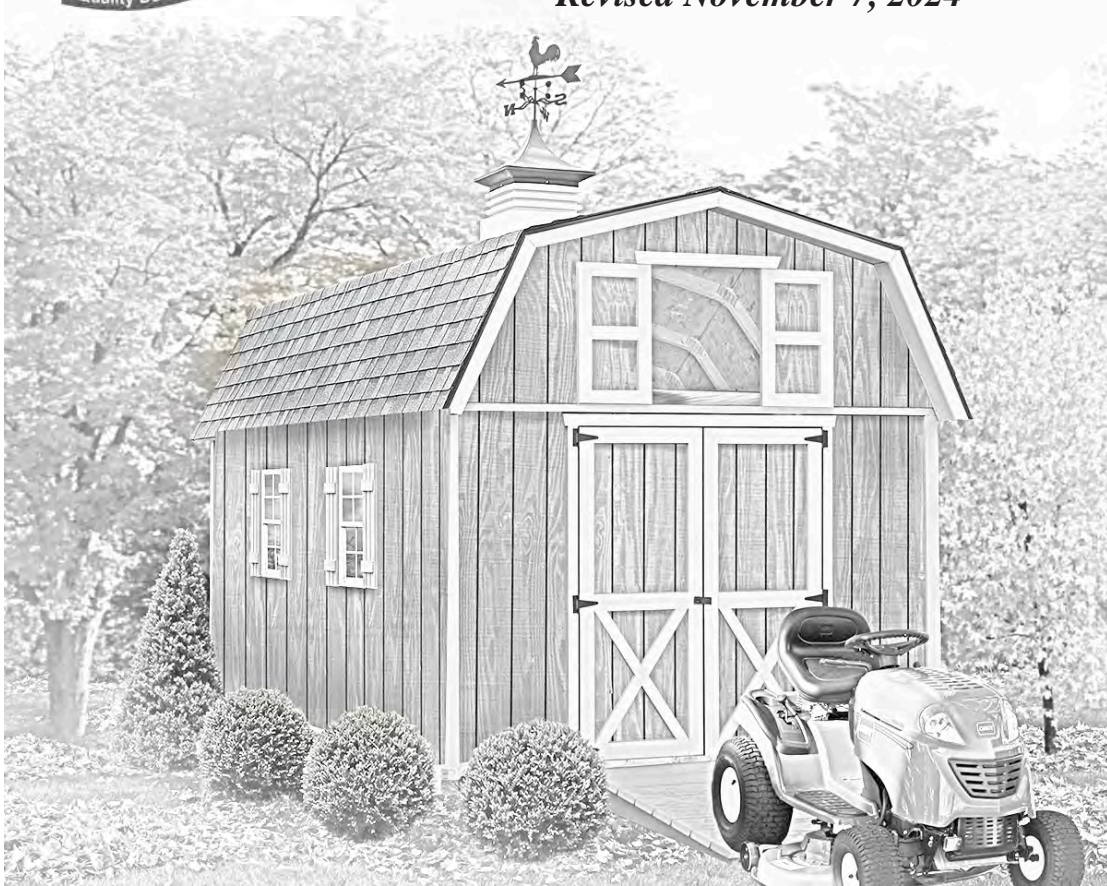




Best Barns Assembly Book

Revised November 7, 2024



the Woodville

10' x 16'

Manufactured by RBS Holdings, LLC

205 Arlington Drive

Greenville, PA 16125

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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

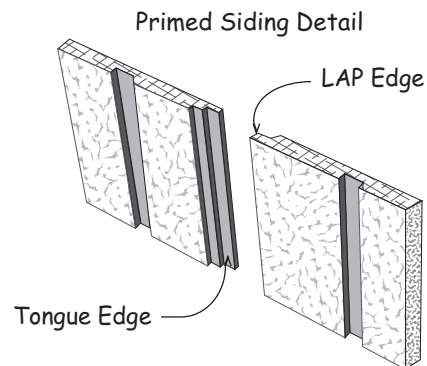
Tie Plate - 2x4s connecting wall sections together

Header - Spans top of door opening

OSB - Oriented Strand Board

LAP - Edge of siding that overlaps Tongue

Tongue - Edge of siding that is overlapped



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

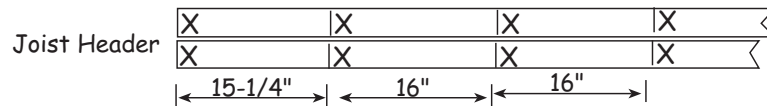
Constructing Details for Deluxe Floor System

Deluxe floors include 4x4 runners, standard floors do not

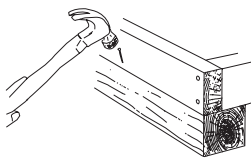
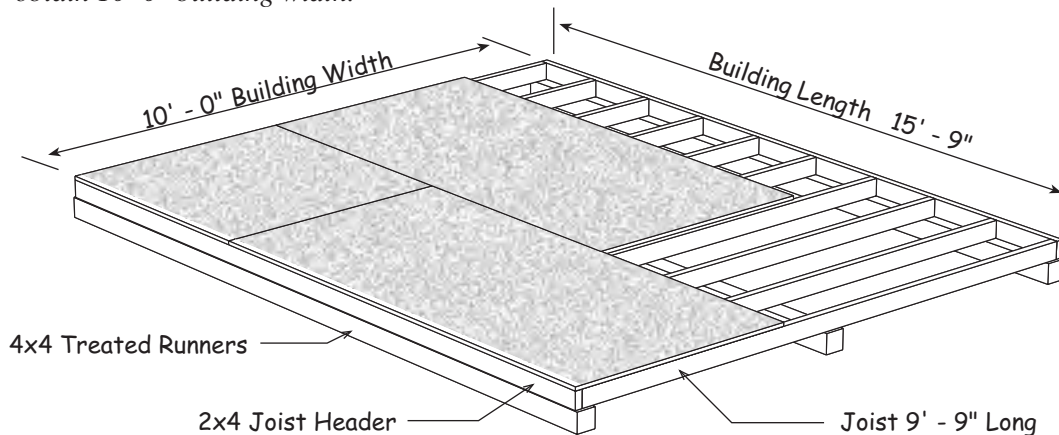
Foundation size is 10'-0" x 15'-9". Check local building codes in your area, the construction may have to change. For a concrete slab, install sill sealer as a moisture barrier between the concrete and the wall plates. Foam sill sealer can be purchased at home centers in rolls 3-1/2" or wider.

1. Cut 2x4-16' joist headers to 15' - 9".

Layout for 16" on center joist spacing. 'X' marks where floor joist will be placed.



2. Cut 2x4-10' floor joist 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.*



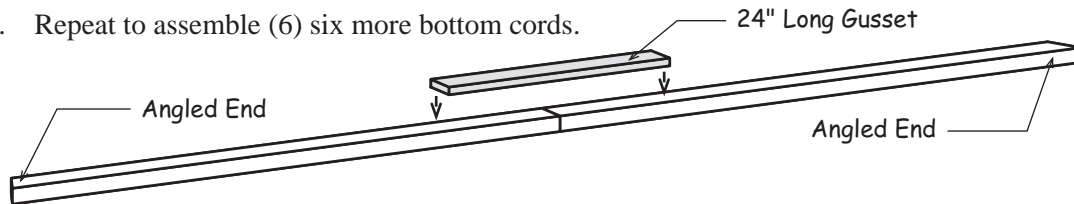
Nail the 2x4s to the 4x4 runners to keep the 2x4 frame from moving.

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 when the floor is square.

Material Description	10' x 16' shed
2x4 Joist Headers	2 pcs. 16'
2x4 Floor Joist	13 pcs. 10'
4x4 Treated Runners	6 pcs. 8'
Flooring 5/8" or 3/4"	5 pcs. 4x8
Screw Floor Nails	2 lb. 8d
Galv. Box Nails	1 lb. 16d

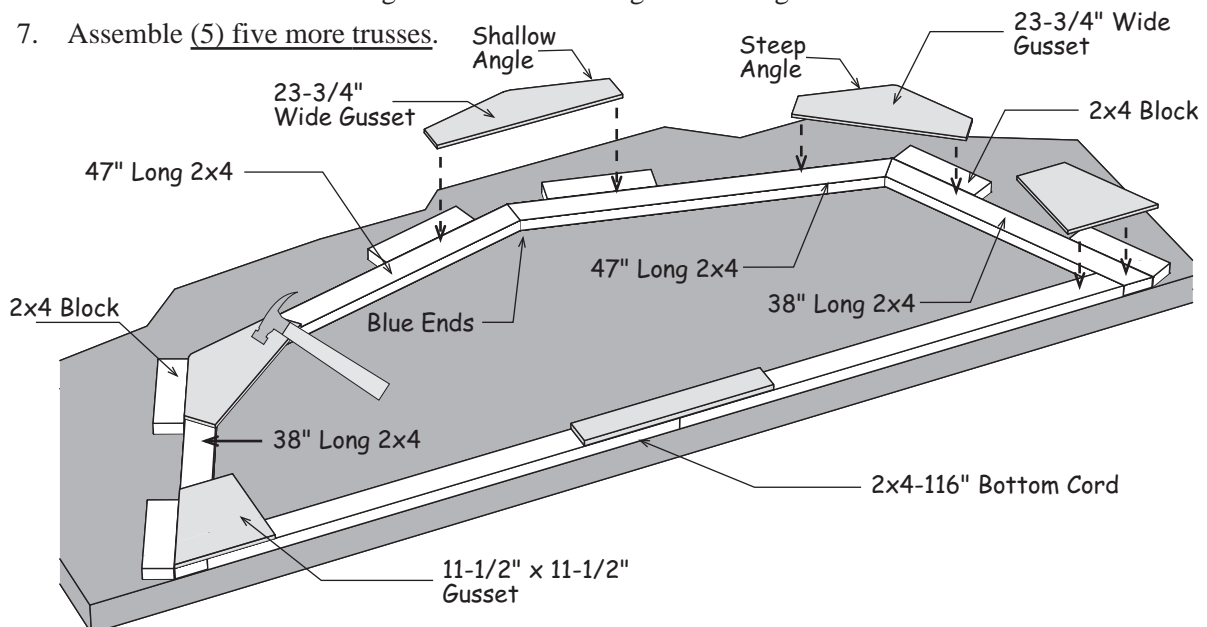
Step 1 Assemble 116" Bottom Cords

1. Locate (2) two 58" long 2x4s with an angle cut on one end. Butt the square ends together and secure together with (1) one 24" long 3/4" thick gusset to make a 116" long bottom cord. Use (12) twelve 6d common nails evenly spaced.
2. Repeat to assemble (6) six more bottom cords.




Step 2A Assemble Trusses

1. Locate (2) two 47" long 2x4s marked with a blue end and (2) two 38" long 2x4s with angle cuts on both ends. Position these boards as shown below. Place a bottom cord between boards.
2. Hold truss parts in place by temporarily screwing 2x4 blocks to the floor. There are 8"-10" long 2x4s which may have angle cuts for this purpose. Use 2-1/2" wood screws.
3. Secure the 47" long boards with blue ends together with a 23-3/4" wide OSB gusset with shallow angles. Nail the gusset with (16) sixteen 6d common nails. Space nails evenly.
4. Secure the 47" and 38" long boards together with (2) two 23-3/4" wide gussets with steep angles. Use (16) sixteen 6d common nails. Space nails evenly.
5. Secure the truss bottom legs to the bottom cord with 11-1/2" x 11-1/2" gussets. Use (12) twelve 6d common nails. Space nails evenly.
6. Turn truss over and install gussets and a 24" long 3/4" thick gusset.
7. Assemble (5) five more trusses.

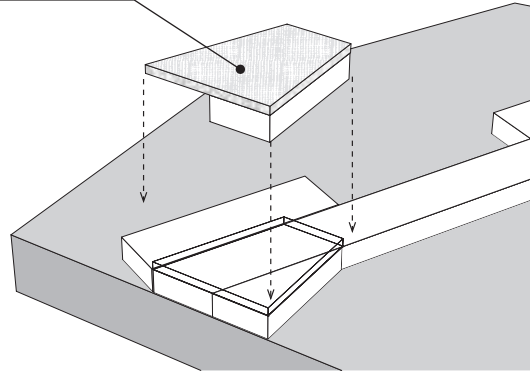


Step 2A Assemble Trusses Continued

8. Assemble another truss without a bottom cord. Locate OSB gussets with a 2x4 block attached to one side.
9. Attach this block/gusset to the bottom of each truss leg. Secure to leg with 6d common nails.
10. Turn truss over and apply (5) five gussets.

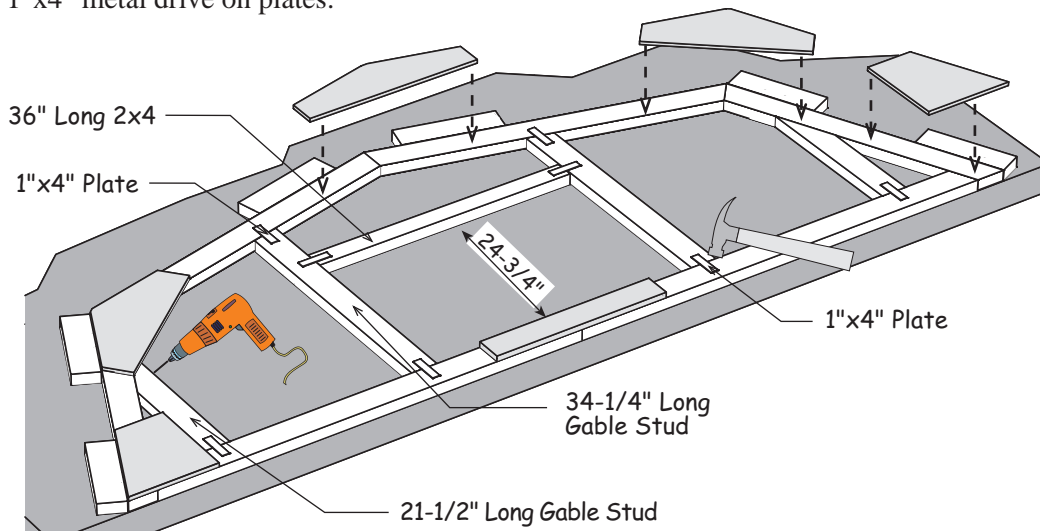
 *Do Not remove 2x4 blocks from floor until gables are completed.*

OSB Gusset with 2x4 Block

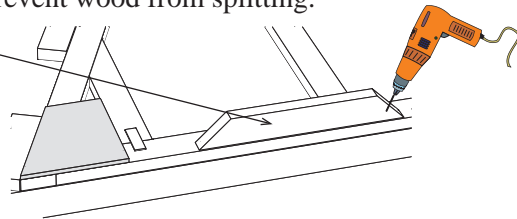


Step 3A Assemble Front Gable


1. Assemble another truss with a bottom cord. **ONLY** apply gussets on one side.
2. Locate (2) two 34-1/4" long 2x4s with angle cut on one end and (1) one 36" long 2x4. Position angled boards as shown. Space the boards 36" apart. It may be necessary to trim the length to get correct spacing. Position the 36" board 24-3/4" from bottom cord. Secure boards with 1"x4" metal drive on plates.




3. Locate (2) two 21-1/2" long 2x4s and install at both ends of gable. Secure with a 2-1/2" wood screws and 1"x4" plates as shown. Pre-drill to prevent wood from splitting.
4. Screw (2) two 24" long 2x4 blocks with angle cuts on both ends flush with bottom of the 2x4 bottom cord. Position each block 20" from each end of gable. Use (2) two 2-1/2" screws.

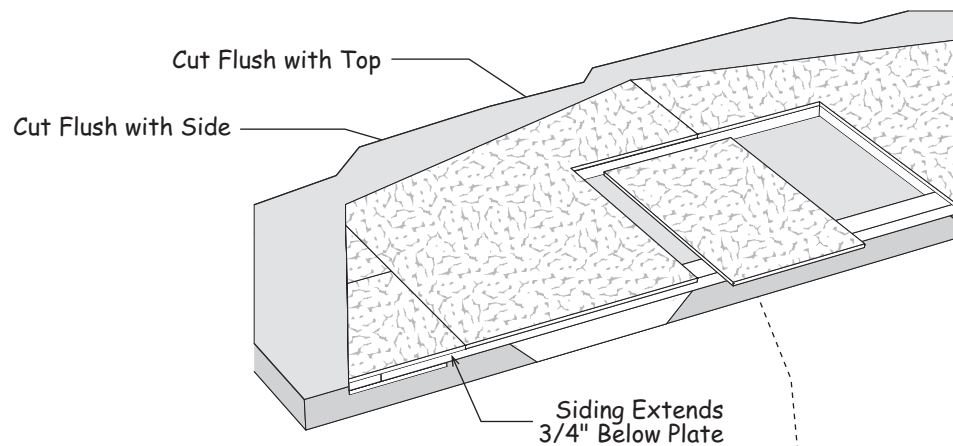


Step 3B Assemble Front Gable Continued

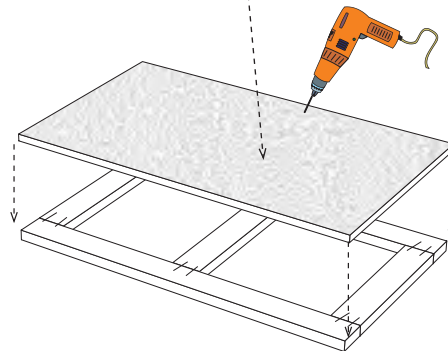
 *If you don't need loft access from the outside, attach loft door frames to the gable to create a decorative look and weather tight storage area.*

 *Tip: Slide gable over edge of work area so the 24" long 2x4 blocks are past the edge. Place pieces of OSB under framing where nailing to keep studs from being knocked loose when nailing.*

5. Turn the gable over. Locate pre-cut gable siding. Starting from the left install the siding extending $\frac{3}{4}$ " below the bottom cord. Insure the siding does not extend past the top of the frame. **IMPORTANT: Do not nail to frame until you have cut out siding for the doors.** Mark and cut so siding is flush with top and left side of opening. Nail siding to frame using 6d galv. nails spaced 8" on center. Lay out next siding panel, do not nail, and repeat cut for right side of door opening. Nail remaining siding to frame.



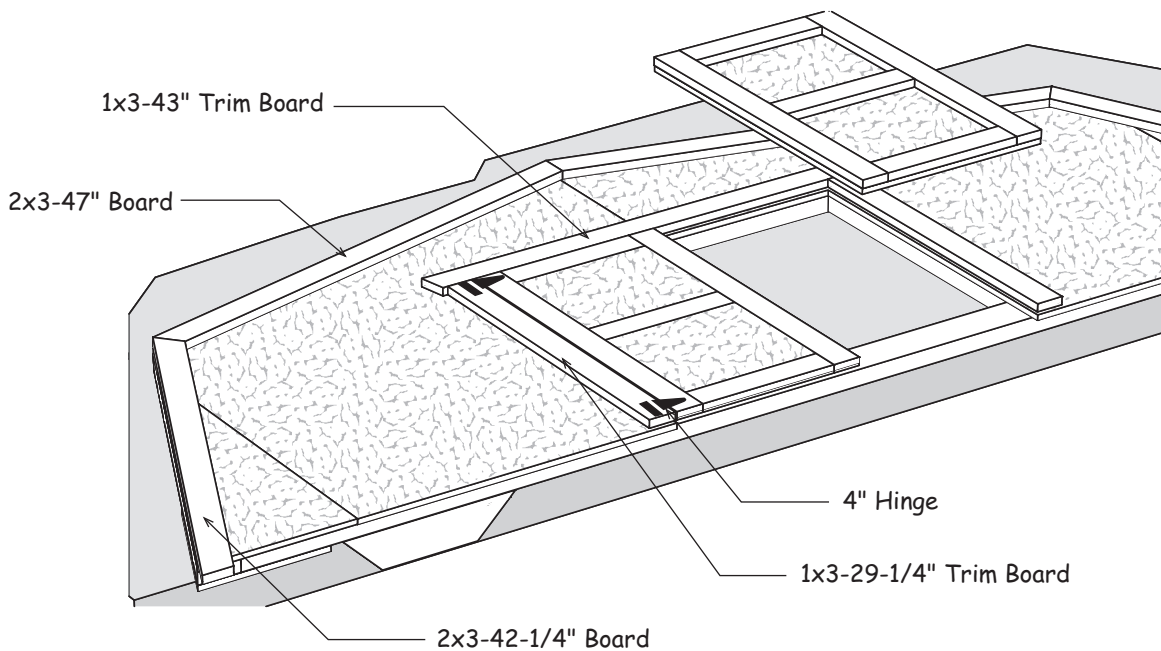
6. Assemble the loft doors. The loft door frames are temporarily held together with corrugated fasteners, this is the back side of the door frame. Place the doors on level surface, face side down. Cut the siding from above step to the size of the door frame. Secure the siding panel to the frame with 1" screws provided.



Step 4 Install Front Gable Overhang and Front Loft Doors

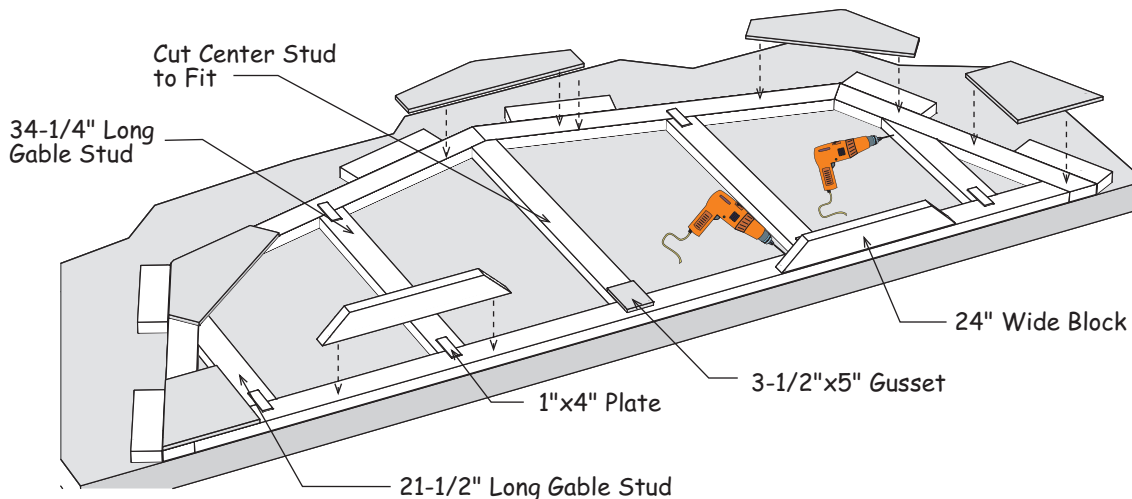
 *If loft doors are to be decorative install door trim and frames over siding with 6d galv. nails.*

1. Apply 47" long 2x3 boards to the front gable. Install flush with the top of the gable frame. Use 10d sinkers spaced 6" apart.
2. Install a 42-1/4" long 2x3 at the sides of the gable, flush with the frame. Board will extend below siding. Use 10d sinkers.
3. Install 29-1/4" long 1x3 trim boards on each side of the loft door opening. Install a 43" long trim board centered across the top. Use 6d galv. nails spaced 8" apart.
4. Install loft doors using 4" hinges and 1-1/4" long black hinge screws. The screws have a #2 square head. Install barrel bolts to the inside top of the doors to secure doors when closed. When door is closed mark where bolt will hit 2x4 gable frame. You will need to drill a 1/4" hole into the underside of the 2x4.



Step 5 Assemble Rear Gable

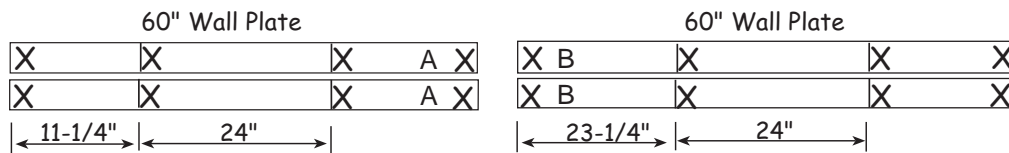
1. Select (2) two 47" long 2x4s, (2) two 38" long 2x4s with angle cuts on both ends, (2) two 58" long 2x4s with angle cuts on one end and all necessary gussets.
2. Place all 2x4s as previously done with trusses.
3. Select a 42" long 2x4 center stud with double angle cuts on one end and cut to fit between ridge and bottom cord. Secure to bottom cord with a 3-1/2"x5" OSB gusset and a 24" wide gusset at top.
4. Install (2) two 34-1/4" long 2x4s with angle cut on one end. Secure to the gable and bottom cord with a 1"x4" metal plate at bottom and top.
5. Install (2) two 21-1/2" long 2x4s with angle cut on one end. Secure to the gable and bottom cord with a 1"x4" metal plate at the bottom and a 2-1/2" screw at the top. Pre-drill to prevent wood from splitting.
6. Install gussets at ends.
7. Install (2) two 24" long 2x4s with angle cuts at both ends with 2-1/2" screws.



8. Turn gable over and apply pre-cut siding. Starting from left install siding extending 3/4" below bottom cord. Insure siding doesn't extend above the top frame.
9. Remove temporary 2x4 blocks and set all trusses and gables aside.

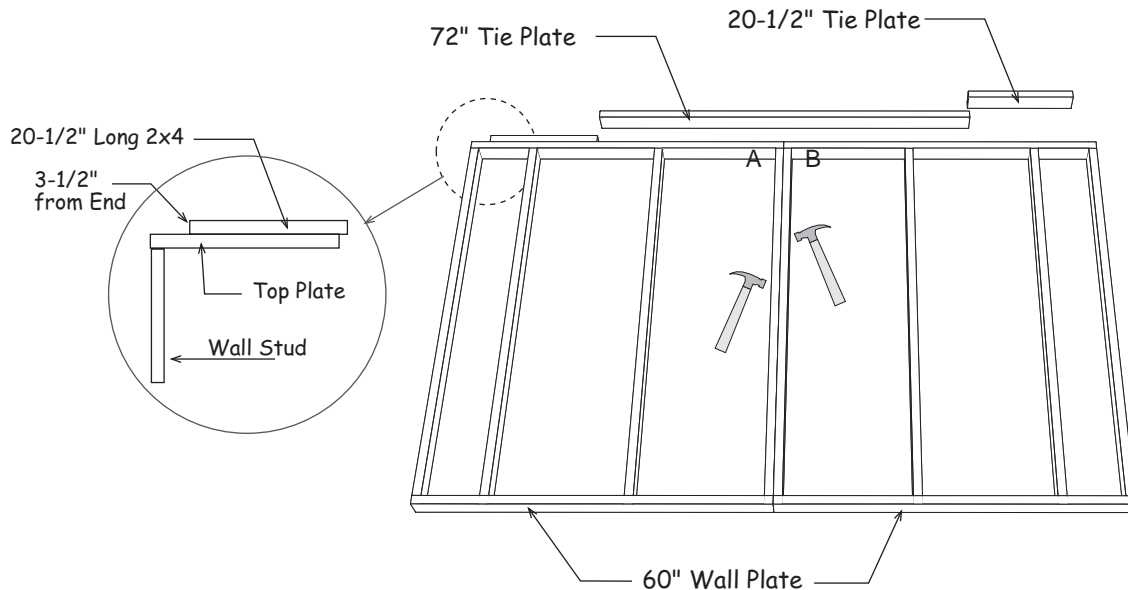
Step 6A Assemble Back Wall

1. Position (4) four 60" 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'.

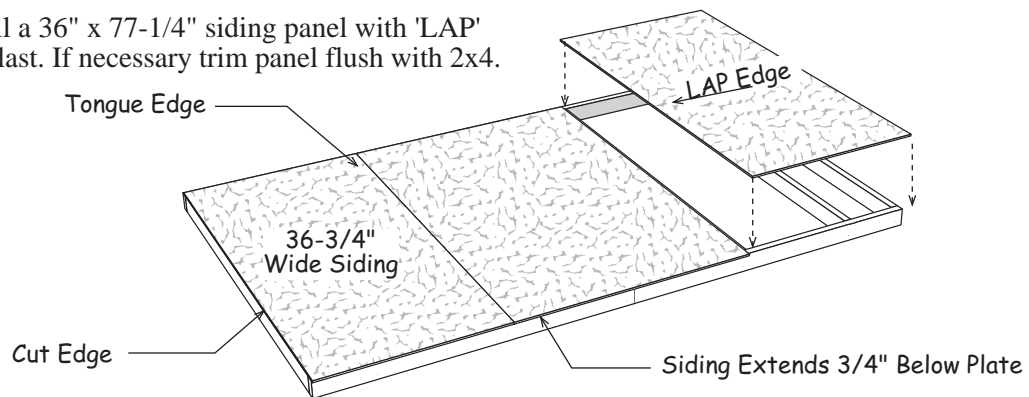


Step 6B Assemble Back Wall Continued

2. Install 72" wall studs between the top and bottom plates. Assemble wall frames with 10d sinkers. Use (2) two nails at end of each wall stud.
3. Nail both wall frames together with (4) four 10d sinkers on each side.
4. Select (2) two 20-1/2" and (1) one 72" long 2x4s. Install a 20-1/2" long 2x4 on top of frame 3-1/2" from left side. Install the 72" long 2x4 next. Finish with the last 20-1/2" long 2x4. Use 10d sinkers spaced 6" apart.

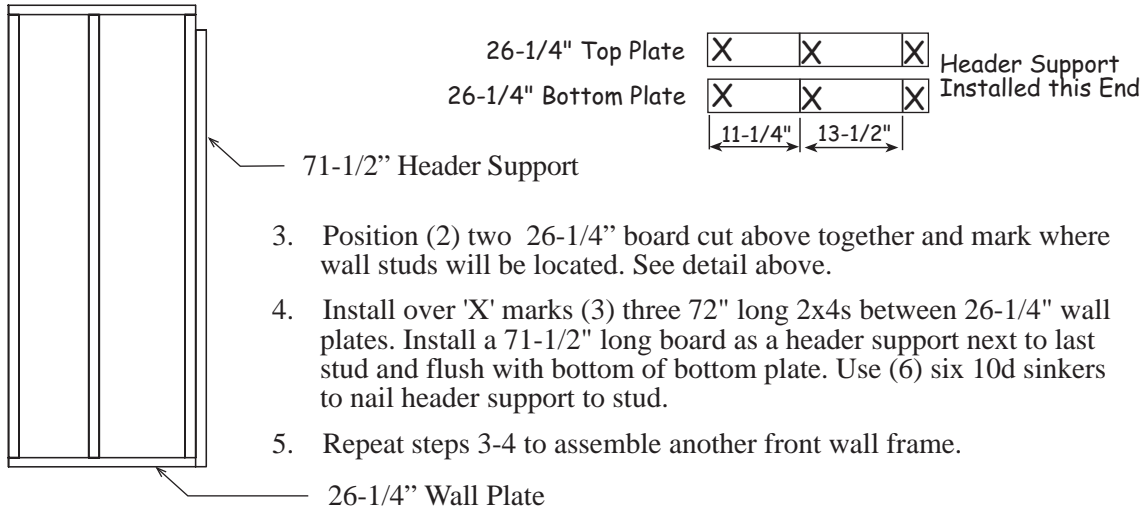


5. Square frame, *measure diagonally (corner to corner)*. The measurements should be equal.
6. Select a 36-3/4" x 77-1/4" siding panel with a 'Tongue' edge. Install this panel with the 'Cut' edge flush with the end of the wall frame and flush with the top of the 2x4 tie plates. The siding should extend 3/4" below the bottom plate. Use 6d galv. nails spaced 8" on center.
7. Install a full width x 77-1/4" long siding panel next.
8. Install a 36" x 77-1/4" siding panel with 'LAP' edge last. If necessary trim panel flush with 2x4.



Step 7 Assemble Front Wall Frames

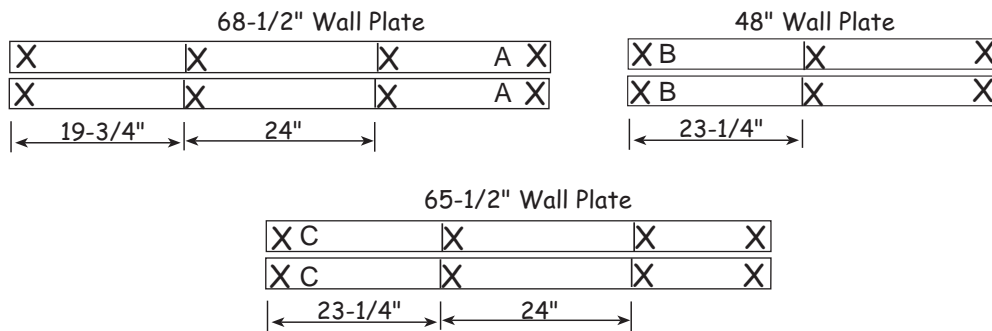
1. Cut (4) four 26-1/4" long boards from (2) two 60" long 2x4 board.
2. Cut (2) two 72" 2x4s to a length of 71-1/2" used for header supports.



3. Position (2) two 26-1/4" board cut above together and mark where wall studs will be located. See detail above.
4. Install over 'X' marks (3) three 72" long 2x4s between 26-1/4" wall plates. Install a 71-1/2" long board as a header support next to last stud and flush with bottom of bottom plate. Use (6) six 10d sinkers to nail header support to stud.
5. Repeat steps 3-4 to assemble another front wall frame.

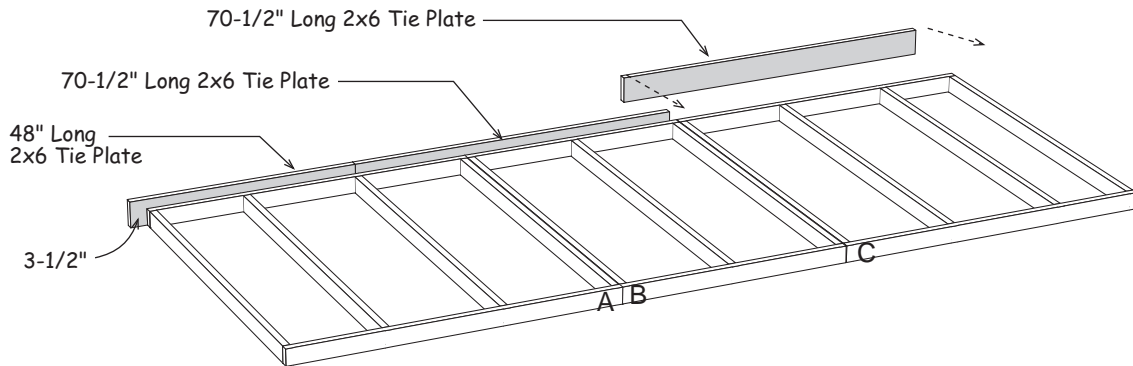
Step 8A Assemble Side Walls

1. Position 68-1/2", 65-1/2", and 48" long 2x4 boards together and mark where the wall studs will be located. Mark the ends that will butt together with the letters 'A', 'B' and 'C'.




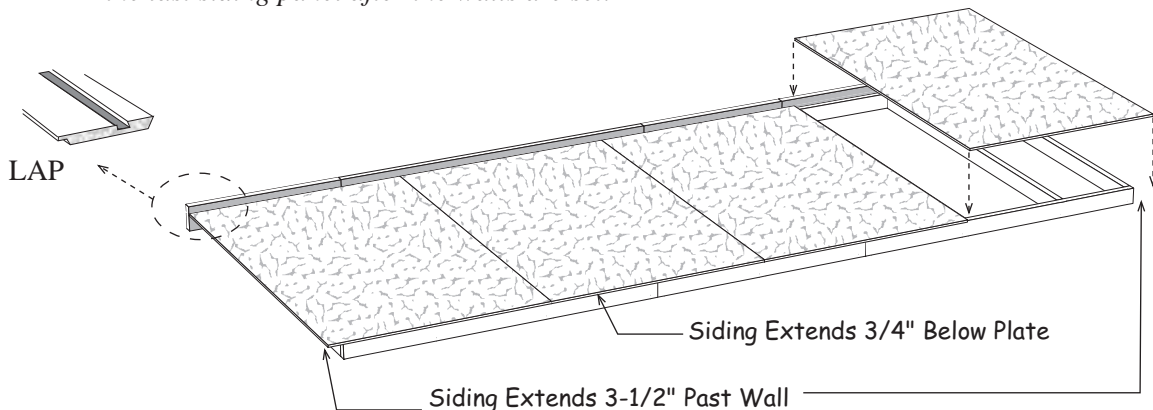
Step 8B Assemble Side Walls Continued

2. Install 72" wall studs between the top and bottom plates.
3. Nail frames together. Use (4) four 10d sinkers on each side.
4. Locate (1) one 48" and (2) two 70-1/2" long 2x6 boards. Install the 48" long board extending 3-1/2" past left side of wall. Install the 70-1/2" boards next. The last board should extend 3-1/2" past wall. Use 10d sinkers spaced 6" apart
5. Square wall frame.



6. Locate (3) three siding panels that are 75-3/4" long and (1) one 77-1/4" long siding panel. Cut the 77-1/4" panel to 75-3/4".
7. Install a siding panel under the 2x6 tie plate with the 'LAP' edge extending 3-1/2" beyond the left side of frame. Use 6d galv. nails spaced 8" on center.
8. Install (2) two full width siding panel in the center.
9. Cut the last siding panel to extend 3-1/2" past the frame and install.

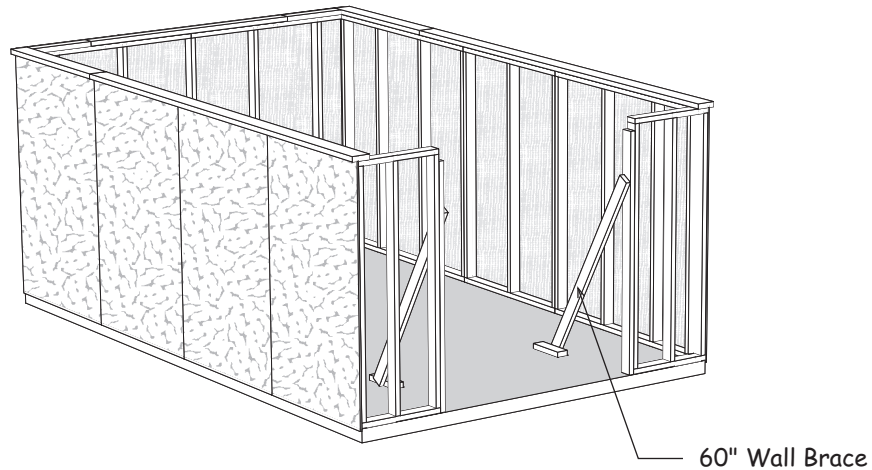
 *Tip; it will be easier to handle this wall if you install the last siding panel after the walls are set.*



9. Repeat to assemble another side wall frame and install (4) siding panels.

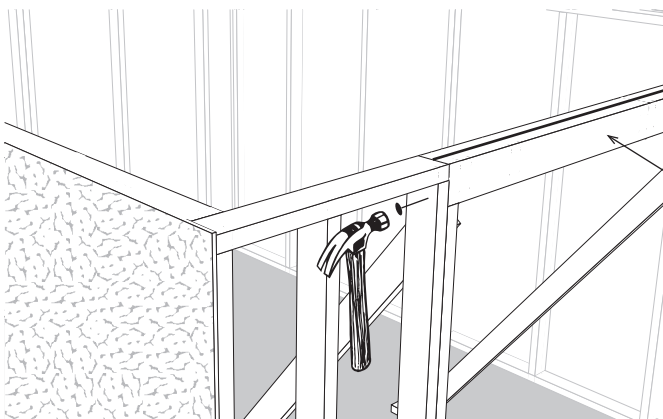
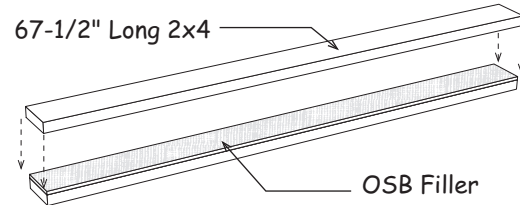
Step 9 Set Lower Walls & Install Header

1. Erect wall panels. **IMPORTANT: Make sure walls are plum and square.** Secure wall panels together at the corners. Use (4) four 10d sinkers per corner. Use 10d sinkers or, if erecting on a concrete slab, concrete anchor bolts (not included) spaced 24" apart.



2. Temporarily brace the front wall on either side of the door opening using (2) two 60" long 2x4s.

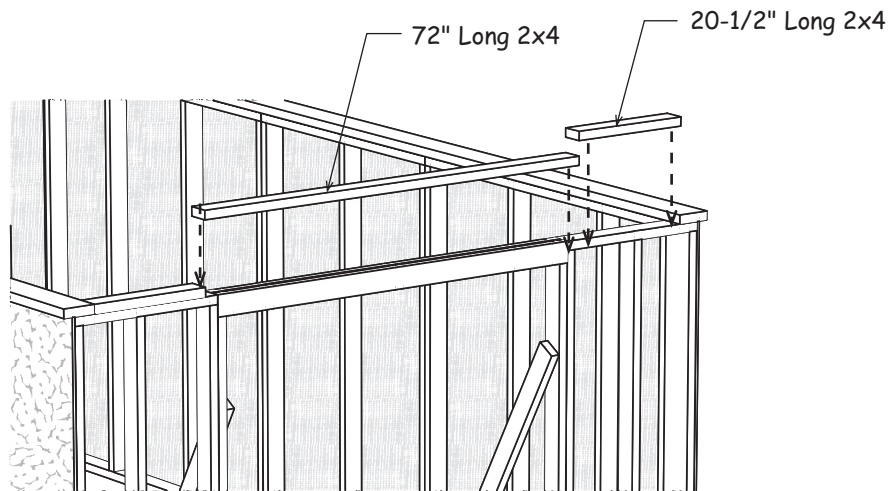
3. Gather (2) two 67-1/2" long 2x4 boards and a 3-1/4" x 67-1/4" OSB filler panel. Nail header together from both sides with 10d sinkers staggered 6" apart.



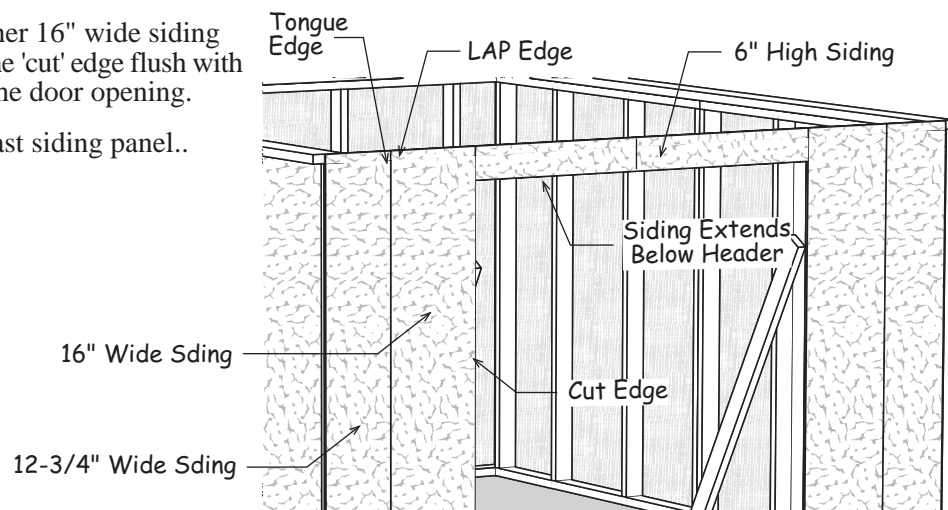
4. Install the 67-1/2" door header between the front wall frames on top of header supports. Secure with 10d sinkers through wall studs.

Step 10 Install Tie Plates & Siding

1. Select (2) two 20-1/2" and (1) on 72" long 2x4s. Install boards on top of front wall frame between side wall 2x6 boards. Use 10d sinkers spaced 6" apart.

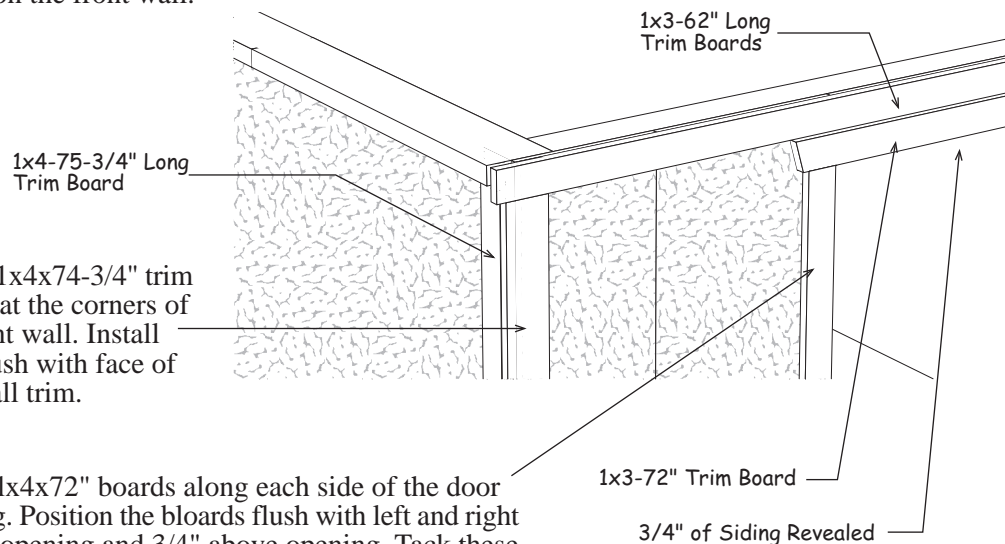


2. Locate a 16" x 77-1/4" siding panel that has a 'LAP' edge. Position the 'cut' edge flush with the left side of the door opening and flush with top of tie plate. Do not nail the 'LAP' edge until the other siding is applied.
3. Locate the 12-3/4" wide siding with a 'tongue edge' and install on the left end of the front wall.
4. Install (2) two 6" siding panels over the door opening, flush with the top plate. Siding will extend below header.
5. Install another 16" wide siding panel with the 'cut' edge flush with the side of the door opening.
6. Install the last siding panel..



Step 11 Install Trim

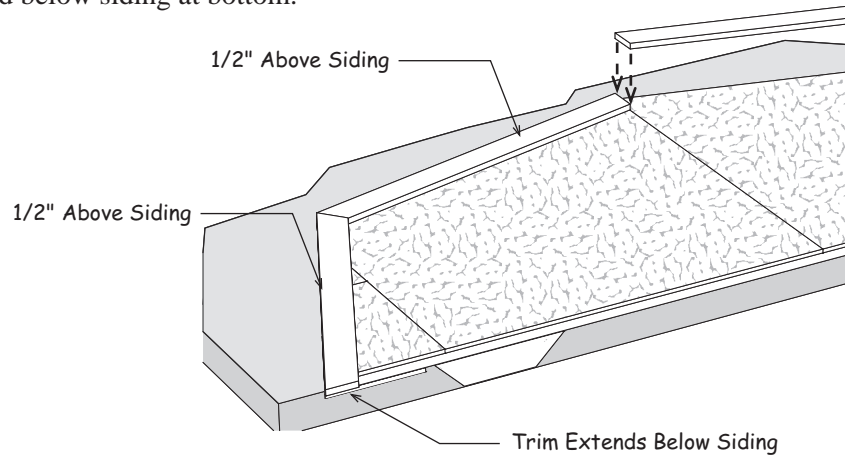
1. Install (2) two 1x3-62" long trim boards flush with the top of the front wall. Use 6d galv. nails spaced 8" apart.
2. Install 1x4-75-3/4" long trim boards at the front corners of the side wall. Install trim flush with siding on the front wall.



3. Install 1x4x74-3/4" trim boards at the corners of the front wall. Install trim flush with face of side wall trim.
4. Install 1x4x72" boards along each side of the door opening. Position the boards flush with left and right side of opening and 3/4" above opening. Tack these boards with a couple 6d galv. nails; you may need to move the trim later when you install the doors.
5. Install a 1x3x72" board centered over the door opening. When installed properly there will be 3/4" of siding revealed below board.
6. Install corner and top of wall trim on the back of the building.

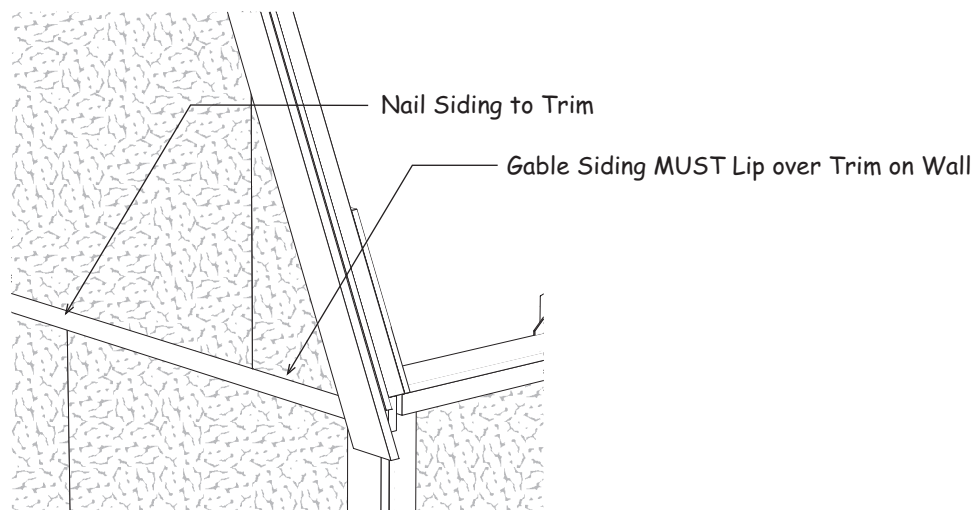
Step 12 Install Trim on Rear Gable & Set Gables

1. Apply 1x4 trim to gable. Install a 47-1/2" long 1x4 at the top of the gable. Install the 1x4 gable trim extending 1/2" above the siding on the gable. When installed later, the roof sheathing will be flush with the top of the trim.
2. Install a 43" long 1x4 at the sides of the gable, 1/2" above the siding on the gable. Trim will extend below siding at bottom.



IMPORTANT: Do Not set gables until all the siding and trim are installed on walls.

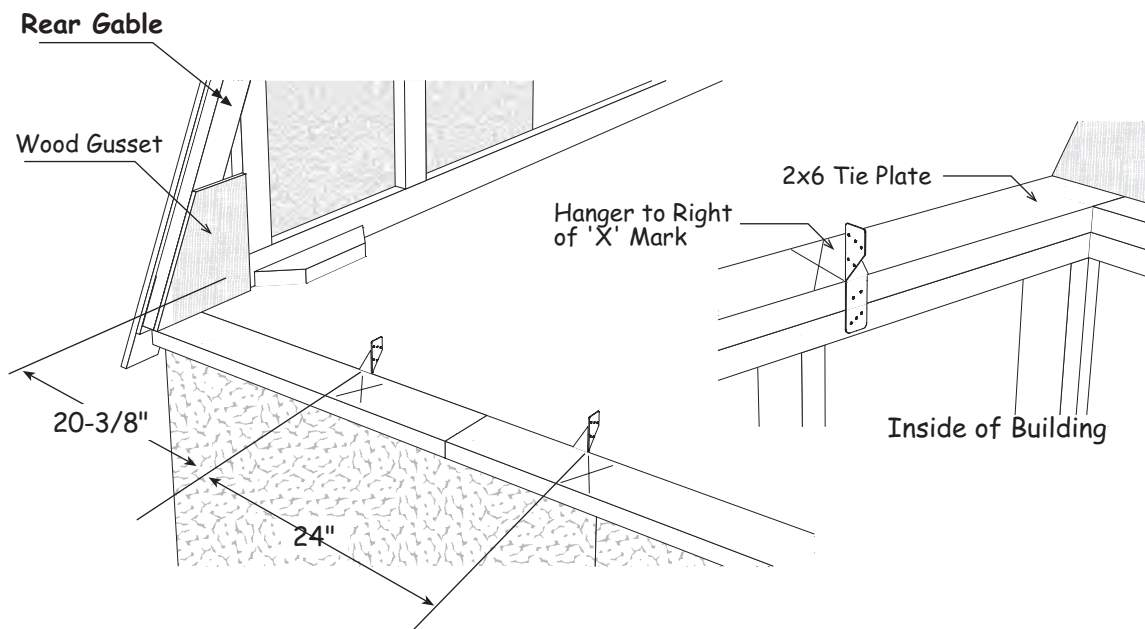
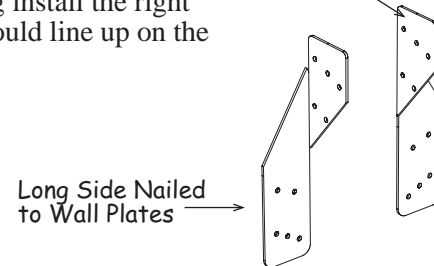
3. Install the rear gable on the back wall. The gable siding will extend over the 1x3 trim on the lower wall. **NOT behind the trim!** Secure gable to wall by nailing through the gable blocks with (6) six 10d sinkers each. Nail siding along the 1x3 trim board with 6d galv. nails.




4. Install Gable on Front Wall

Step 13 Layout for Truss Spacing

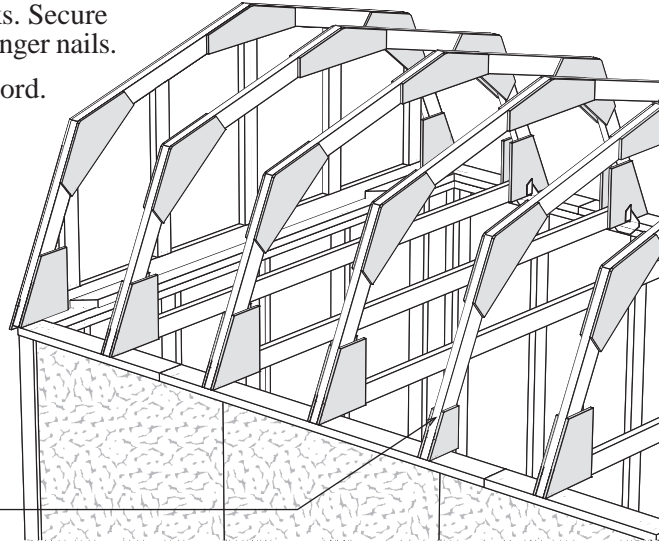
1. Layout the truss spacing on the left side wall, facing building. Start at the back of the building. Measure from the inside face of the wood gusset when marking the location of the first truss.
2. Locate the truss hangers, there are left and right hangers. Select the right hangers.
3. Using 1-1/2" hanger nails, from the inside of building install the right hangers to the 2x6 tie plate. The top hanger flange should line up on the right side of the 'X' mark.



 **Important:** When marking the opposite wall, use the left hangers and place the 'X' mark on the same side of the line so your trusses are parallel when they are installed.

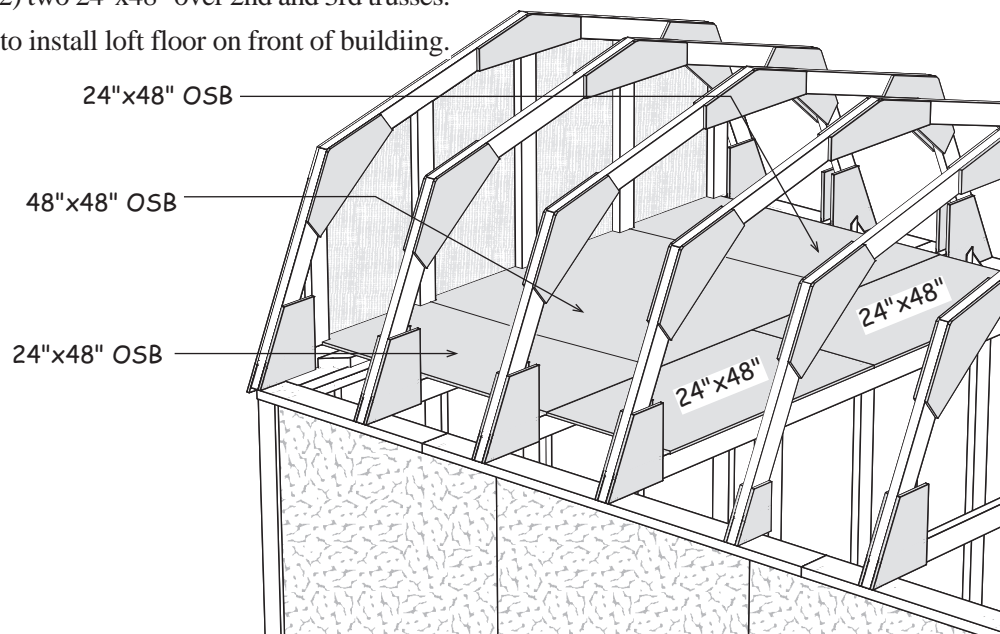
Step 14 Install Trusses & Loft Floor

1. Starting from rear gable install (3) three trusses with a bottom cord over the 'X' marks. Secure truss to metal hangers using 1-1/2" hanger nails.
2. Next install truss without a bottom cord.
3. Install the last three trusses.



Note: The center truss will not have a bottom cord.

4. Select (2) two 24"x48" and (1) one 48"x48" OSB sheets. Set OSB loft flooring centered to the width of the building over the two trusses at the rear of building. Do not nail yet. Notch the OSB around the studs on the rear gable. Secure floor with 6d common spaced 10" apart.
5. Install (2) two 24"x48" over 2nd and 3rd trusses.
6. Repeat to install loft floor on front of building.

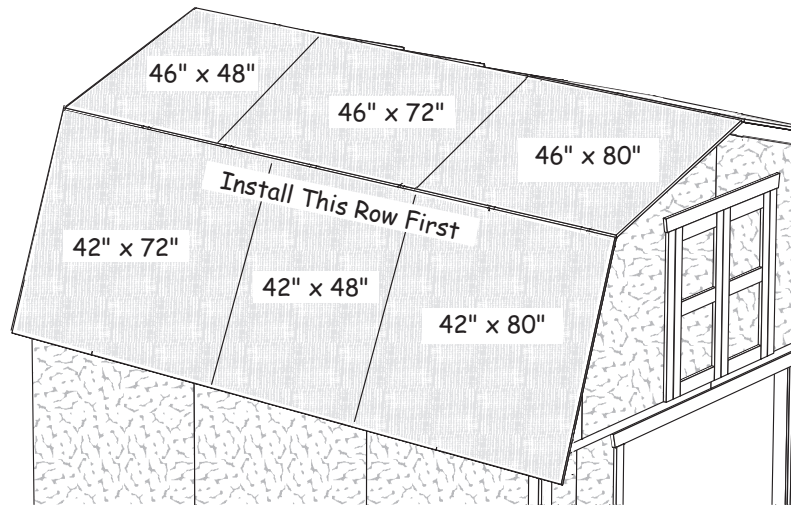



Step 15 Install Roof Sheathing

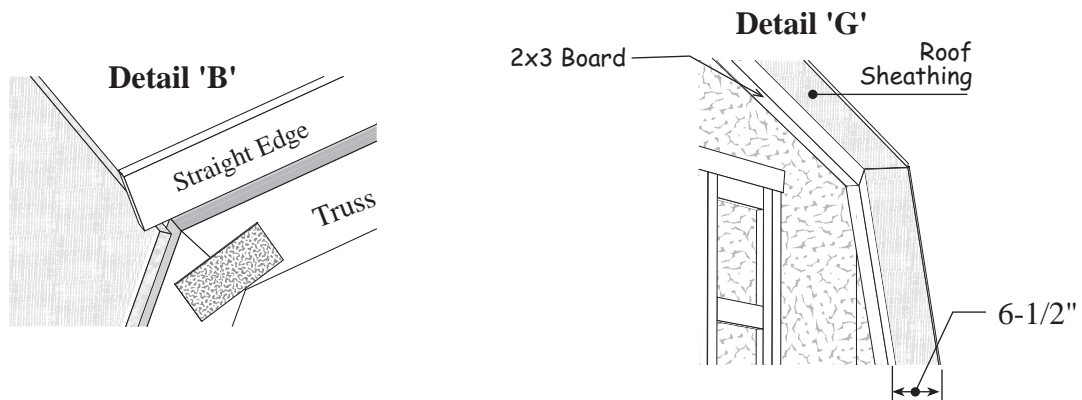
Install roof sheathing on the steep side of the roof. Use a straight edge to align the top of the sheathing with the top of the truss; see **Detail 'B'**. Make sure the trusses are plumb and the roof sheathing meets the center of the truss. Use 6d common nails spaced 8" apart.

The top roof sheathing will not extend to the ridge. This will allow an opening for air ventilation should you install a ridge vent.

1. Working from rear gable install a 42" x 72" OSB sheet against back of trim. Install 42" x 48" sheet next.
2. Install a 42" x 80" and cut (if necessary) to extend 6-1/2" past 2x3 board on front gable.
3. Install upper sheathing as shown below cutting the 46"x80" sheet if necessary.



 **Important:** Make sure the gable is plumb and the roof sheathing extends 6-1/2" past the 2x3s along the face of the gable; see **Detail 'G'**

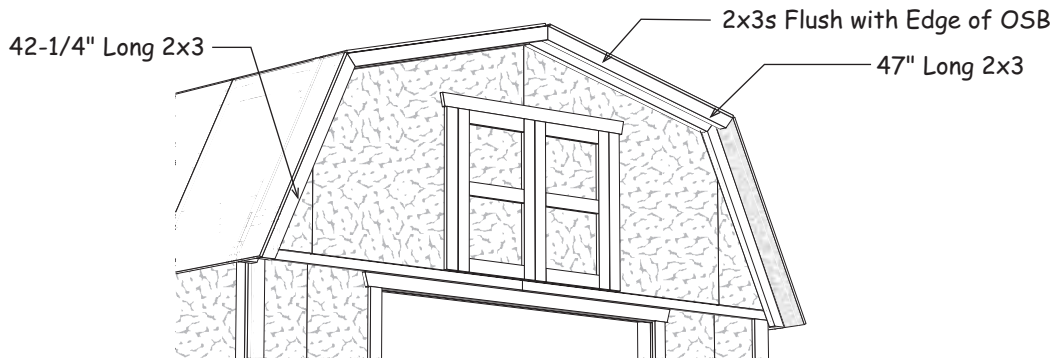


4. Repeat steps 1-3 to sheath opposite side of building.

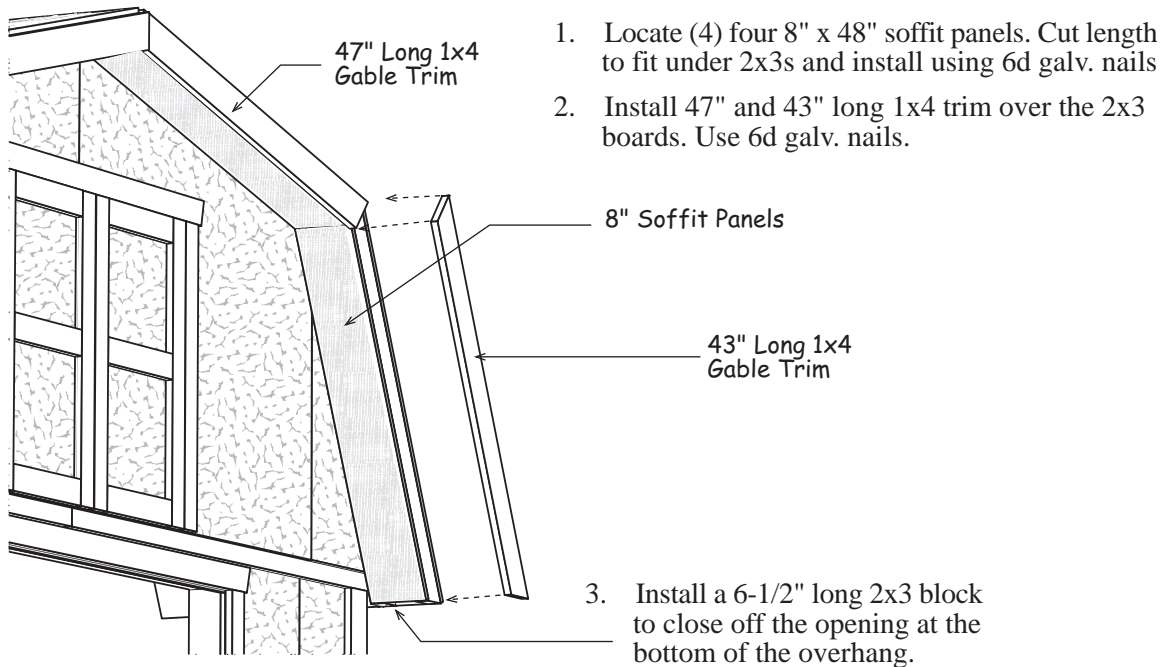
Step 16 Install Gable Overhang

 A helper or wood clamps will be beneficial in this step.

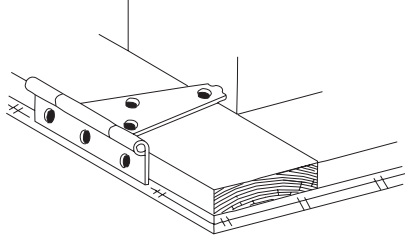
1. Gather (1) one 47" long 2x3 and (1) one 42-1/4" long 2x3. Starting at the ridge position the 47" long board under the OSB overhang flush with the edge of OSB. Clamp or have someone hold the board in place. Screw the OSB to the 2x3 with 1-5/8" long screws spaced 6" apart.
2. Next install the 42-1/4" long board in the same manner.
3. Repeat on the other side of gable overhang.



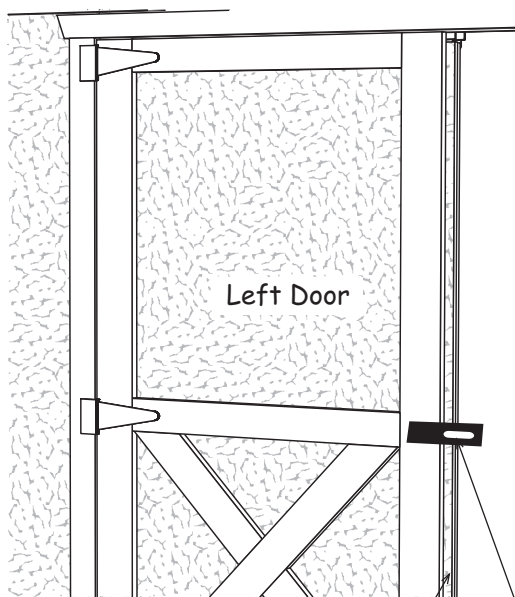
Step 17 Install Gable Soffit and Trim



Step 18 Install Doors & Hardware



1. Lay the left door with the trim facing up. The siding on the left door extends past the door trim. 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.

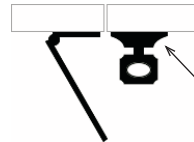


4. Before fastening the hinges to the side trim, temporarily prop the doors in the opening. Leave a space at the top and bottom of the doors and between the doors and the side trim to allow room for the doors to expand due to humidity.

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.

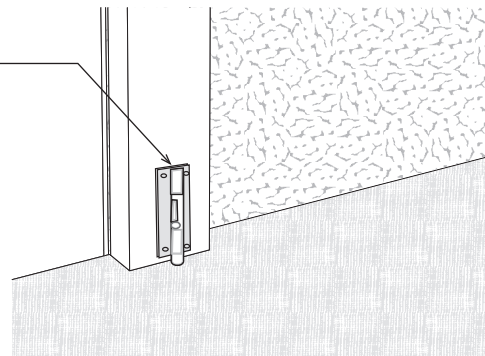
Siding Extends Past Trim



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.

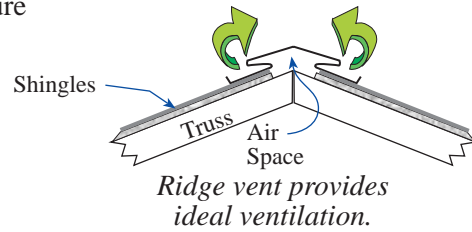


Install Shingles - not included in kit

Install roof shingles per instructions on outside of wrapper.

Building Tip: Install ridge vent in lieu of shingles caps. Ridge vent provides ideal ventilation, preventing heat or moisture build-up from damaging your building or its contents.

Material Description	Quantity
Roof Shingles	10 bdl.
Roof 'drip' Edge	7 pcs.



Material List

Hardware

3 lbs. 10d Sinkers	4 lbs. 6d Galvanized
7 lbs. 6d Common	2 lbs. Hanger Nails
12 Screws 2-1/2"	24 Drywall Screws 1"
36 Drywall Screws 1-5/8"	50 Black Hinge Screws 1-1/4"
25 Black Hinge Screws 2"	20 Truss Hangers
4 Door Hinges 4"	6 Door Hinges 5"
2 Barrel Bolts 4"	2 Barrel Bolts 6"
1 Door Hasp	

Material List

Qty	2x4 Framing	Size	Qty	2x6 Framing	Size
2	Wall Plates (Not used in this kit)	78-1/2"	4	Tie Plates for Side Walls	70-1/2"
40	Wall Studs	72"	2	Tie Plates for Side Walls	48"
4	Wall Plates	68-1/2"	Qty OSB Loft & Roof		
2	Door Headers	67-1/2"	2	Roof Sheathing	42"x80"
4	Wall Plates	65-1/2"	2	Roof Sheathing	46"x80"
8	Wall Plates	60"	2	Roof Sheathing	46"x72"
4	Wall Plates	20-1/2"	2	Roof Sheathing	42"x72"
1	Gable Stud	42"	2	Roof Sheathing	46"x48"
1	Gable Stud	36"	2	Roof Sheathing	42"x48"
4	Gable Stud	34-1/4"	4	Loft Flooring	48"x48"
4	Gable Stud	21-1/2"	8	Loft Flooring	24"x48"
6	Temp Blocks	8"-10"	Qty OSB & Plywood		
16	Bottom Cords	58"	12	Ridge Gussets	8"x24"
18	Top Rafter with Blue Ends	47"	24	Knee Gussets	9"x23-3/4"
18	Bottom Rafter	38"	20	Bottom Gussets	11-1/2"x11-1/2"
4	Gable Support Blocks	24"	9	Bottom Cord Gussets	3-1/2"x24"
Qty 2x3 Framing			1	Gable Stud Gusset	3-1/2"x5"
4	Top Gable Overhang	47"	Qty Siding		
4	Bottom Gable Overhang	42-1/4"	3	Wall Panels	48"x77-1/4"
2	Gable Blocks	6-1/4"	2	Wall Panels	36"x77-1/4"
Qty 1x4 Trim			2	Wall Panels	16"x77-1/4"
4	Corner Trim	75-3/4"	2	Wall Panels	12"x77-1/4"
4	Corner Trim	74-3/4"	6	Wall Panels	48"x75-3/4"
2	Side Door Trim	72"	4	Gable Panels	48"x48"
4	Top Gable Trim	47-1/2"	4	Gable Panels	16"x30"
4	Bottom Gable Trim	43"	1	Door Header Panels 6"x32-3/4" & 6"x32-1/4"	
Qty 1x3 Trim			8	Soffit Panels	8"x48"
1	Top Door Trim	72"	Qty Pre-Built Components		
4	Lower Wall Trim	62"	2	Barn Doors	
1	Loft Door Trim	43"	2	Loft Door Frames	
2	Loft Door Trim	29-1/4"	2	Bottom Gussets with Angled 2x4	