BEST BARNS
Quality Do-it-yourself Barn Kits

Assembly Book
Revised on September 28, 2022

EZ up

Northwood Deluxe   10'x10'

Manufactured by RBS Holdings, LLC
205 Arlington Drive   Greenville, PA   16125

IMPORTANT INFORMATION ABOUT YOUR KIT

Thank you for purchasing our kit. Please read the following information before beginning construction. Always check with your local HOA or building code office for any requirements or restrictions.

Floor: Wood flooring is sold optionally. You may choose to build your own or pour a cement pad.

Always wear safety glasses when cutting or nailing!

Tools Required:
Hand or Circular Saw	Level	Safety Glasses
Cordless Drill	Measuring Tape	Dust Mask
Hammer	6'-8' Ladder(s)	Phillips Screwdriver
Pencil		Framing Square

Additional Materials - **Not included in kit:**

Windows are purchased separately

Required: Shingles or metal roofing, Drip Edge, Roofing Nails or Screws, Paint

Optional: Caulk, Ridge Vent

Terminology:

Square - Confirm corners are at 90 degrees
Plumb - Confirm walls and trusses are straight vertically
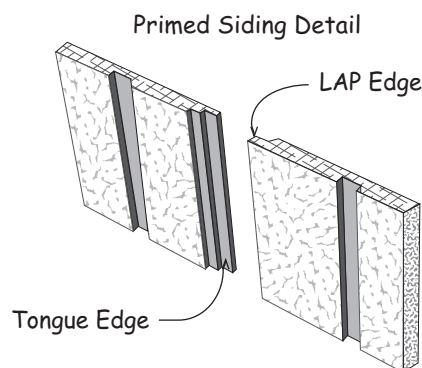Wall Plate - Top and bottom 2x4s used to frame walls
Tie Plate - 2x4s connecting wall sections together
Header - Spans top of door opening
OSB - Oriented Strand Board
LAP - Edge of siding that overlaps Tongue
Tongue - Edge of siding that is overlapped

Primed Siding Detail

LAP Edge

Tongue Edge

Organize:

Unpack all items & organize according to size and type. This will make items easier to find when instructed.

Review the parts list on the back page. Should there be missing items or sub-par material contact Best Barns Customer Service.

DO NOT discard any material including the pallet until your project is complete.

Assembly:

Review all instructions before you begin. Please follow steps carefully and in sequence for successful results.

If you have any questions we are happy to assist you. Please contact us at:

800-245-1577 - Mon - Fri 8AM - 5PM EST

**724-866-4357** - After hours and weekends

Email - questions@barnkits.com

| Material Purchased Separately						
10'x10' Building	6	bdl.	Roof Shingles	6	pcs.	Roof 'drip' edge
14'x10' Building	8	bdl.	Roof Shingles	7	pcs.	Roof 'drip' edge

General Construction Guidelines

Siding is made in sheets with grooves cut into the face, the long edge is beveled so that the siding overlays where they butt. This serves to hide where the panels join together and gives the appearance of one continuous piece of siding.

To identify which edge we want you to use, we will refer to the edge as either the 'LAP' Edge or the Tongue Edge.

LAP Edge

Tongue Edge
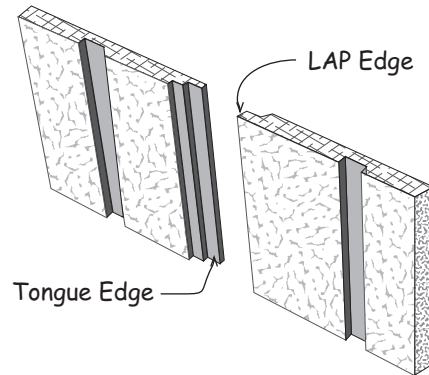
Be sure the wall frame is square. Measure the wall diagonally (corner to corner). Then measure the opposite corner. The measurements will be the same, if the wall is square.

Position all the siding panels on wall frame, tacking siding in place. When the siding panels are adjusted to fit properly, nail siding in position using 6d galv. nails. Space nails 8" apart.
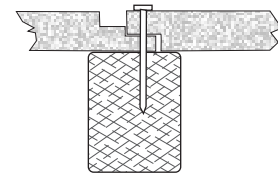
Paint the bottom edges of the siding around the perimeter of the building. Keep dirt, grass, mulch and snow away from the lower part of the siding. The siding manufacturer recommends 8" or more of clear space.

Wall Panel

Bottom Plate on Wall Panels
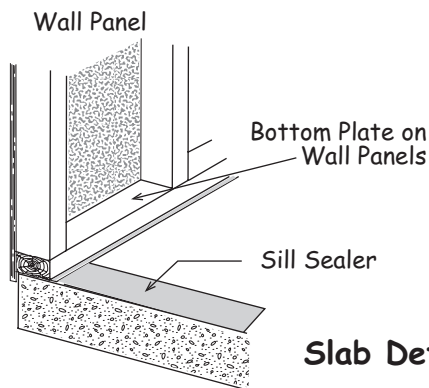
Sill Sealer

Slab Detail

Foundation Information

When using a concrete slab for a floor, install foam sill sealer as a moisture barrier between the concrete and the bottom wall plate.
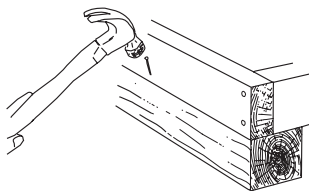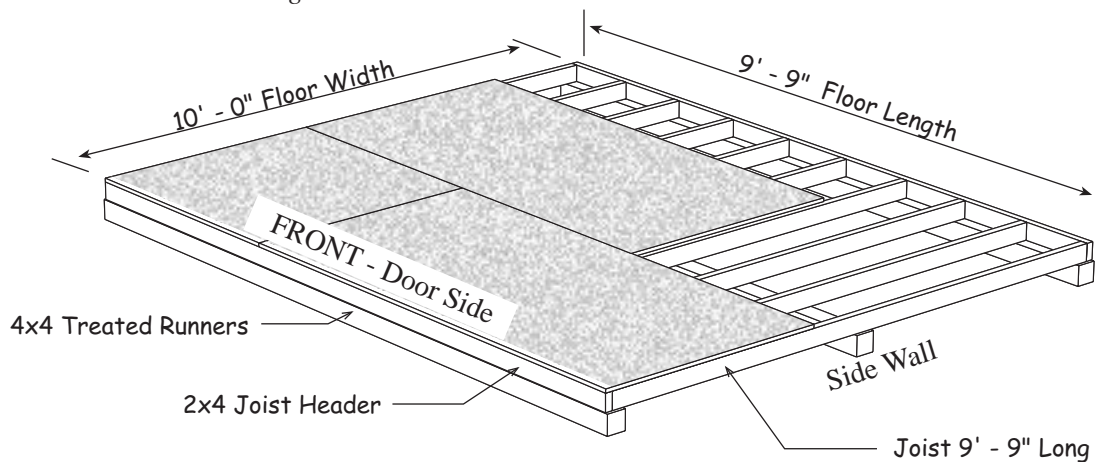
Constructing Details for Deluxe Floor System

Foundation size is 10"-0" x 9'-9". 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

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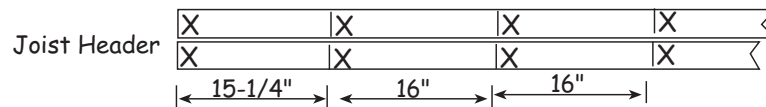
2. Cut 2x4-10' floor joists to 9'-9". *Treated lumber may be thicker than 1-1/2". Take this into account when cutting the length of floor joists. Shorten joist measurements if necessary to obtain 10'-0" building width.*

10' - 0" Floor Width

9' - 9" Floor Length

FRONT - Door Side

4x4 Treated Runners

2x4 Joist Header

Side Wall

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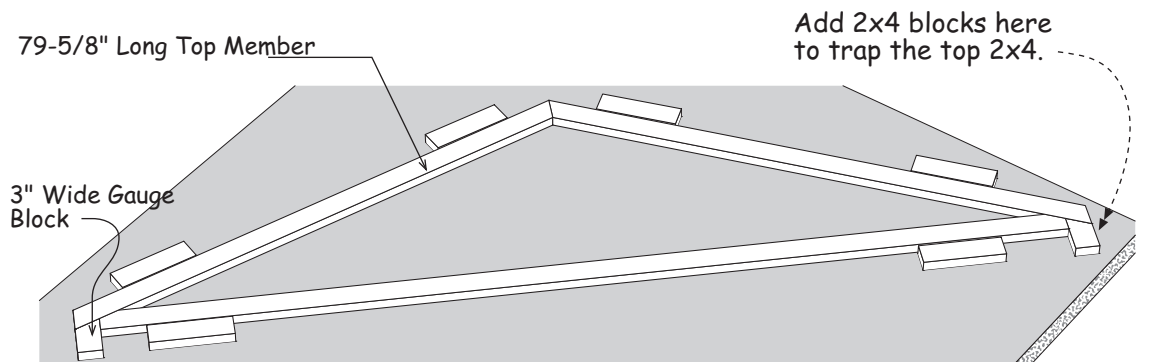
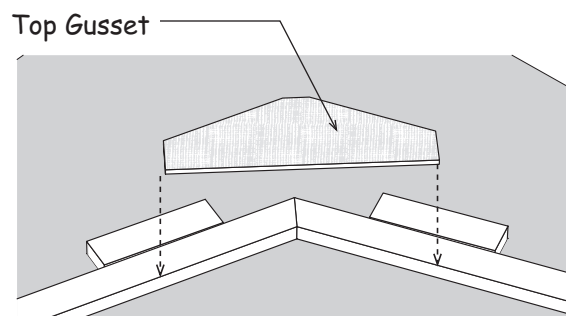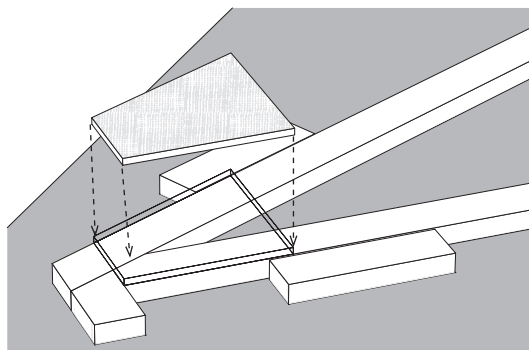| Material Description	10' x 10' shed	
2x4 Joist Headers	2 pcs.	10'
2x4 Floor Joist	9 pcs.	10'
4x4 Treated Runners	3 pcs.	10'
Flooring 5/8" or 3/4"	4 pcs.	4x8
Screw Floor Nails	1 lb.	8d
Galv. Box Nails	1 lb.	16d

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 with a brush between the 2x4 boards and the gusset. Nail the gusset to the 2x4s with 6d common nails. Use (14) fourteen 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) eight 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

Add 2x4 blocks here to trap the top 2x4.

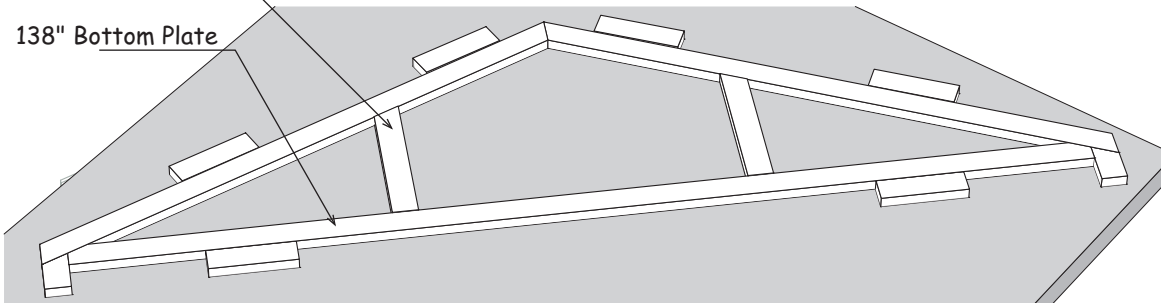3" Wide Gauge Block

DETAIL 'A'

Top Gusset

Step 2   Assemble Roof Gables

1. Position a 138" long 2x4 and (2) two 79-5/8" long 2x4s between the blocks.

2. Place (2) two 20-3/4" long gable studs between the top and bottom 2x4s. Insure the top and bottom are snug against top and bottom 2x4s. The siding will secure them in place.

20-3/4" Gable Studs

138" Bottom Plate

3. Starting from left end install a gable siding with the 'LAP' edge flush with end of gable. The siding should extend 3/4" below the lower 2x4. Nail siding to the frame with 6d galv. nails spaced 8" apart.

4. Install center and right panels. If necessary cut last panel flush with end of gable frame.
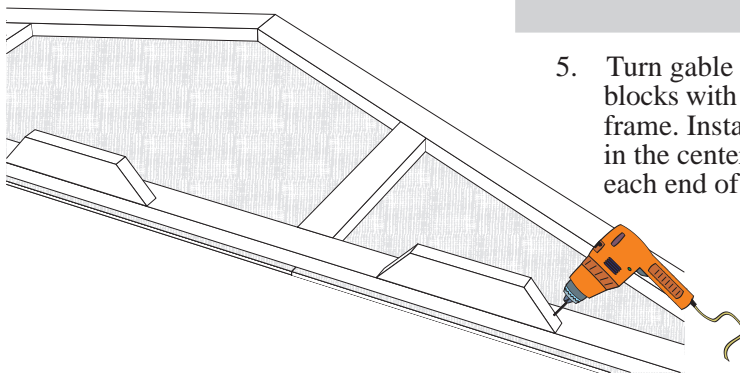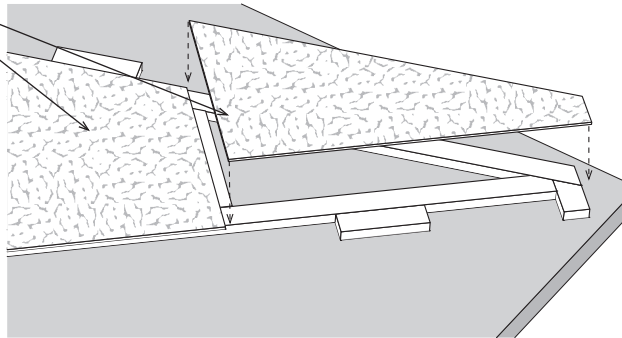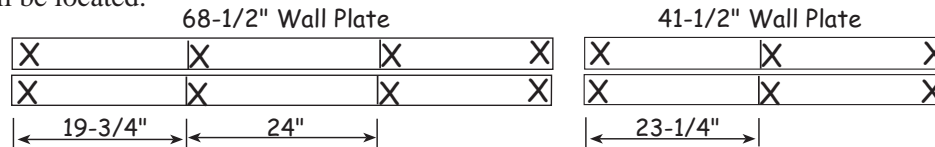
5. Turn gable frame over and install 18" long 2x4 blocks with angle ends to the bottom of the gable frame. Install blocks 21" from each end and one in the center. Use (1) one 2-1/2" long screw on each end of block..

6. Repeat steps to assemble another roof gable. Remove temporary 2x4 blocks.

Step 3   Assemble Back Wall

1. Locate (2) two 68-1/2" long 2x4 boards and (2) two 41-1/2" long boards ***Do NOT use 41" long boards***. 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
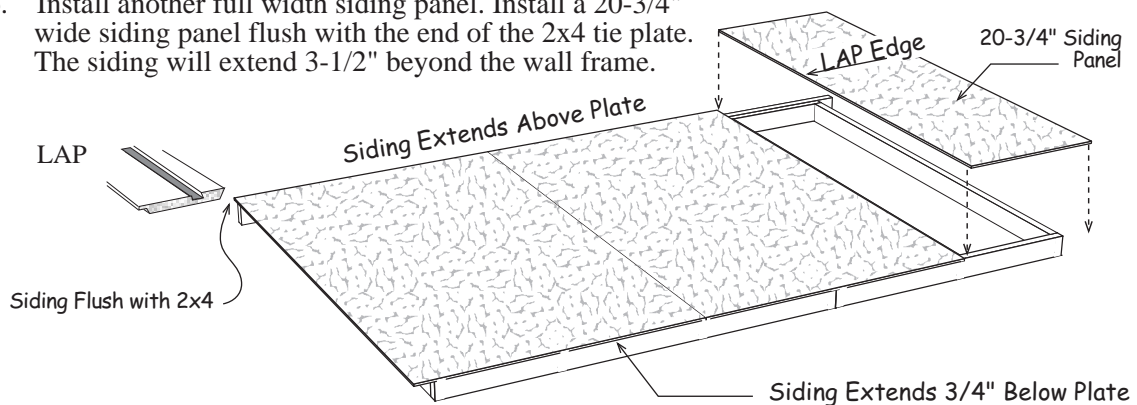
|← 19-3/4" →|← 24" →| |← 23-1/4" →|

2. Install 72" wall studs between the top and bottom plates. Assemble the frames with 10d sinkers, (2) two nails per stud. Nail both wall frames together with (4) four 10d sinkers (stagger nails on each side of the studs).

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 one each end. Use 10d sinkers spaced 16" apart.

72" Tie Plate

45" Tie Plate

68-1/2" Top Plate

3-1/2"

Wall Stud

133   133"
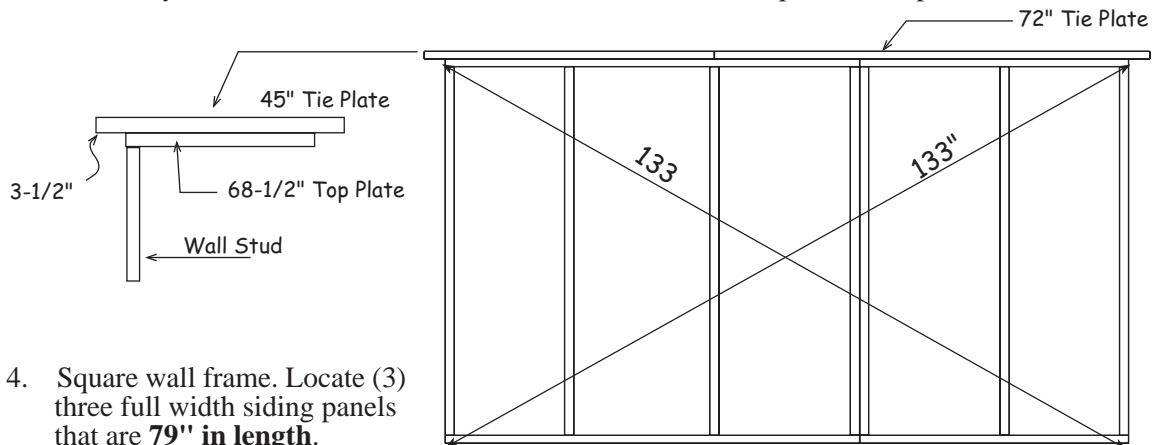
4. Square wall frame. Locate (3) three full width siding panels that are **79" in length**.

5. Install the first panel with the 'LAP' edge <u>flush with the end</u> of the 2x4 tie plate. The siding should extend 3/4" below the bottom plate and extend above the 2x4 tie plate. Use 6d galv. nails spaced 8" apart.

6. Install another full width siding panel. Install a 20-3/4" wide siding panel flush with the end of the 2x4 tie plate. The siding will extend 3-1/2" beyond the wall frame.

LAP Edge   20-3/4" Siding Panel

Siding Extends Above Plate

LAP

Siding Flush with 2x4

Siding Extends 3/4" Below Plate

Step 4   Assemble Side Wall Frames

1. Locate (2) two 69" long 2x4 boards and (2) two 51" long 2x4 boards. Position these boards together and indicate with 'X' marks where the wall studs will be located. Mark a 'C' anywhere on a 51" wall plate.

69" Wall Plate

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

|← 20-1/4" →|← 24" →|

51" Wall Plate

| X | X | X |
| X | X | C | X |

|← 23-1/4" →|
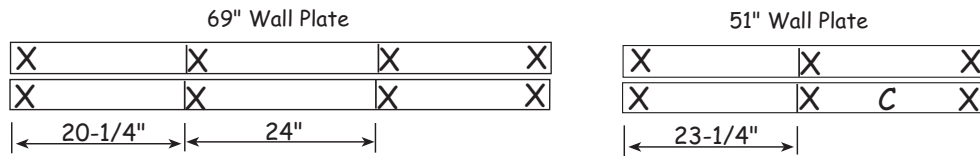
2. Install 72" wall studs between the top and bottom plates. Nail both wall frames together.

3. Install a 41" and 72" long 2x4s as tie plates over the top plate. The 2x4 tie plates will set back 3-1/2" from the end of the wall frame.
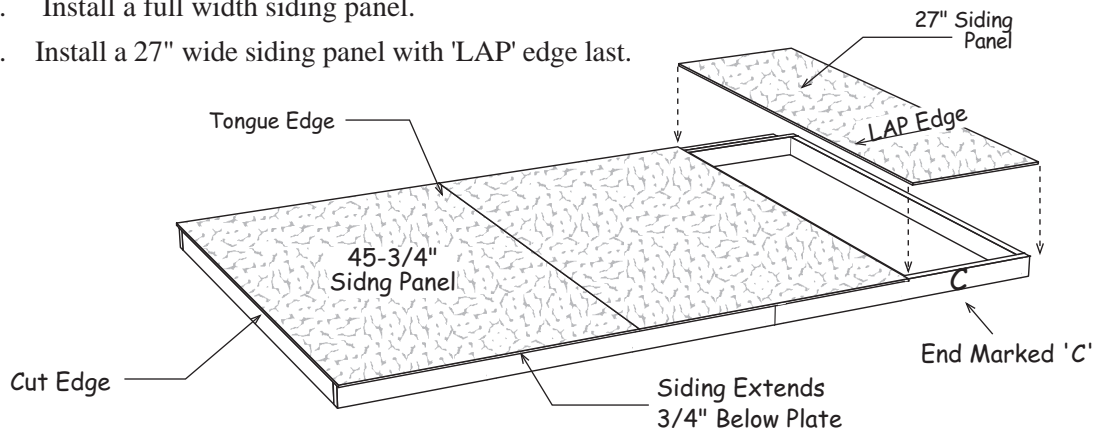
3-1/2"

41" Tie Plate

69" Top Plate

Wall Stud

72" Tie Plate

141-1/2"   141-1/2"
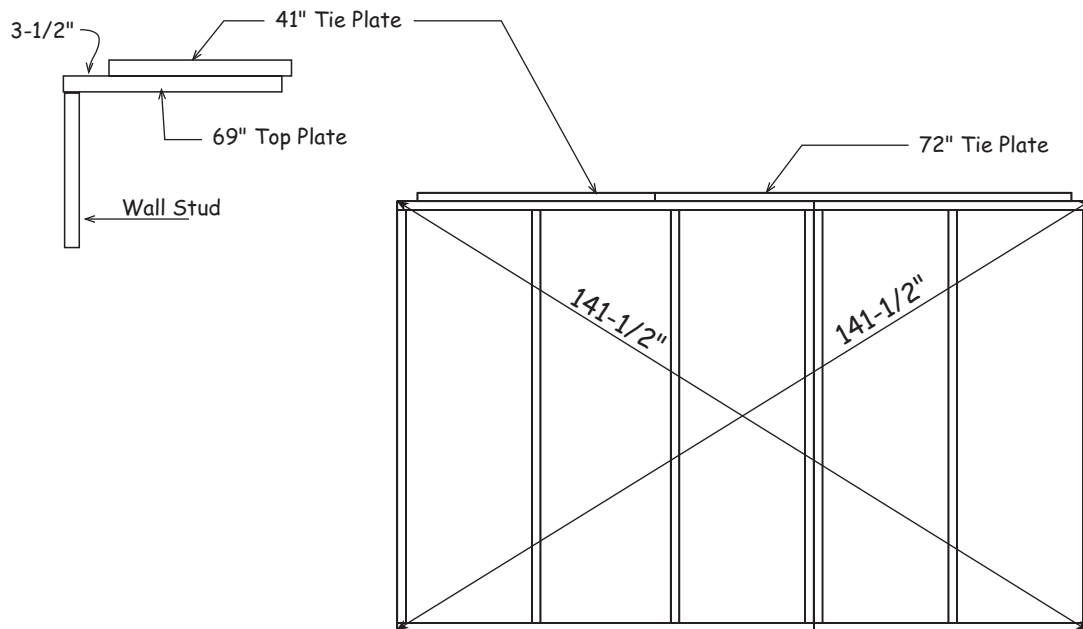
5. Repeat steps to assemble another side wall frame.

Step 5   Assemble Left Side Wall

1. Select one of the side wall frames. ***Orient the 'C' mark on the wall frame to the right***. Square wall frame.

2. Install a 45-3/4" x 77-1/4" siding panel, *with cut edge and Tongue edge*, on the left end of the wall. Siding should extend 3/4" below the bottom plate.

3. Install a full width siding panel.

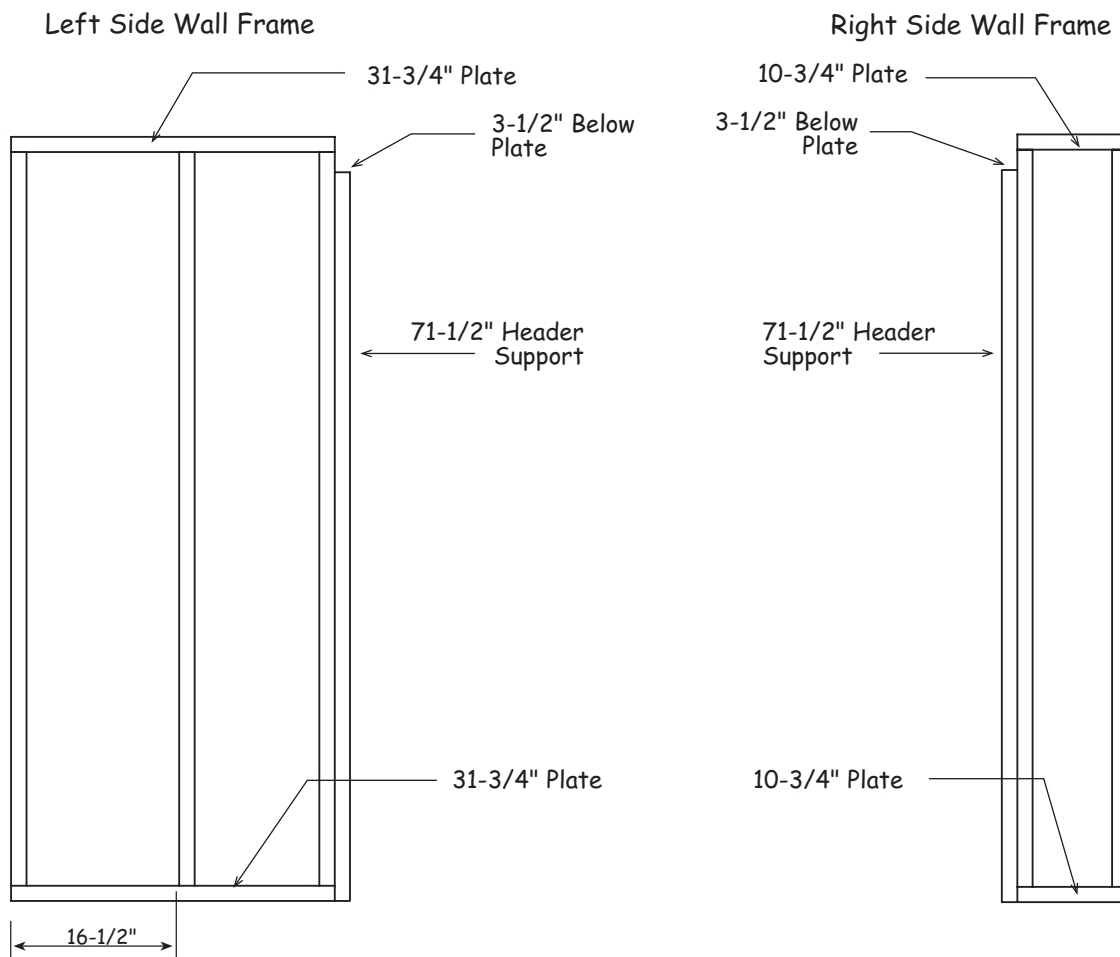4. Install a 27" wide siding panel with 'LAP' edge last.

27" Siding Panel

Tongue Edge

LAP Edge

45-3/4" Sidng Panel

C

End Marked 'C'

Cut Edge

Siding Extends 3/4" Below Plate

Step 6   Assemble Right Side Wall

1. Select the other wall frame. ***Orient the 'C' mark on the wall frame to the left.***

2. Install a 27-3/4" x 77-1/4" siding panel, *with cut edge and Tongue edge*, on the left end of the wall. Siding should extend 3/4" below bottom plate. Use 6d galv. nails.

3. Install a full width siding panel.

4. Install a 45" wide siding panel last.

Tongue Edge

LAP Edge

27-3/4" Siding Panel

C

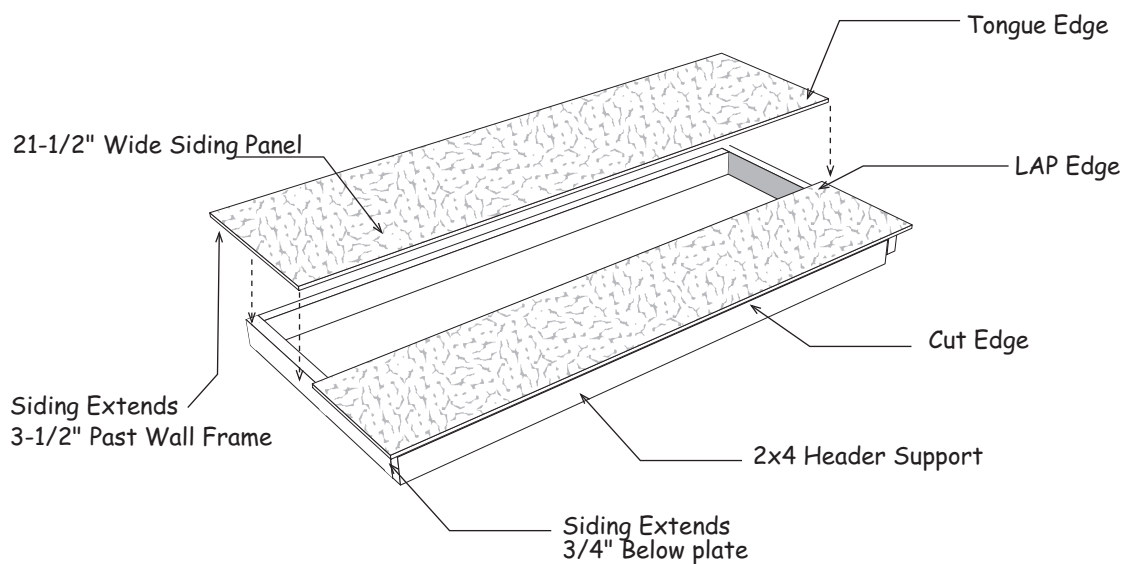End Marked 'C'
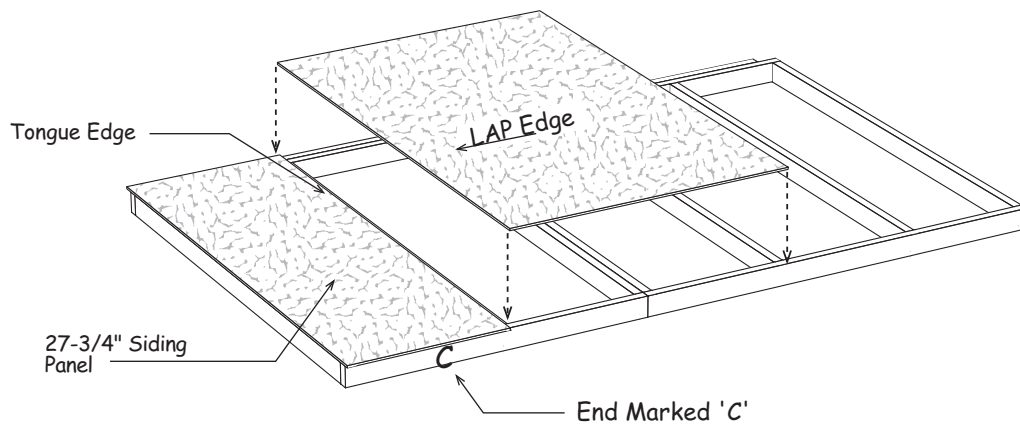
Step 7   Assemble Door Walls

1. Gather (3) three 72" wall studs and (2) two 31-3/4" long 2x4 wall plates. Assemble left side
    wall frame as shown below. Use 10d sinkers.

2. Attach (1) one 71-1/2" long 2x4 as a header support to end of frame. Top of 2x4 will be 3-1/2"
    below top plate. Use (4) four 10d sinkers.

3. Gather (2) two 72" wall studs and (2) two 10-3/4" long 2x4 wall plates. Assemble right side
    wall frame as shown below. Use 10d siners.

4. Attach (1) one 71-1/2" long 2x4 as a header support to end of frame. Top of 2x4 will be 3-1/2"
   below top plate. Use (4) four 10d sinkers.

Left Side Wall Frame

31-3/4" Plate

3-1/2" Below
Plate

71-1/2" Header
Support

31-3/4" Plate

16-1/2"

Right Side Wall Frame

10-3/4" Plate

3-1/2" Below
Plate

71-1/2" Header
Support

10-3/4" Plate

Step 8   Install Siding on Door Wall

☞ *If you want the door opening on the left, flip the walls and apply siding to the opposite side of the wall frames.*

1. Select the larger door wall frame.

2. Locate a pre-cut 16" wide siding panel that has a 'LAP' edge. Position this panel 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 other siding panel is installed.

3. Install a 21-1/2" wide siding panel. The siding will extend 3-1/2" beyond the wall frame.

Tongue Edge

21-1/2" Wide Siding Panel

LAP Edge

Cut Edge

Siding Extends
3-1/2" Past Wall Frame

2x4 Header Support

Siding Extends
3/4" Below plate

4. Install a pre-cut 16" wide siding panel with the 'cut' edge flush with the 2x4 header support. The siding will extend 3-1/2" beyond the wall frame and 3/4" below the bottom plate.

Siding Extends
3-1/2" Past Wall Frame

Cut Edge

71-1/2" Header
Support

Siding Extends
3/4" Below plate
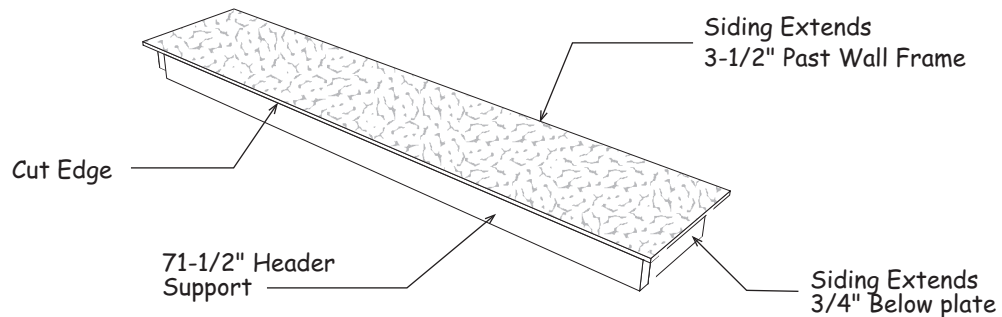
Step 9   Set Walls

1. The front and back walls set between side walls. Secure wall panels together at the corners. Use (4) four 10d coated nails per corner. Nail frames to the floor using 10d sinkers (or concrete anchor bolts, *not included*) 24" on center.

2. Install the 67-1/2" wide 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. Use 10d sinkers. Wall trim, installed later, will hide where the siding butts the front wall panels.
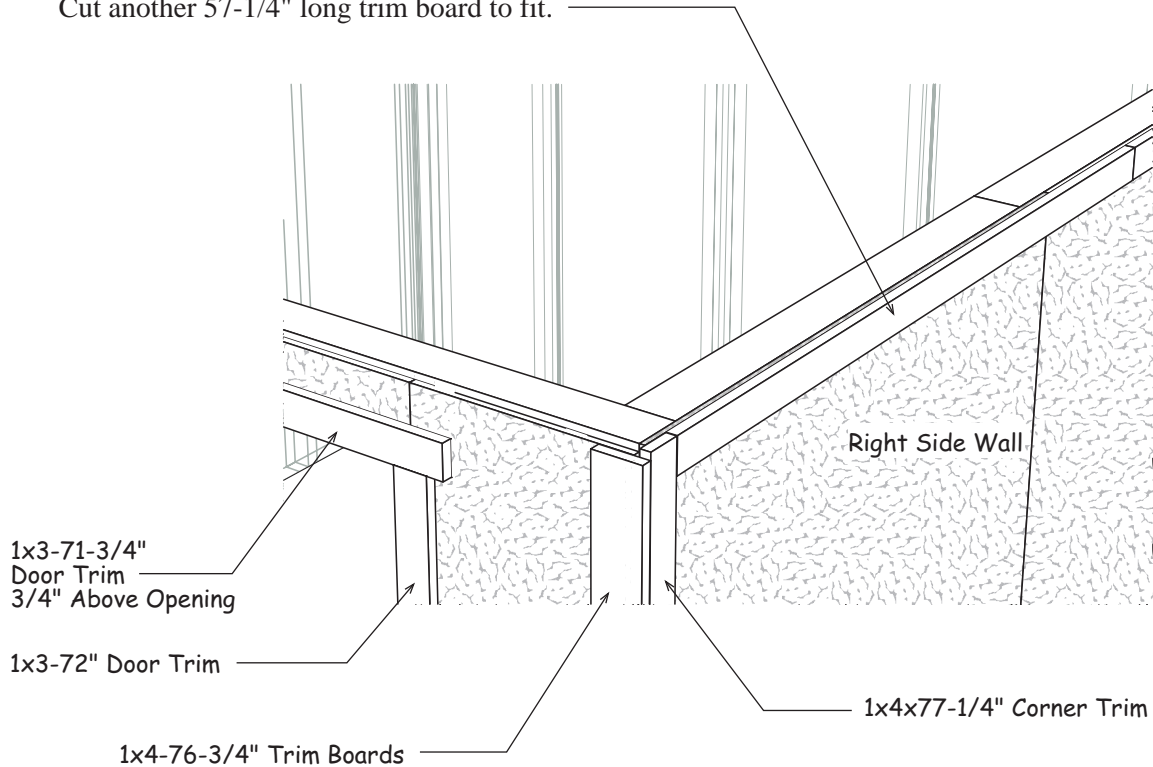
Siding Extends 1-1/2"
Above Header
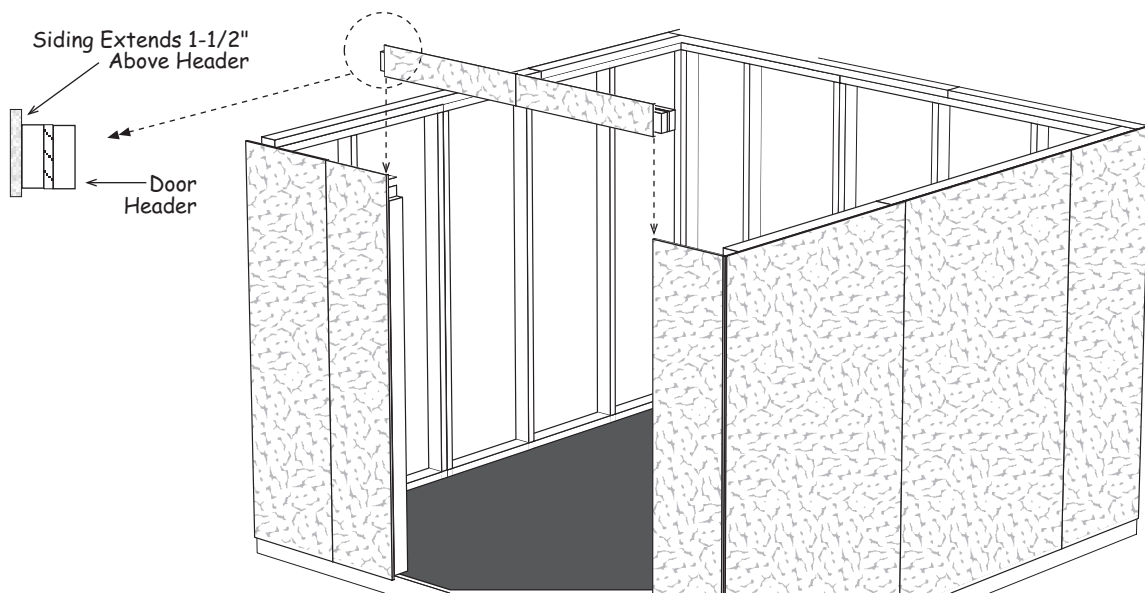
Door
Header

3. Install a 45" and 72" long 2x4s across the top of the front wall as tie plates. Use 10 d sinkers spaced 16" apart.

2x4-45"

2x4-72"

View From Inside
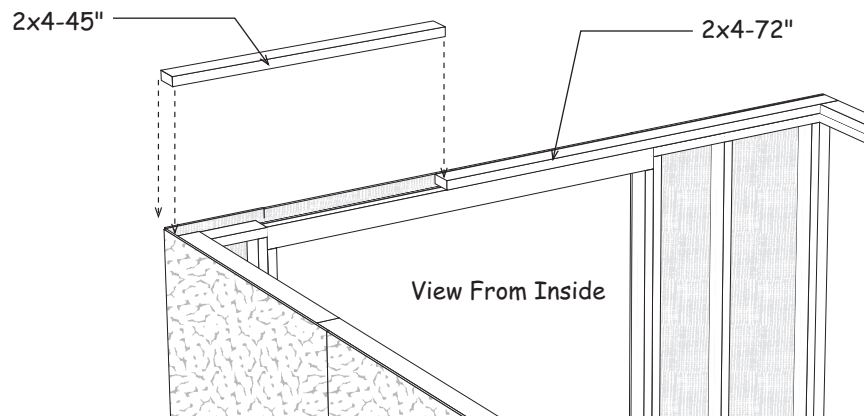
Step 10   Install Trim

☞   Use 6d galv. nails spaced 12" apart when installing trim.

1.   Position (2) two lx3x72" trim boards along each side of the door opening with top of boards 3/4" above door. Tack these boards with a couple nails; you may want to move the trim later when you install the doors.

2.   Install a 1x3x71-3/4" board, *that has angle cuts on both ends*, over the door opening. There should be 3/4" of siding exposed below this board.

3.   Install 1x4x77-1/4" trim boards at the front and rear corners of the side wall. Install the trim flush with face of the siding on the front and back walls and flush with bottom of siding.

4.   Install a 1x4x57-1/4" trim board flush with the top of the side wall and butted to corner trim. Cut another 57-1/4" long trim board to fit.

Right Side Wall

1x3-71-3/4"
Door Trim
3/4" Above Opening

1x3-72" Door Trim

1x4-76-3/4" Trim Boards

1x4x77-1/4" Corner Trim

5.   Install corner trim and top wall trim on the opposite side wall.

6.   Install 1x4x76-3/4" corner trim at the front corners. Install 1x4 flush with face of side wall trim and the bottom of the siding.

Step 11   Install Gable on Right Side Wall

1. Install the gable on the right side wall. The gable frame will butt against the back wall siding and extend over the front wall. Gable siding MUST extend over the 1x4 trim on the side wall. Secure gable to wall by nailing through the gable blocks with 10d sinkers.

2. Nail siding along the 1x4 trim board with 6d galv. nails.

3. Install the left gable.

Siding Overlaps Side Wall Trim

Right Gable

1x4 Trim

Back Wall

Right Side Wall
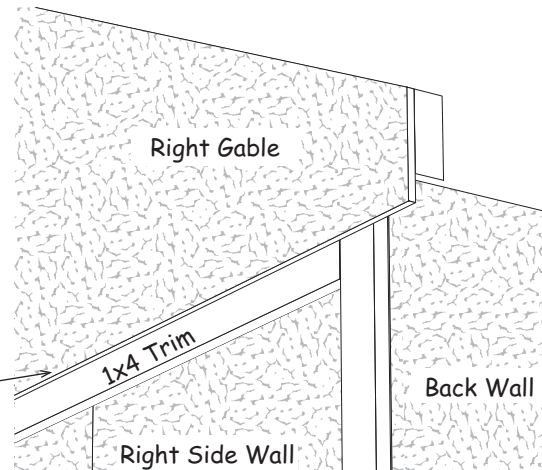
## Step 12A Install Trusses

1. Indicate with 'X' marks where the trusses will be located on the front wall. Measure from the <u>inside face of the gable</u> to the first 'X' mark. **Important:** When marking the back wall, place the 'X' mark on the same side of the line so your trusses are parallel when they are installed.

Detail 'B'

Right Gable

Inside of Building

21-3/8"

24"
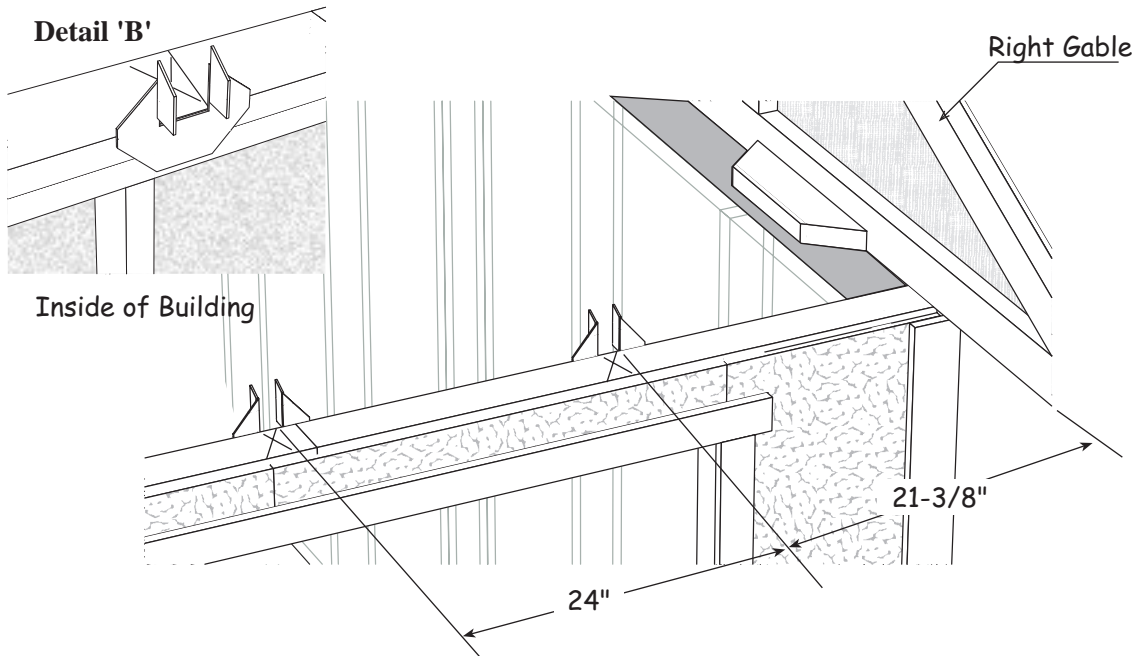
2. Using 1-1/2" hanger nails, install metal hangers to the 2x4 tie plate on the **<u>front wall only</u>**. The opening should line up with the 'X' mark, the bottom of the opening, flush with the 2x4 tie plate.See **Detail 'B'**.

Step 12B Install Trusses Continued

3. Place a truss in the front hanger and over the 'X' mark on the back wall. **Important**; the 2x4 should be centered, *not the wood gusset*, over the 'X' mark on the rear 2x4 plate. Check the truss spacing, front and back, to make sure the truss is parallel with gable.

4. Secure the truss to the back wall by screwing through the rear siding into the end of the truss with a 2-1/2" wood screw. You can also toe nail the truss to the 2x4 tie plate with 10d sinkers.

5. Install the rest of the trusses.
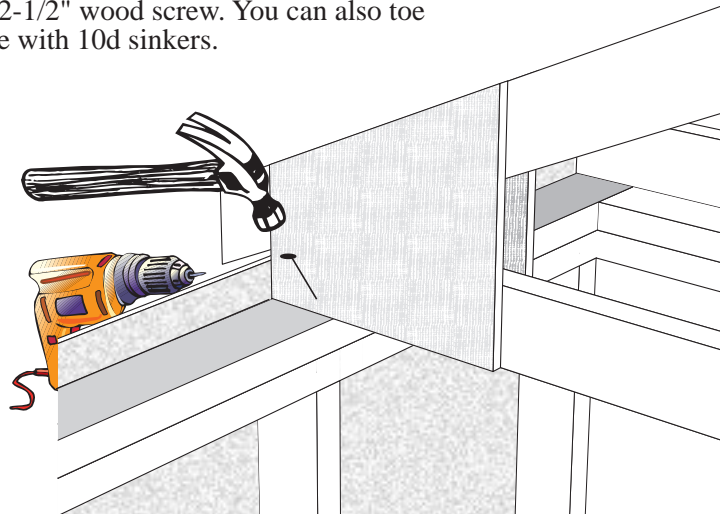
Step 13   Install Rear Soffit & Trim

1. Locate (3) three 3"x48-3/4" soffit panels with a beveled edge. Cut the first soffit panel along the "LAP" edge so the Tongue edge is centered to the second truss. Install under truss overhang with primed siding down and beveled edge flush with truss end. Use 6d galv. nails

2. Install next soffit. Cut last soffit to fit.

3. Install 1x4 trim boards on the rear corners.

Beveled Edge

1x4 Corner Trim
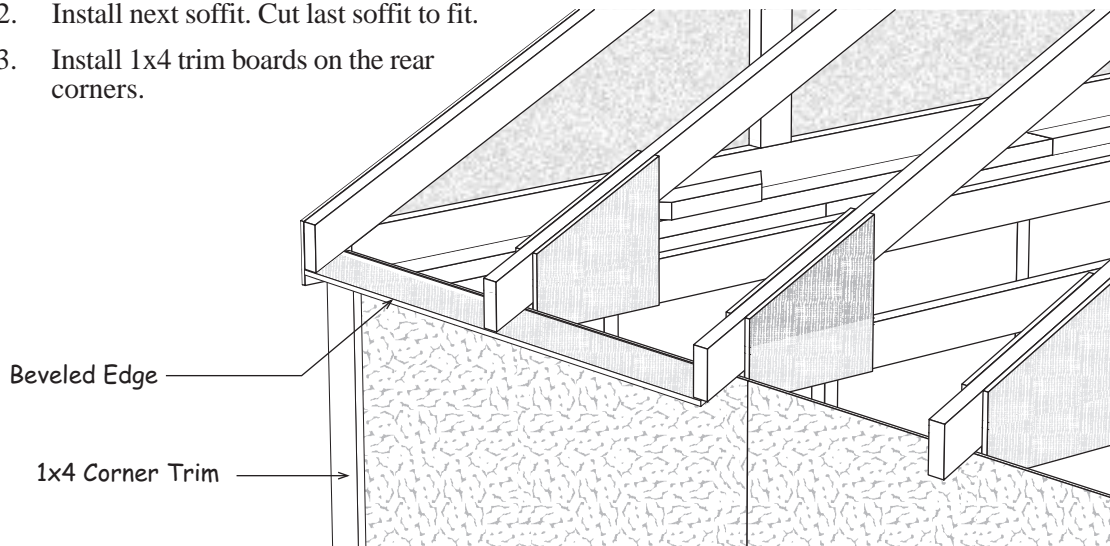
Step 14   Install Front Soffit

1. Secure the front of the trusses to the H1 hangers with 1-1/2" hanger nails.

2. Locate (4) four 21"x48-3/4" soffit panels under the front overhang. Cut the first soffit panel along 'LAP' edge so the tongue edge is centered on the second truss. Use 6d galv. nails.

3. Install another soffit panel. Cut the last panel to fit.
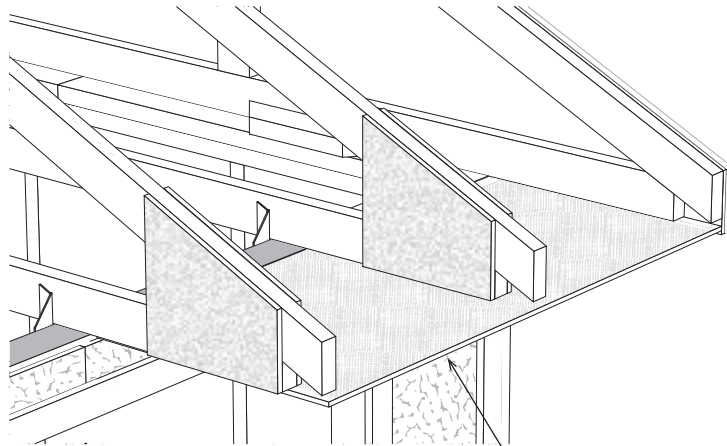
Siding/Soffit Panel

Step 15   Install Gable Trim

Install the 1x4 gable trim extending 1/2" above the 2z4 on the gable. When installed later, the roof sheathing will be flush with the top of the trim.
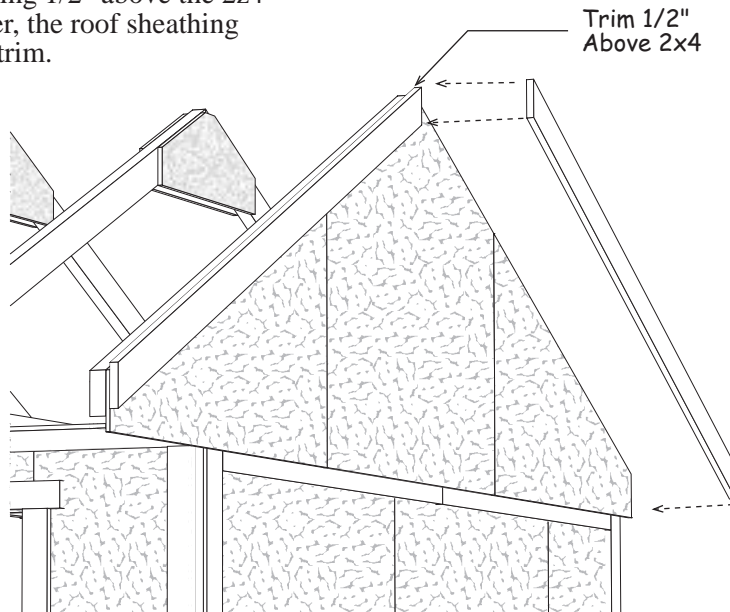
Trim 1/2"
Above 2x4

Step 16　Install Roof Sheathing

1. Cut a 73-1/2" long 1x6 fascia board to fit flush with the trim on the gable and meeting the center of the third truss. Install the fascia so the bottom edge of the roof sheathing will rest on the edge. *See detail below.* Use 6d galv. nails.

2. Install a 48" x 72" roof panel on the lower right corner. Use 6d common nails, spaced 12" apart.

3. Install a 48" long roof panel at the top. The top sheathing will be 1" below the peak of the trusses.

31-1/2" x 48"

48" x 72"

Roof Sheathing

2x4 Truss

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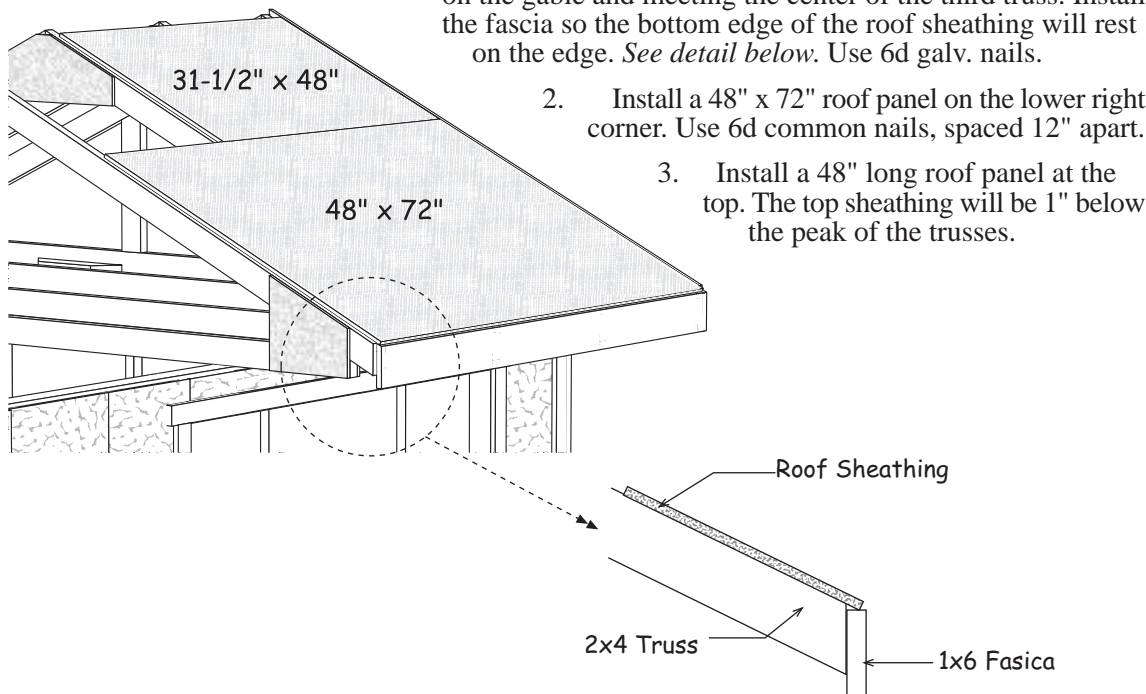
4. Cut to fit a 50" long 1x6 trim board and install flush with the gable trim on the left gable.

5. Install the remaining roof sheathing.

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

31-1/2" x 72"

31-1/2" x 48"

48" x 48"

48" x 72"

Cut 1x6-50"
To Length
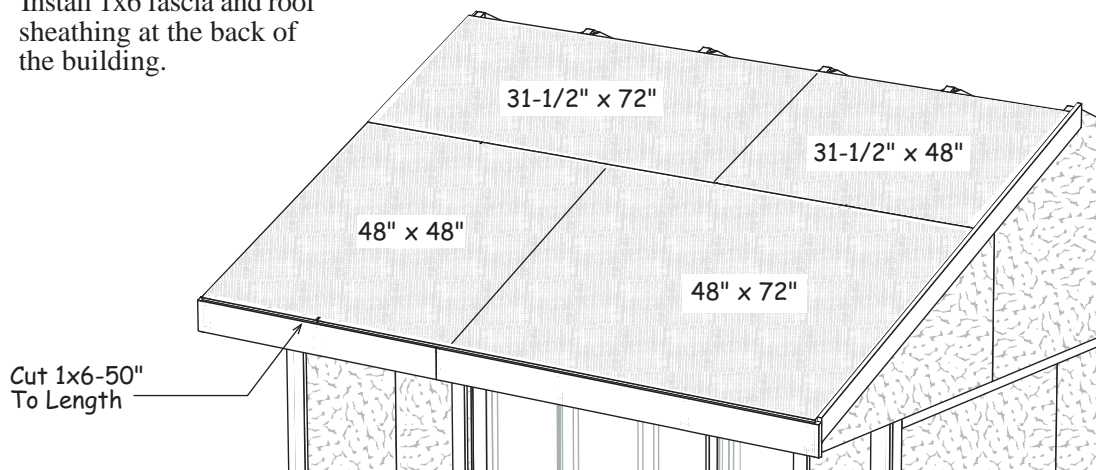
Step 17   Install Loft flooring

1. Gather (2) two 24" x 48" and (2) two 16-1/2" x 48" pieces of OSB sheathing. Install these panels over the bottom 2x4 truss member. Secure with 6d common nails.

2. Notch panels around gable studs.

3. Cut the first 24"x 48" panel to meet the center of the 2x4 truss.

16-1/2" x 48"
Sheathing

4. Repeat to install loft flooring at the other end of the building.
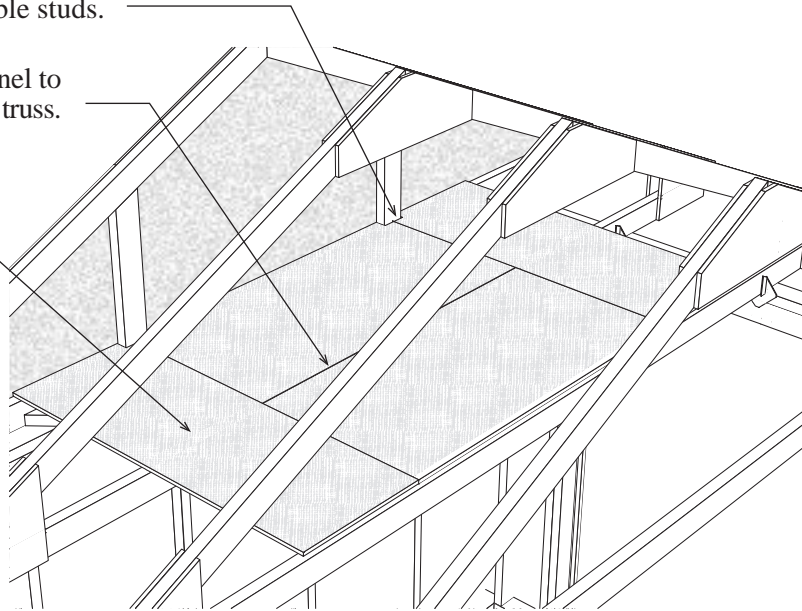
Install Roofing —
Not Supplied in Kit

1. Install metal roof edging perimeter of the roof area. If you are not installing shingles at this time, you can purchase felt paper to protect the roof sheathing. Install the felt paper before you install the metal roof edge.

Felt Paper

1x6 Gable Trim

1x6 Fascia

2. Install shingles according to the instructions on the wrapper.
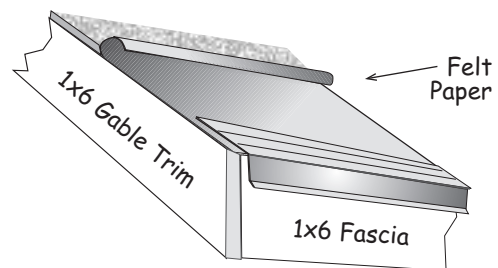
Building Tip: Install ridge vent in lieu of shingles caps. Ridge vent provides ideal ventilation, preventing heat and moisture from damaging your building or its contents.

Shingles

Truss   Air Space
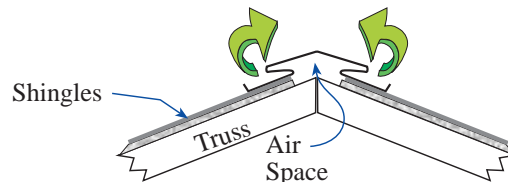
Step 17   Install Doors & Hardware
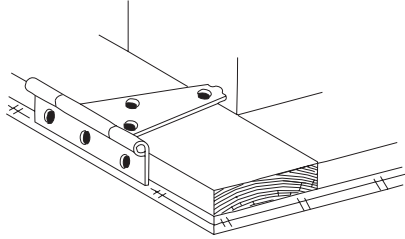
1. Lay the <u>left door</u> with the trim facing up. The siding on the left door <u>extends past the door trim</u>. See detail below.
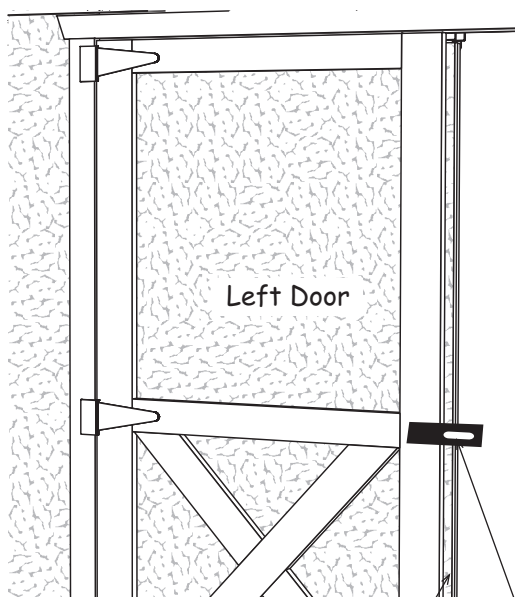
2. Install 5" hinges to the left side of the door frame. To position the hinge properly, hold the rectangular plate against the frame. Use 1-1/4" black screws.

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

4. Before fastening the hinges to the side trim, temporarily prop the doors in the opening. Leave a space at the top and bottom of the doors and between the doors and the side trim to allow room for the doors to expand due to humidity.

   If your door opening is out of square, the space around the doors will not be even. You can remove and re-position 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. Determine position of hinges and install to side trim with 2" screws.

6. Install door hasp on double doors. When properly installed the hasp will fold in half to receive locking latch and the screw heads will be covered.
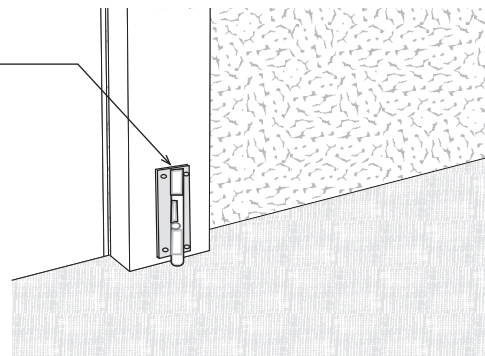
Left Door

Siding Extends Past Trim
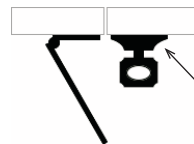
Fold Hasp to Cover Screws

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.

Northwood 10' x 10' Barn kit

Qty.	Description	Size	
	2x4 Framing		
6	Truss Material - bottom cords	138	"
12	Truss Material-top members	79	5/8"
30	Wall Studs/Plates	72	"
2	Header Supports	71	1/2"
2	Wall Plates	68	1/2"
4	Wall Plates	69	"
4	Wall Plates	51	"
2	Wall Plates	41	1/2"
2	Wall Plates	31	3/4"
2	Tie Plates	41	"
2	Tie Plates	45	"
2	Tie Plates	74	"
4	Gable Studs	20	7/8"
6	Gable Blocks - angle ends	18	"
2	Wall Plates	10	3/4"
2	Gauge Blocks for trusses	3" x 7"	
	7/16" OSB Material		
2	48" x 72" Roof Sheathing		
2	48" x 48" Roof Sheathing		
2	31-1/2" x 72" Roof Sheathing		
2	31-1/2" x 48" Roof Sheathing		
4	24" x 48" Loft Flooring		
4	16" x 48" Loft Flooring		
	Primed Soffit Material		
3	48-3/4" x 21" Front Soffit Panels		
3	48-3/4" x 3" Back Soffit Panels		
	Wood Gussets		
8	9-1/2" x 24" Wood Gussets		
16	12" x 12" Wood Gussets		

Packing List

Qty.	Description	Size	
	1x6 Fascia		
2	1x6 Fascia	73	1/2"
2	1x6 Fascia	50	"
	Trim		
4	1x4 Gable Trim	79	5/8"
2	1x4 Corner Trim	79	"
2	1x4 Corner Trim	76	3/4"
4	1x4 Corner Trim	77	1/4"
2	1x3 Door Trim	72	"
1	1x3 Door Trim	71	3/4"
4	1x4 Wall Trim	57	1/4"
	Pre-built Components		
2	32" x 72" Barn Doors		
1	Pre-built 67-1/2" Door Header		
	Hardware		
3	lb. 10d Sinkers	6	5" Door Hinges
4	lb. 6d Galv. Nails	2	Barrel Bolts
4	lb. 6d Common	1	Door Latch
1	lb. Hanger Nails	1	Bottle Glue
48	Hinge Screws	2	Screw Bits
4	H1 Truss Hangers	25	2-1/2" Screws
	LP Wall Siding		
2	48-3/4" x 77-1/4"	2	48-3/4" x 79"
1	45-3/4" x 77-1/4"	1	20-3/4" x 79"
1	27-3/4" x 77-1/4"	1	45" x 77-1/4"
1	21-1/2" x 77-1/4"	1	27" x 77-1/4"
1	16" x 77-1/4"	1	16" x 77-1/4"
	LP Gable Siding		
2	48-3/4" x 39-1/2" high		
4	48-3/4" x 28" high		