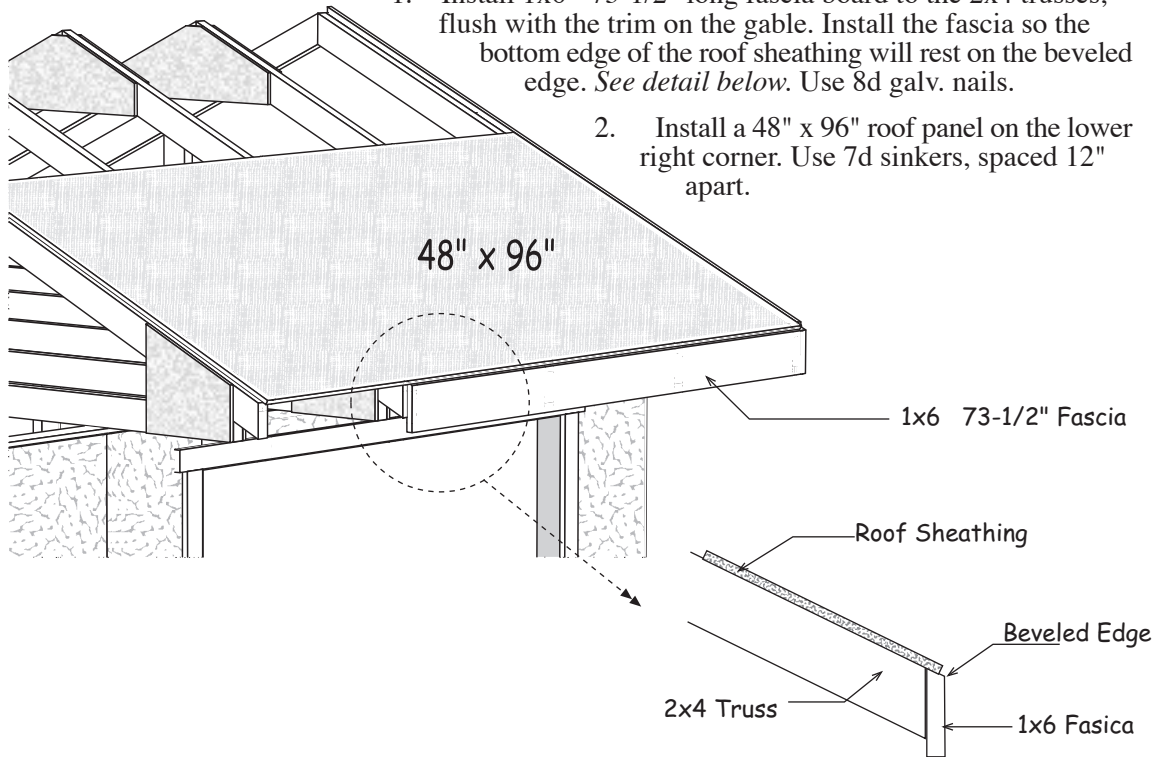
3. Cut and install a 50" long 1x6 trim board flush with the gable trim on the left gable.

4. Install the remaining roof sheathing.

5. Install 1x6 fascia and roof sheathing at the back of the building.

96"

24"

24" x 48"

48" x 96"

Cut 1x6-50"
To Length
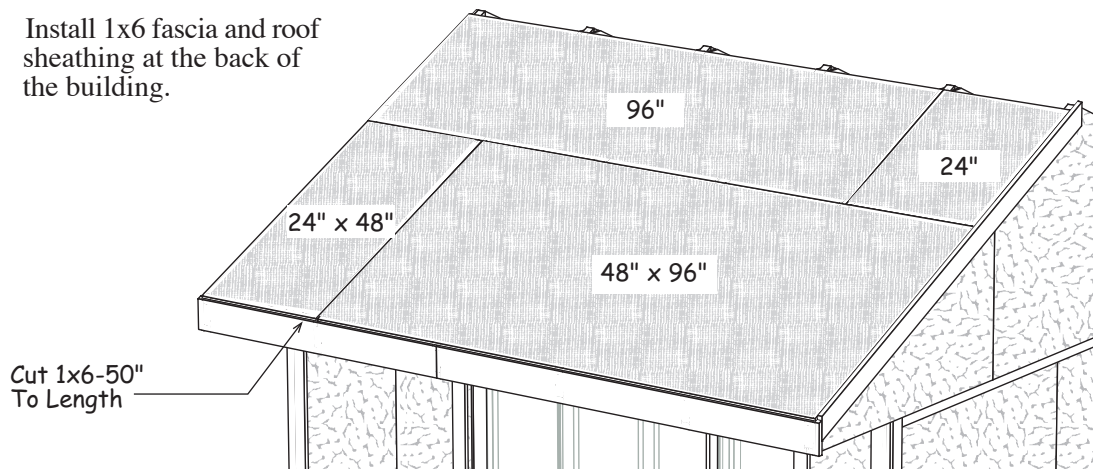
Step 17   Install Doors & Hardware
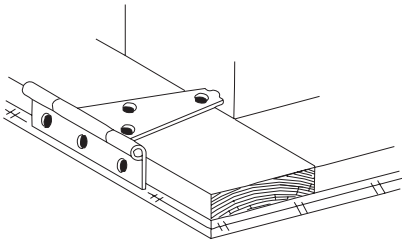
1. Lay the <u>left door</u> with the trim facing up. The siding on the left door <u>extends past the door trim</u>. See detail below.

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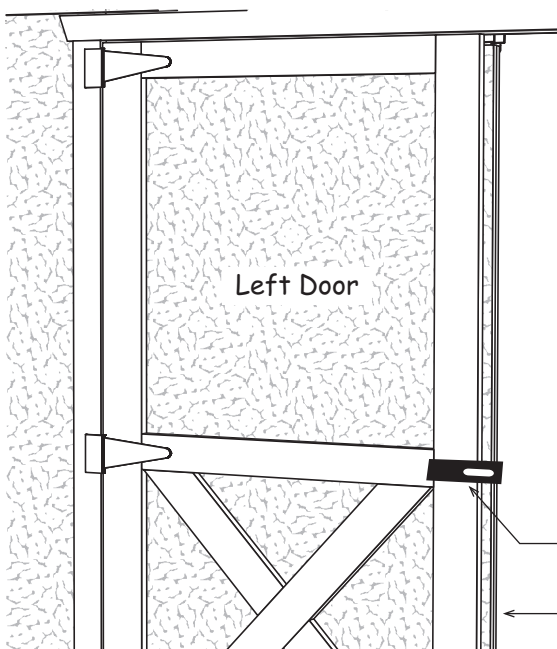
4. Before you fasten the hinges to the door trim, temporarily prop the doors in the opening. Leave a space at the top of the doors and between the doors and the side trim to allow room for the doors to expand when they absorb moisture.

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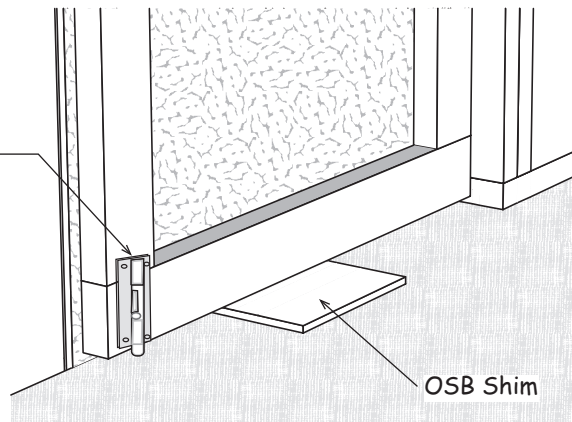
5. Install hinges to trim with 2" screws.

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