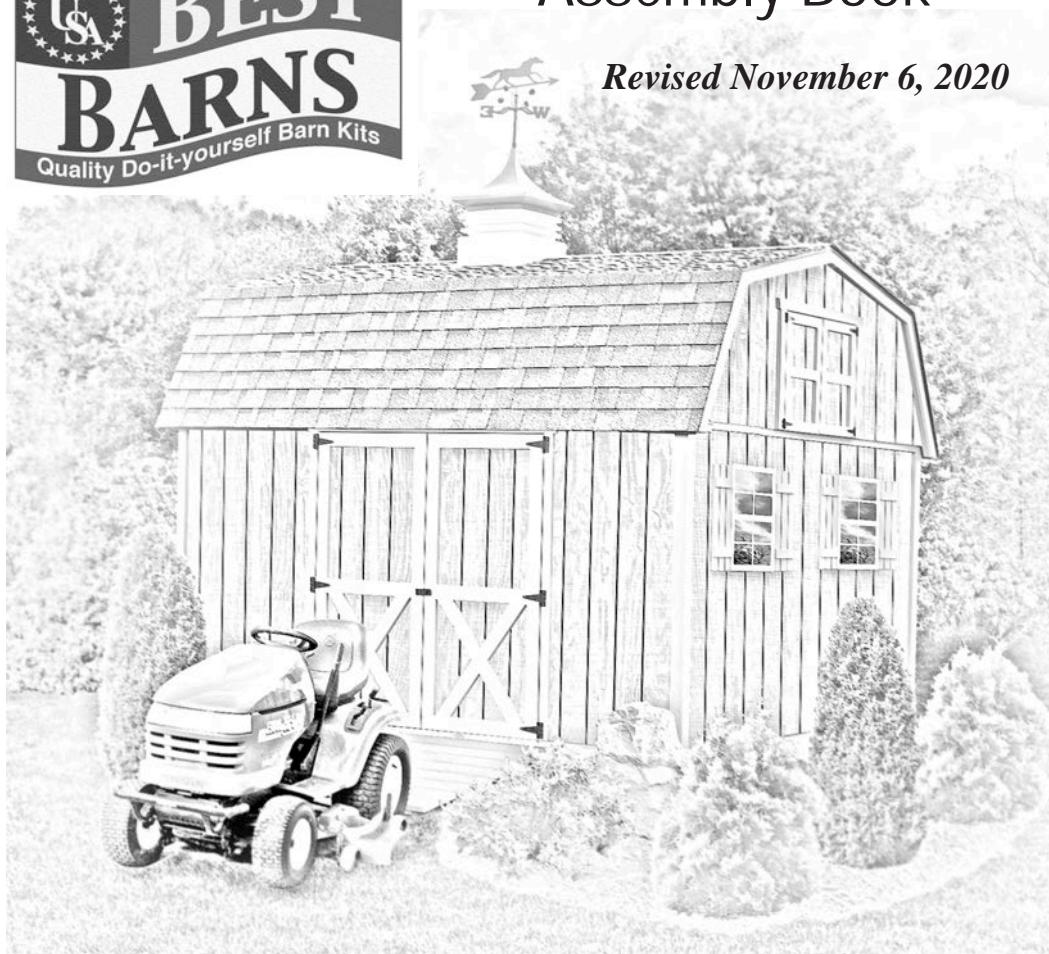




# Best Barns USA Assembly Book

*Revised November 6, 2020*



**the Meadowbrook-R** **12' x 10'**

**Manufactured by Reynolds Building Systems, Inc.**

205 Arlington Drive

Greenville, PA 16125

724-646-3775

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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

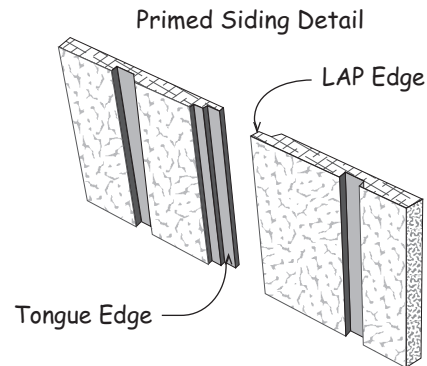
Tie Plate - 2x4s connecting wall sections together

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](mailto:questions@barnkits.com)



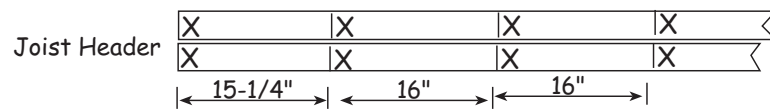
## Constructing Details for Deluxe Floor System

*Deluxe floors include 4x4 runners, standard floors do not*

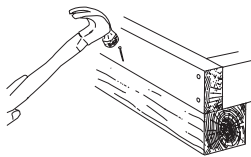
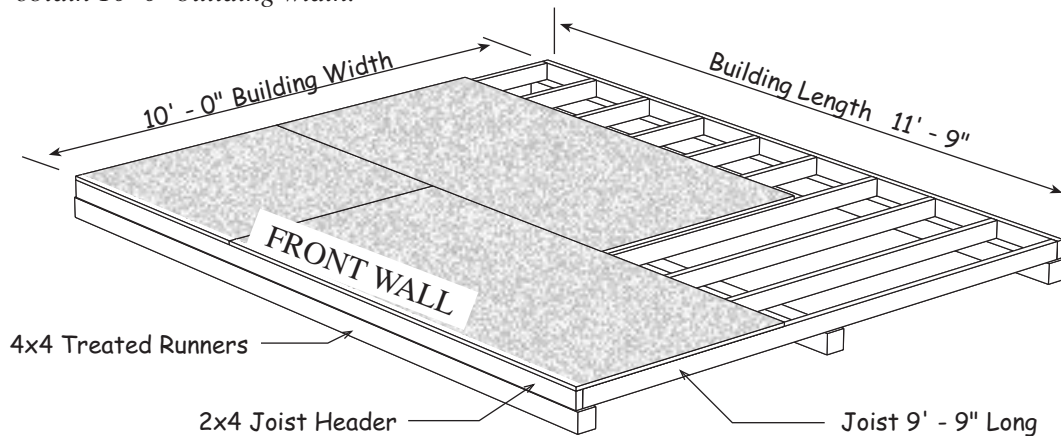
Foundation size is 10'-0" x 11'-9". Check local building codes in your area, the construction may have to change. For a concrete slab, install sill sealer as a moisture barrier between the concrete and the wall plates. Foam sill sealer can be purchased at home centers in rolls 3-1/2" or wider.

1. Cut joist headers to floor length. See Below.

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



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.

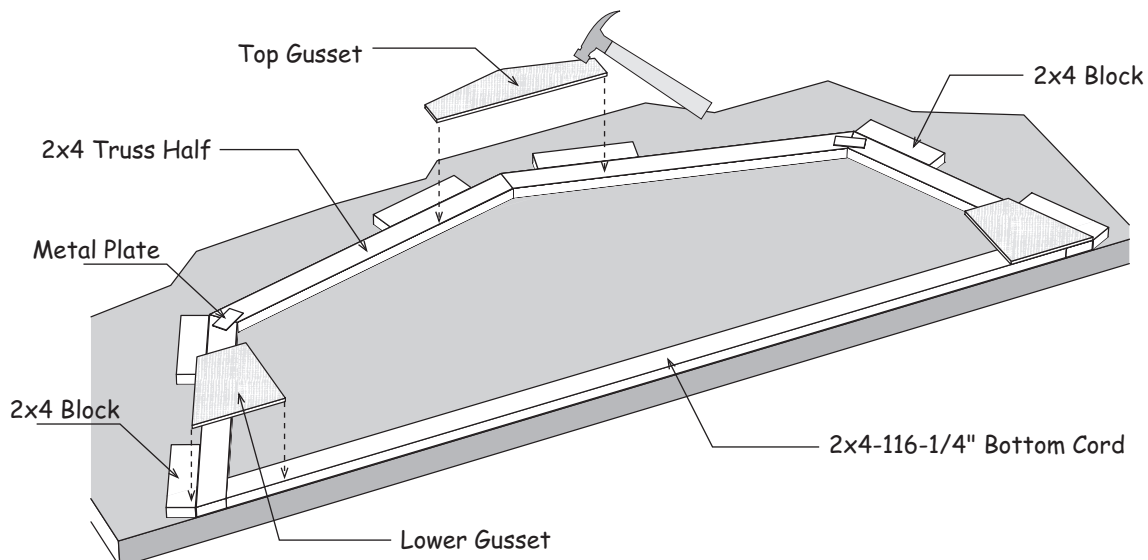
It is important that the floor be level and square. Before nailing the flooring, measure the floor diagonally (corner to corner). Then measure the opposite corners. These measurements will be the same if the floor is square.

Material Description	10' x 12' shed	10' x 16' shed
2x4 Joist Headers	2 pcs. 12'	2 pcs. 16'
2x4 Floor Joist	10 pcs. 10'	13 pcs. 10'
4x4 Treated Runners	3 pcs. 12'	6 pcs. 8'
Flooring 5/8" or 3/4"	4 pcs. 4x8	5 pcs. 4x8
Screw Floor Nails	1 lb. 8d	2 lb. 8d
Galv. Box Nails	1 lb. 16d	1 lb. 16d

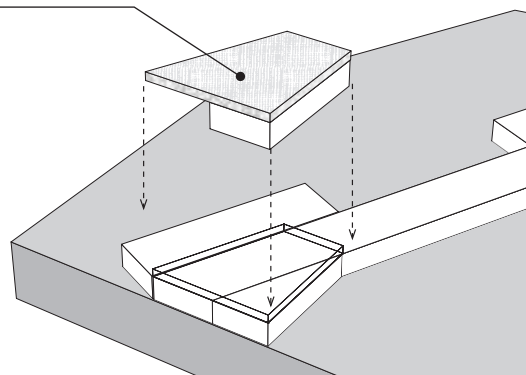


## Step 1 Assemble Trusses

1. Position (2) two truss halves together so that a 116-1/4" long 2x4 bottom cord may be placed between them.
2. Hold truss parts in place by temporarily screwing 2x4 blocks to the floor. There are short 2x4 blocks supplied in the kit for this purpose. Use 2-1/2" wood screws.
3. Secure the tops together with a wood gusset. Nail the gusset with (16) sixteen 6d common nails. Space nails evenly.
4. Secure the truss bottom legs to the bottom cord with wood gussets. **Note:** You may have to spread the truss bottom to fit the bottom 2x4. Use 12 nails per gusset. Space nails evenly.
5. Assemble (3) three more trusses.
6. Turn trusses over and apply wood gussets to the opposite side.



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

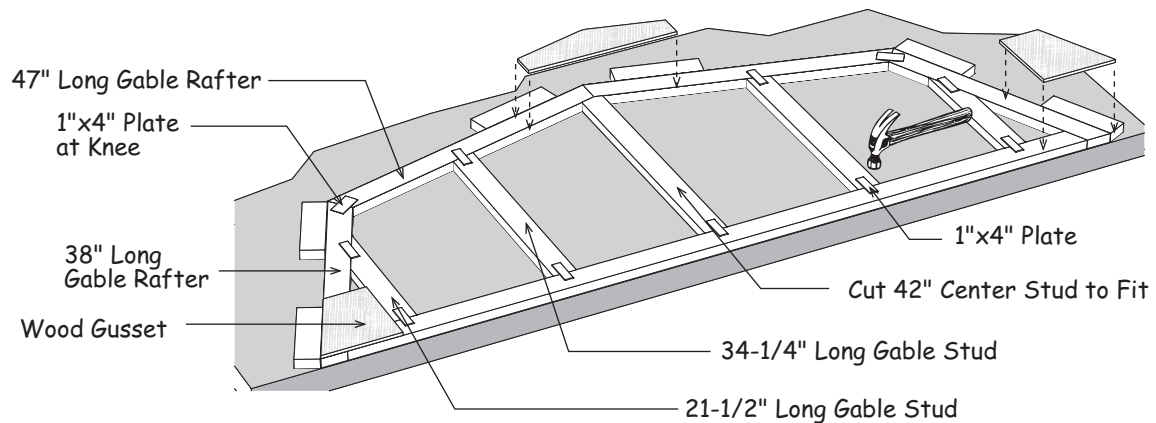


Do Not remove blocks from floor until **Step 2** is completed.

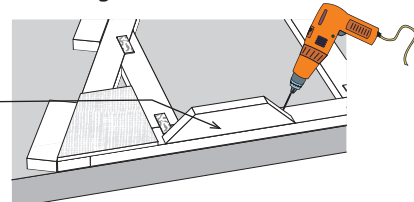


## Step 2 Assemble Gable without Loft Door

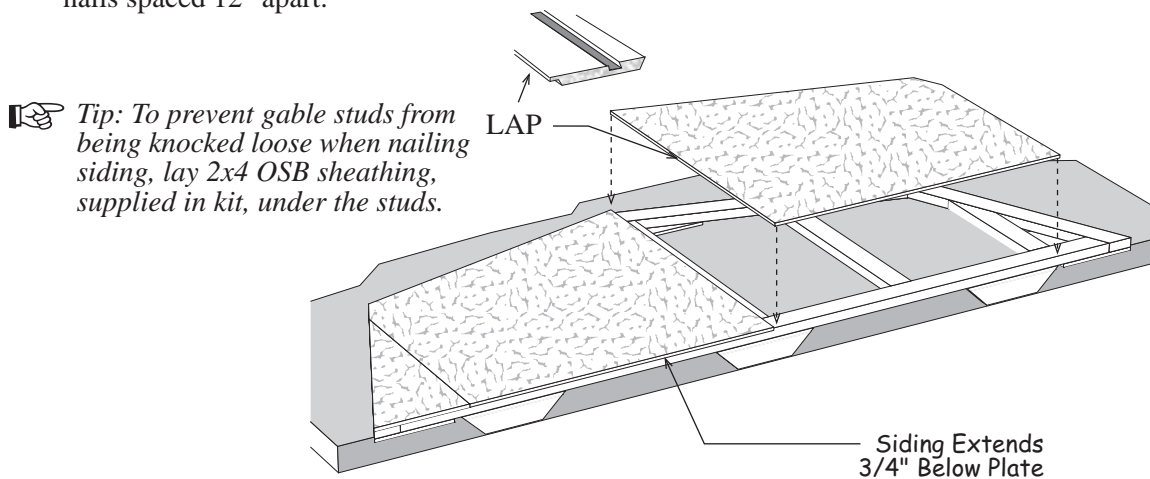
1. Place (2) two truss halves and a 116-1/4" bottom cord in the truss jig. Secure bottom cord with gussets.
2. Select a 42" long 2x4 center stud and cut to fit between ridge and bottom cord.
3. Install (2) two 21-1/2" and (2) two 34-1/4" with angle cut on one end. Secure 2x4 gable studs to the truss with (9) nine 1"x4" metal plates at top and bottom.



4. Screw (3) three 16" long 2x4 blocks flush with bottom of the 2x4 bottom cord. One on each end and one in the center. Use (2) two 2-1/2" screws.



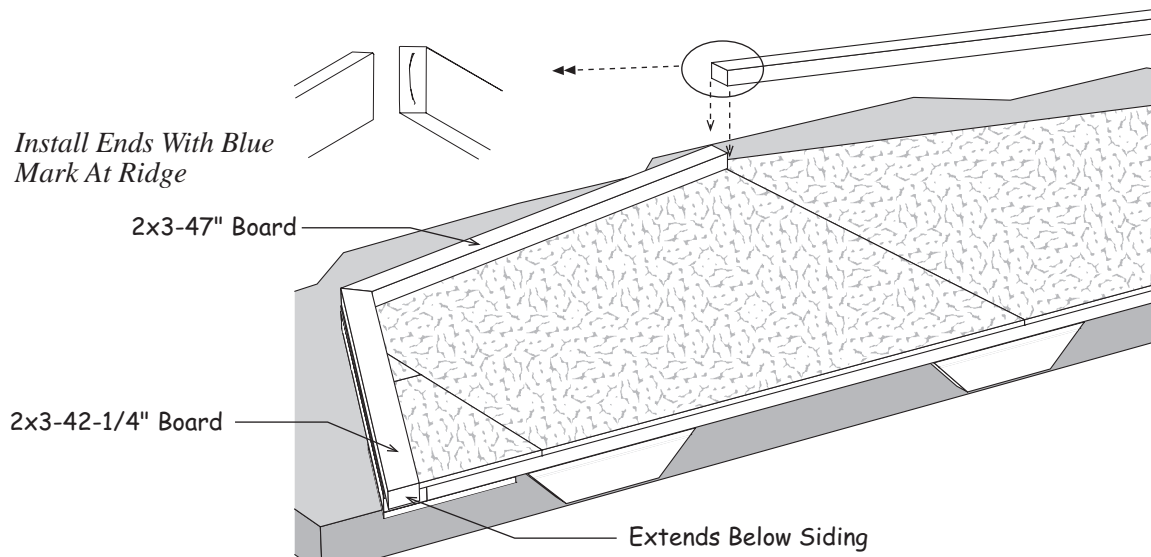
5. Turn the gable over. Locate pre-cut gable siding. Starting from left install the siding extending 3/4" below the bottom 2x4. Insure the siding does not extend above the top frame. Use 6d galv. nails spaced 12" apart.



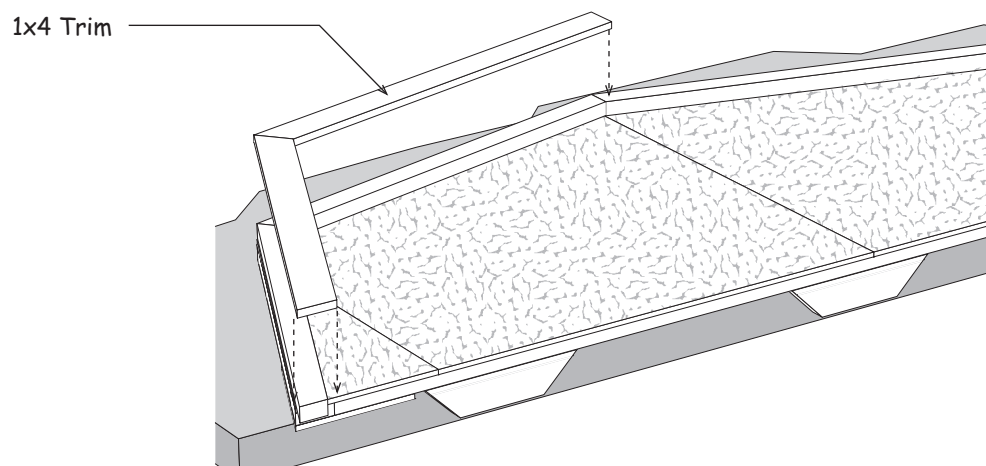


### Step 3 Install Rear Gable Overhang & Trim

1. Apply 47" long 2x3 boards to the gable. These boards have a blue marking on one end. Install this end at the peak. Install boards flush with the top of the gable frame. Use 10d sinkers.
2. Install a 42-1/4" long 2x3 at the sides of the gable, flush with the frame. Board will extend below siding.



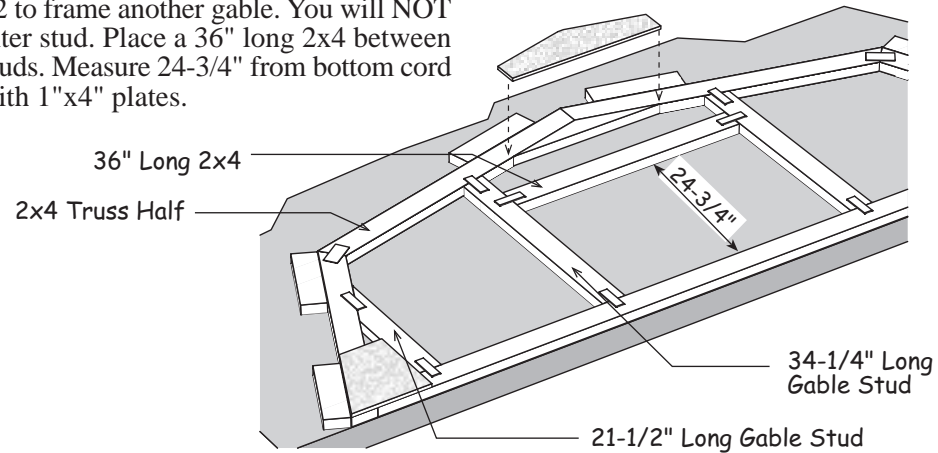
3. Apply 1x4 white pine trim to gable. Install a 47-1/2" long 1x4 at the top of the gable. These boards have a blue marking on one end. Install this end at the peak. Install the 1x4 gable trim extending 1/2" above the siding on the gable. When installed later, the roof sheathing will be flush with the top of the trim.
4. Install a 43" long 1x4 at the sides of the gable.






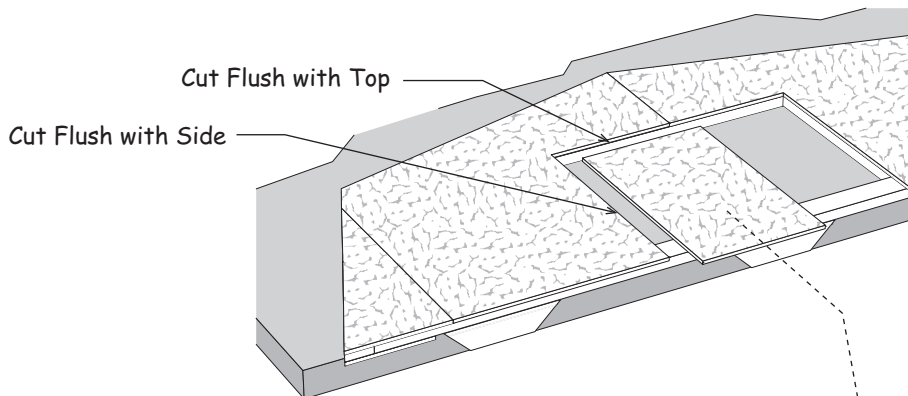
## Step 4 Assemble Roof Gable With Loft Doors

1. Repeat Step 2 to frame another gable. You will NOT use a 42" center stud. Place a 36" long 2x4 between the 34-1/4" studs. Measure 24-3/4" from bottom cord and secure with 1"x4" plates.

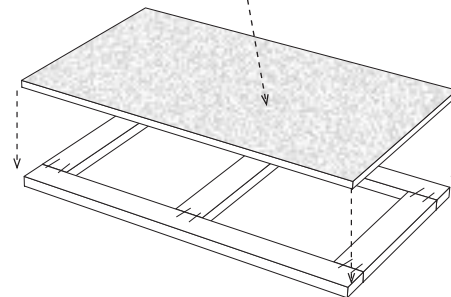


 If you don't need loft access from the outside, attach loft door frames to the gable to create a decorative look and weather tight storage area.

2. Turn the gable over. Lay out the first (2) two pieces of siding on frame. **Important: Do not nail to frame.** Mark and cut so siding is flush with top and left side of opening. Cut to bottom of siding below gable plate. Nail first two pieces of siding to frame. Lay out next siding panel, do not nail, and repeat cut for right side door opening. Nail last two pieces of siding to frame.



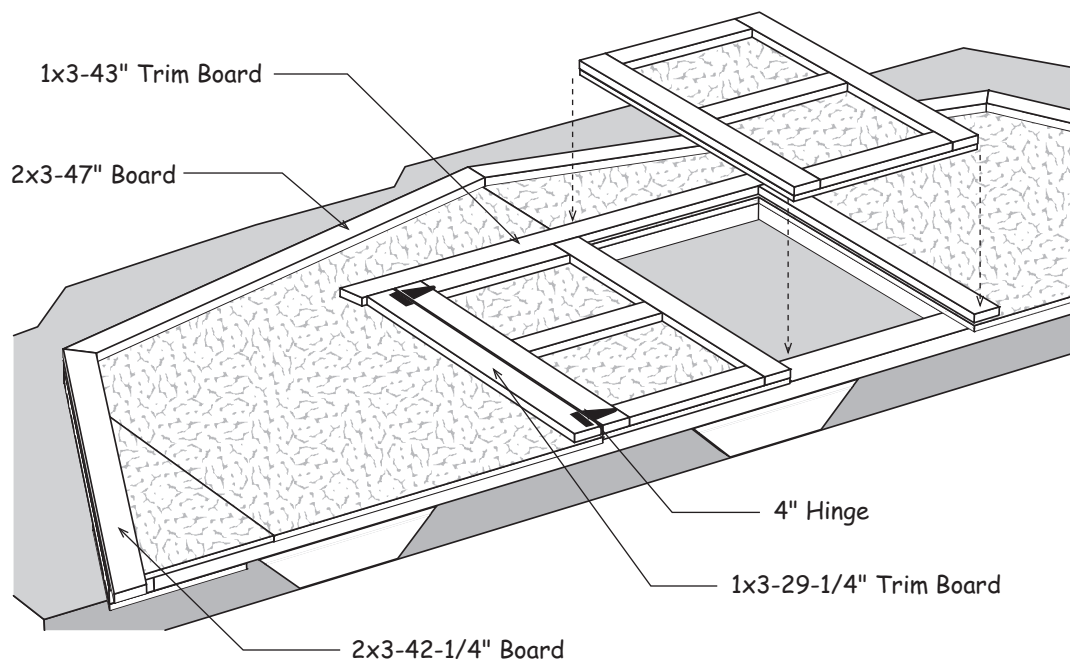
3. Assemble the loft doors. The loft door frames are temporarily held together with corrugated fasteners, this is the back side of the door frame. Place the doors on level surface, face side down. Cut the siding from above step to the size of the door frame. Secure the siding panel to the frame with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





## Step 5 Install Gable Trim & Loft Doors

1. Apply 47" long 2x3 boards to the gable. These boards have a blue marking on one end. Install this end at the peak. Install boards flush with the top of the gable frame.
2. Install a 42-1/4" long 2x3 at the sides of the gable, flush with the frame.
3. Install 29-1/4" long 1x3 trim boards on each side of the loft door opening. Install a 43" long trim board across the top.
4. Install loft doors using 4" hinges and 1-1/4" long hinge screws. The screws have a square head. The bit is packed with the screws. 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.

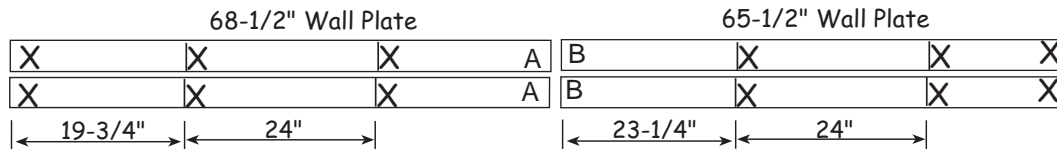


5. Apply 1x4 white pine trim to gable. Install a 47-1/2" long 1x4 at the top of the gable. These boards have a blue marking on one end. Install this end at the top. Install trim flush with the top of the gable frame. Use 6d galv. nails.
6. Install a 43" long 1x4 at the sides of the gable, flush with the frame.

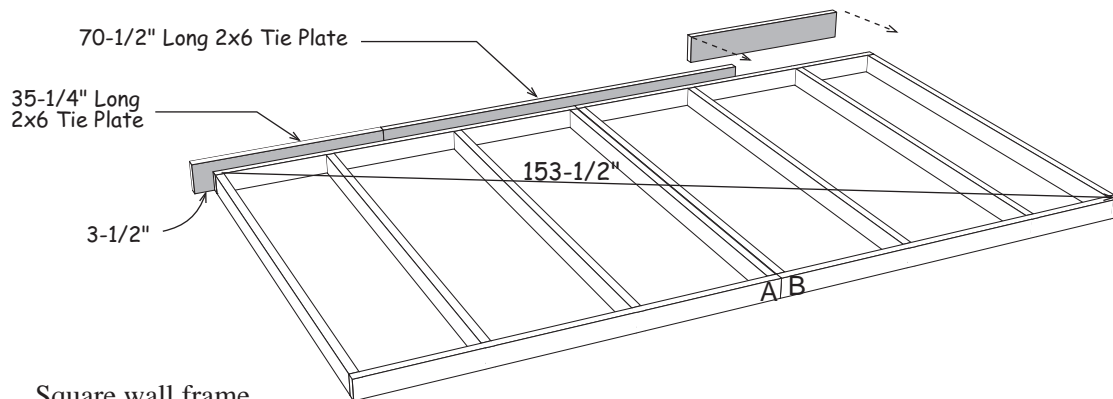


## Step 6 Assemble Back Wall

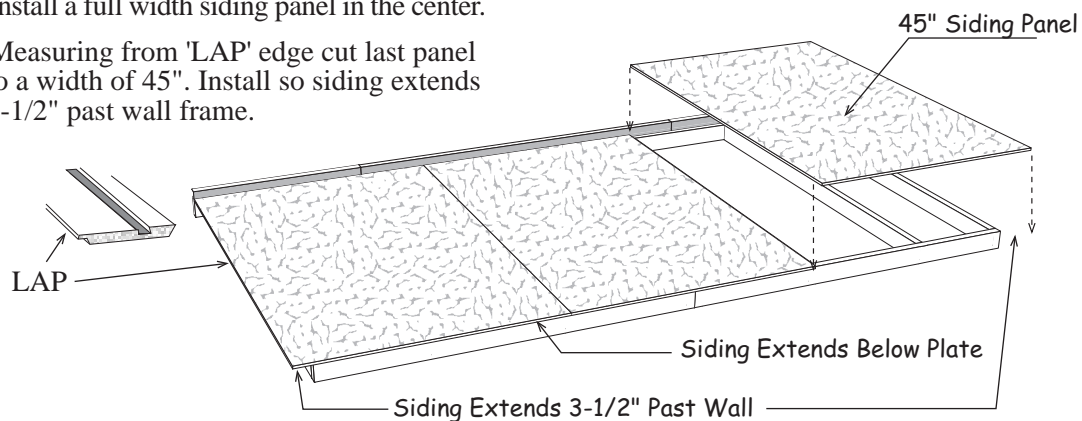
1. Position 68-1/2" and 65-1/2" long 2x4 boards together and indicate where the wall studs will be located. Mark the ends that will butt together with the letters 'A' and 'B'.



2. Install 72" long wall studs, between the wall plates, over the 'X' marks and where the plates meet. Use (2) two 10d sinkers at each end of stud. Nail wall frames together using 10d sinkers.
3. For a 12' long building, cut a 70-1/2" long 2x6 board in half so the center 2x6 tie plate will span where the sidewalls meet..
4. Install (2) two 35-1/4" and a 70-1/2" long 2x6 boards as tie plates over the top plate. The 2x6s will extend 3-1/2" beyond the end of the wall frame.



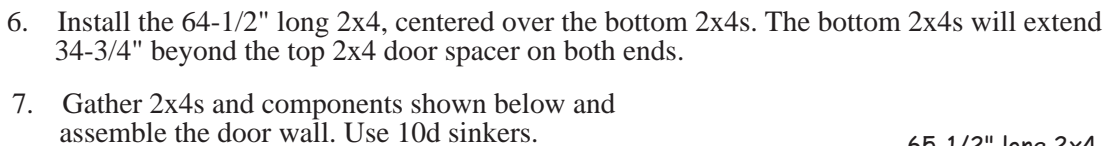
5. Square wall frame.
6. Locate (3) full width x 75-3/4" siding panels. Install the first siding panel with the 'LAP' edge extending 3-1/2" beyond the wall frame. Use the 6d galv. nails spaced 12" on center.
7. Install a full width siding panel in the center.
8. Measuring from 'LAP' edge cut last panel to a width of 45". Install so siding extends 3-1/2" past wall frame.





 Assemble door header jacks and door spacer to aid in the door wall assembly.

- 
- Diagram illustrating the assembly of a 2x4 beam. The assembly consists of two 2x4s joined end-to-end. The top 2x4 is labeled "69-1/2" long 2x4". The bottom 2x4 is labeled "72" long 2x4". The ends of the two 2x4s are aligned, labeled "ends flush".

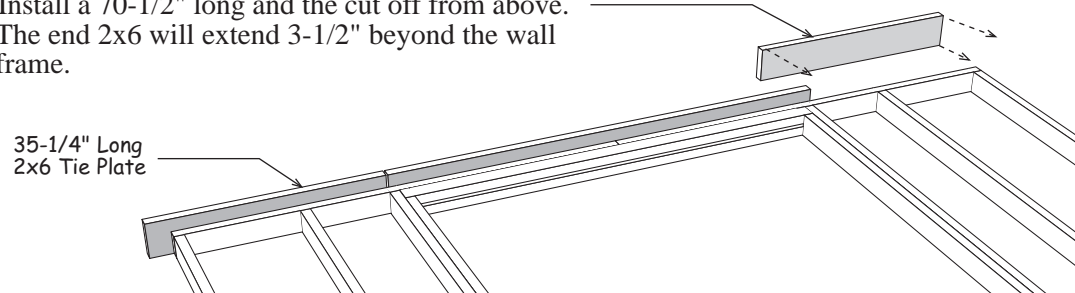


- 
- Diagram illustrating the assembly of a door frame using 2x4 lumber. The components and dimensions are labeled as follows:
- Top Header:** 65-1/2" long 2x4
  - Side Jacks:** 68-1/2" long 2x4
  - Pre-built Door Header:** The central horizontal component.
  - Door Jacks:** The vertical components supporting the door.
  - Door Spacer:** 64-1/2" long 2x4
  - Dimensions:**
    - Left side width: 18-1/4"
    - Right side width: 18-1/4"

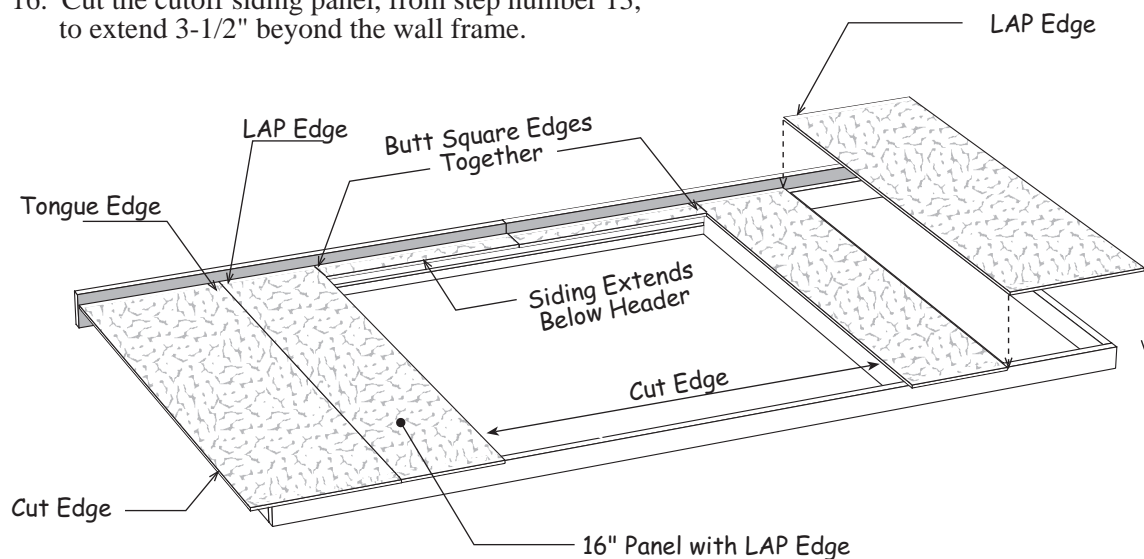


## Step 7 Assemble Front Wall Panel Continued

9. For a 12' long building, cut a 70-1/2" long 2x6 board in half. Install one of the 2x6 boards so the left end is extending 3-1/2" beyond the wall frame.
10. Install a 70-1/2" long and the cut off from above. The end 2x6 will extend 3-1/2" beyond the wall frame.



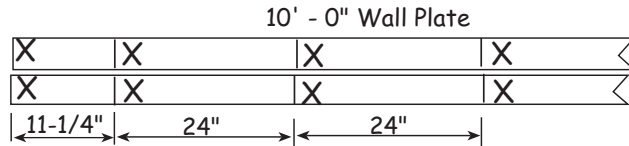
11. Cut (2) two 32-1/4" x 6" siding panels to a height of 4-1/2".
12. Locate a 16" wide siding panel that has a 'LAP' edge. Cut the siding to 75-3/4" length. Position the 'cut' edge flush with the left side of the door opening. Do not nail the LAP edge until the 'left' siding panel is applied.
13. Cut a full width siding panel width to 22-1/2", *measuring from the 'Tongue' edge*. Install the panel with the 'cut' edge extending 3-1/2" beyond the left end of the wall frame.
14. Cut another 16" wide panel to a length of 75-3/4" and install with the 'cut' edge flush with the right side of the door opening.
15. Install the 4-1/2" siding panels over the door opening.
16. Cut the cutoff siding panel, from step number 13, to extend 3-1/2" beyond the wall frame.



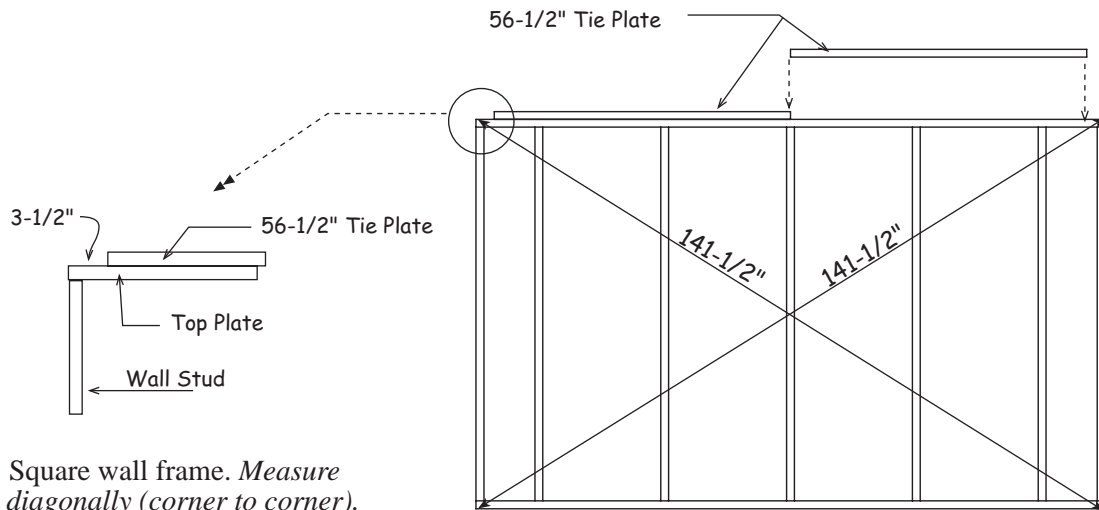


## Step 8 Assemble End Walls

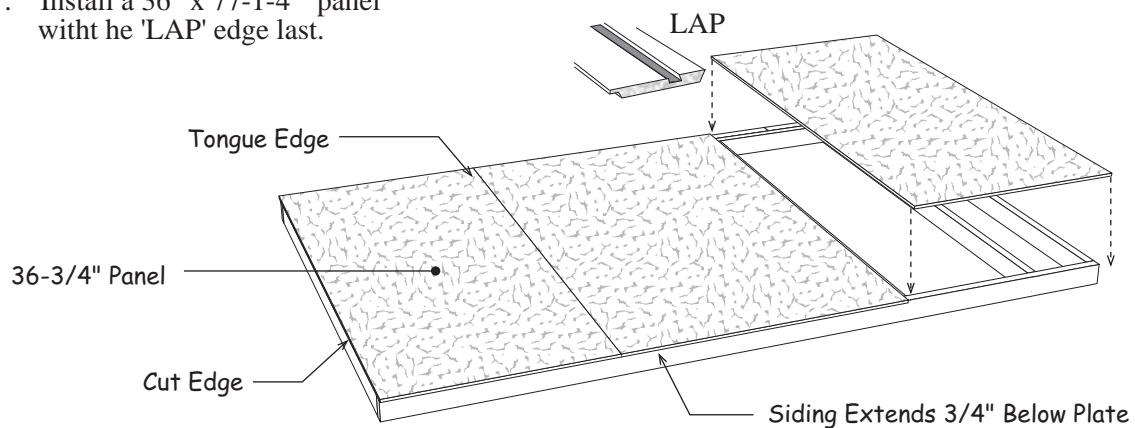
1. Position (2) two 2x4-10' boards together and indicate with 'X' marks, where the wall studs will be located.



2. Install 72" wall studs between the top and bottom plates.
3. Install (2) two 56-1/2" long 2x4s as tie plates over the top plate. The 2x4s will be 3-1/2" short of the end of the wall frame.



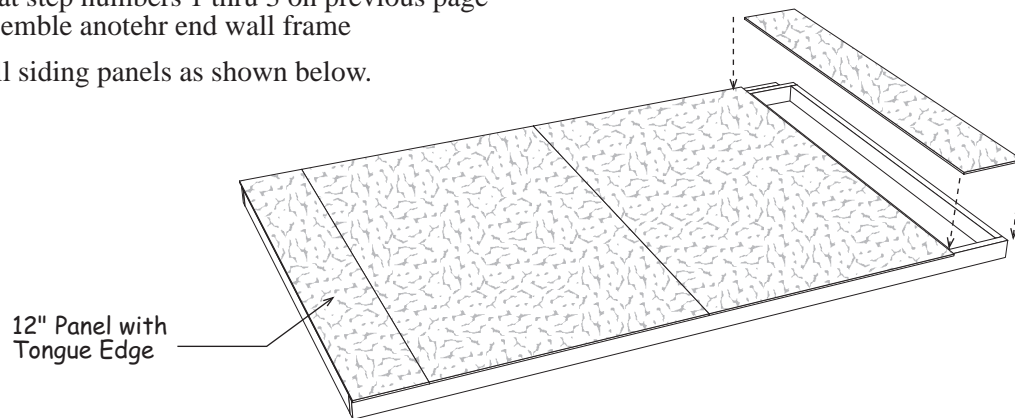
4. Square wall frame. *Measure diagonally (corner to corner).*
5. Locate a 36-3/4" x 77-1/4" siding panel with the 'Tongue' edge. Install the siding panel on the left corner, with the 'cut' edge flush with the end of the wall and flush with the top of the 2x4 tie plate. The siding should extend below the bottom plate.
6. Install a 48-3/4" x 77-1/4" siding panel in the center of the wall frame.
7. Install a 36" x 77-1-4" panel with the 'LAP' edge last.





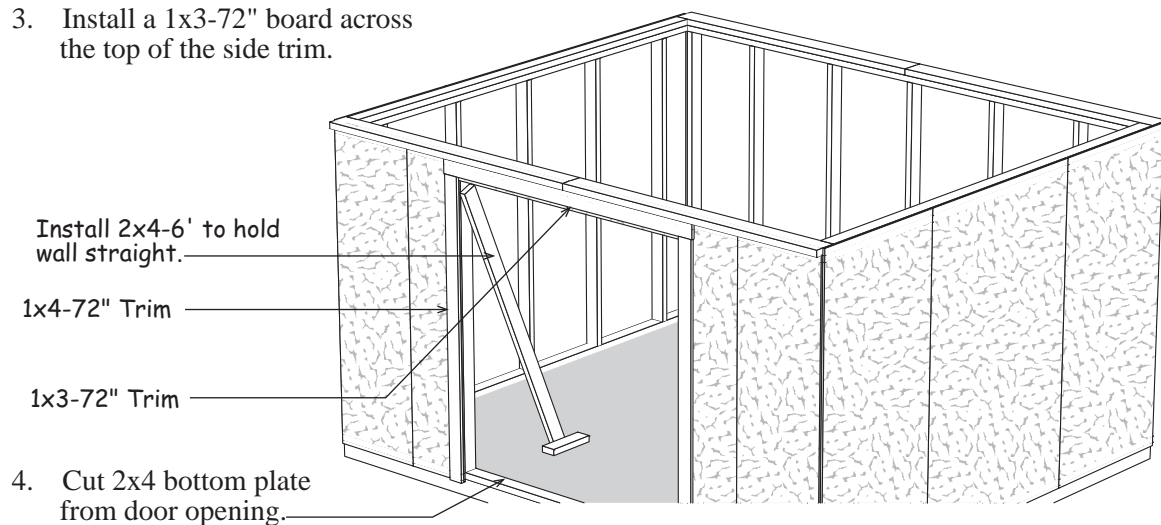
## Step 8 Assemble End Walls Continued

- Repeat step numbers 1 thru 3 on previous page to assemble another end wall frame
- Install siding panels as shown below.



## Step 9 Set Lower Walls

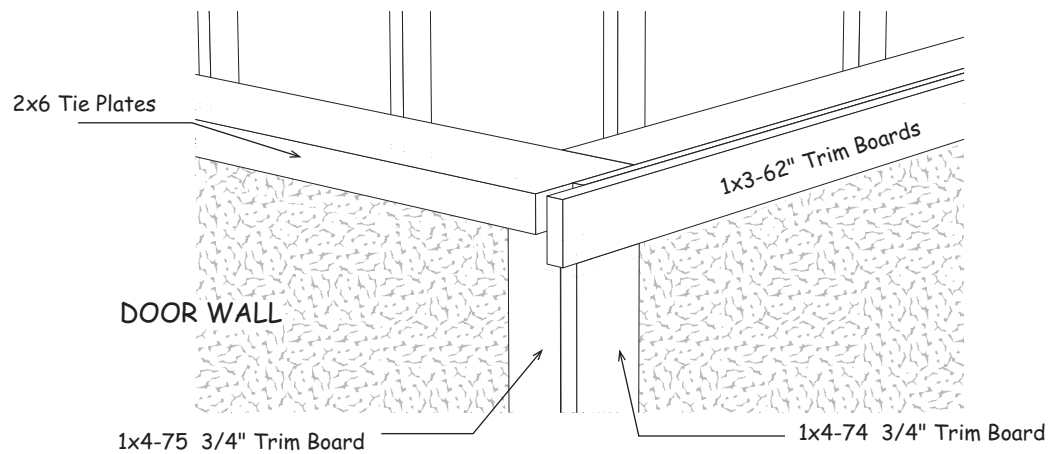
- Secure wall panels together at the corners. Use (4) four 10d coated nails per corner. Nail wall panels to the floor. Nail through the bottom plate. Space 10d sinkers 24" apart.
- Install (2) two 1x4-72" boards along each side of the door opening, flush with the bottom edge of the siding. Tack these boards with a couple nails; you may want to move the trim later when you install the doors. Use 6d galv. nails.
- Install a 1x3-72" board across the top of the side trim.





## Step 10 Install Trim

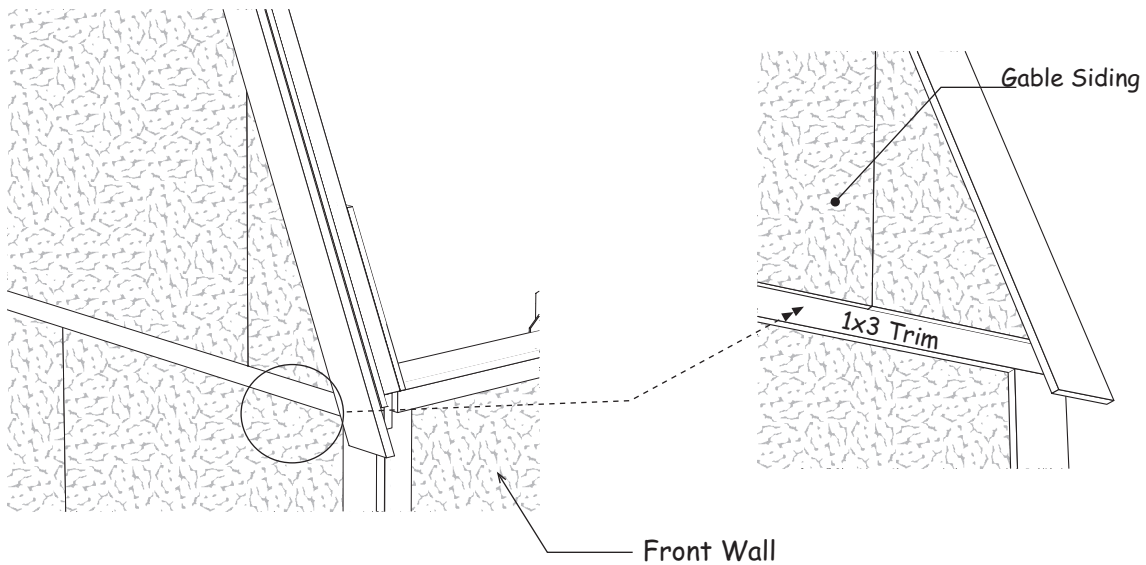
1. Install (2) two 1x3-62" long trim boards flush with the top of the front wall. Use 6d galv. nails.
2. Install 1x4-75 3/4" trim boards at the corners of the front and back. Install the trim flush with siding on the end wall.
3. Install 1x4x74-3/4" trim boards at the corners of the front wall.





## Step 11 Set Left Gable

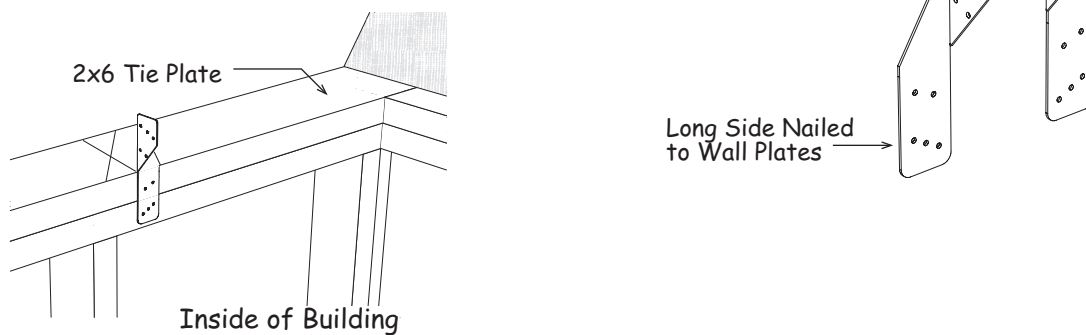
1. Install the gable on the left end wall. The gable siding will extend over the 1x3 trim on the lower wall. **NOT behind the trim!** Secure gable to wall by nailing through the gable blocks with 10d sinkers. Nail siding along the 1x3 trim board with 6d galv. nails.



## Step 12 Set Trusses

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

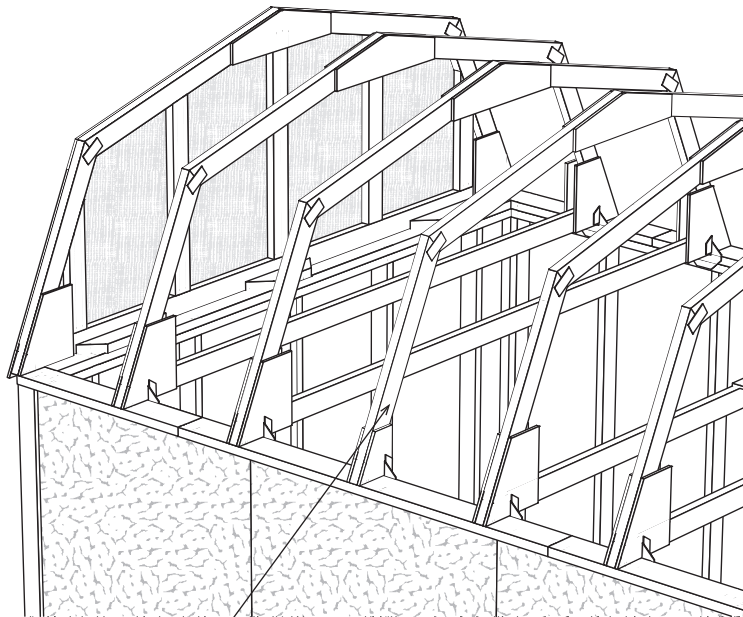
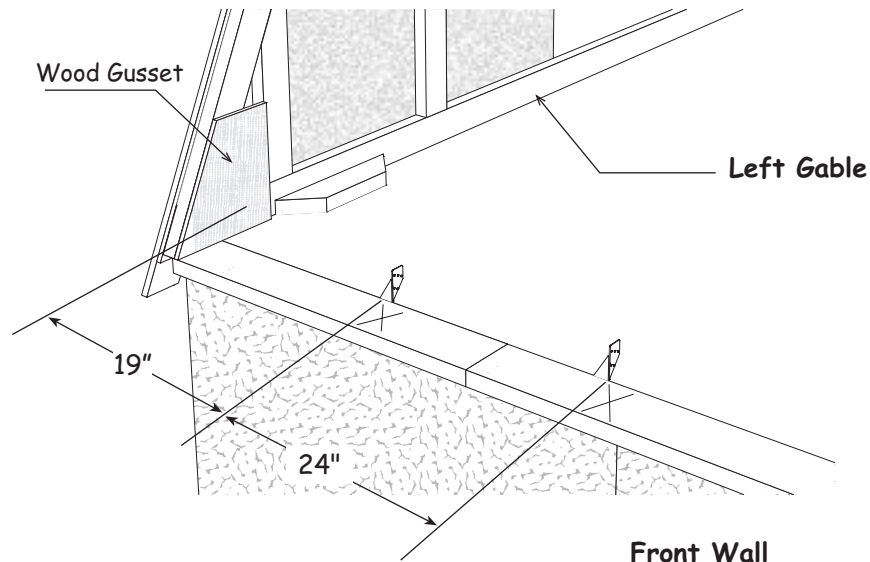
**Important:** When marking the back wall, use the left hangers and place the 'X' mark on the same side of the line so your trusses are parallel when they are installed.






## Step 12 Set Trusses Continued

4. Install the trusses over the 'X' marks. Install hanger to the opposite side of the trusses. Secure truss to metal hangers using 1-1/2" hanger nails.

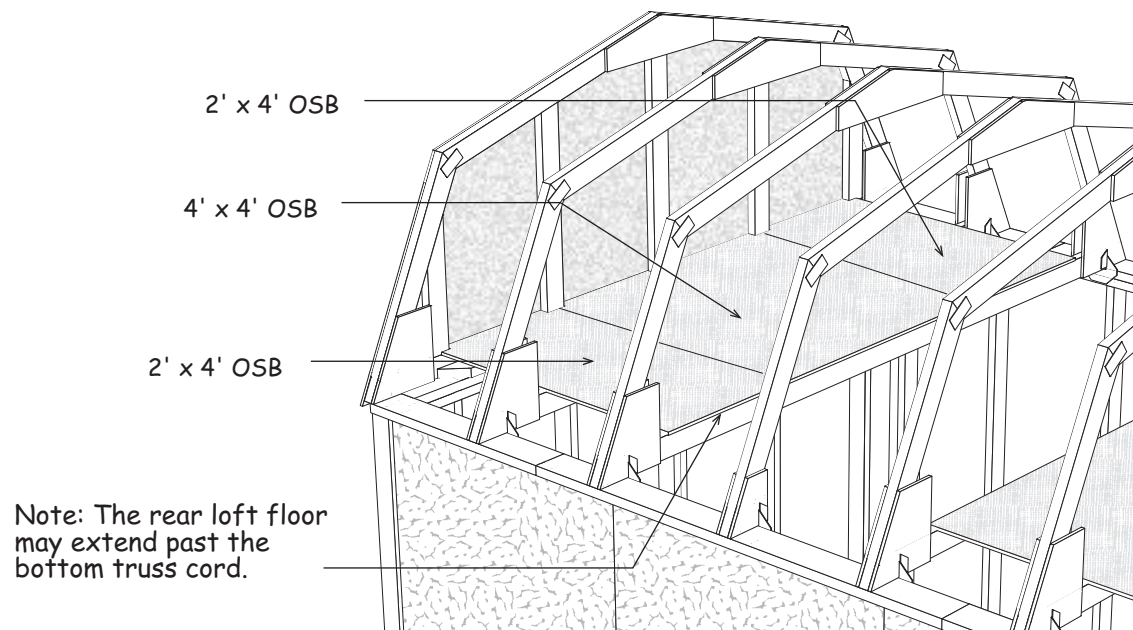


 Note: The center truss will not have a bottom cord.



## Step 13 Install Trusses & Loft Floor

1. Install front gable.
2. Install OSB loft flooring over the rear and front trusses. Notch the flooring around the gable studs on the rear and front gables. Secure floor with 7d sinkers. Note: Some OSB panels may be attached to the shipping pallet.

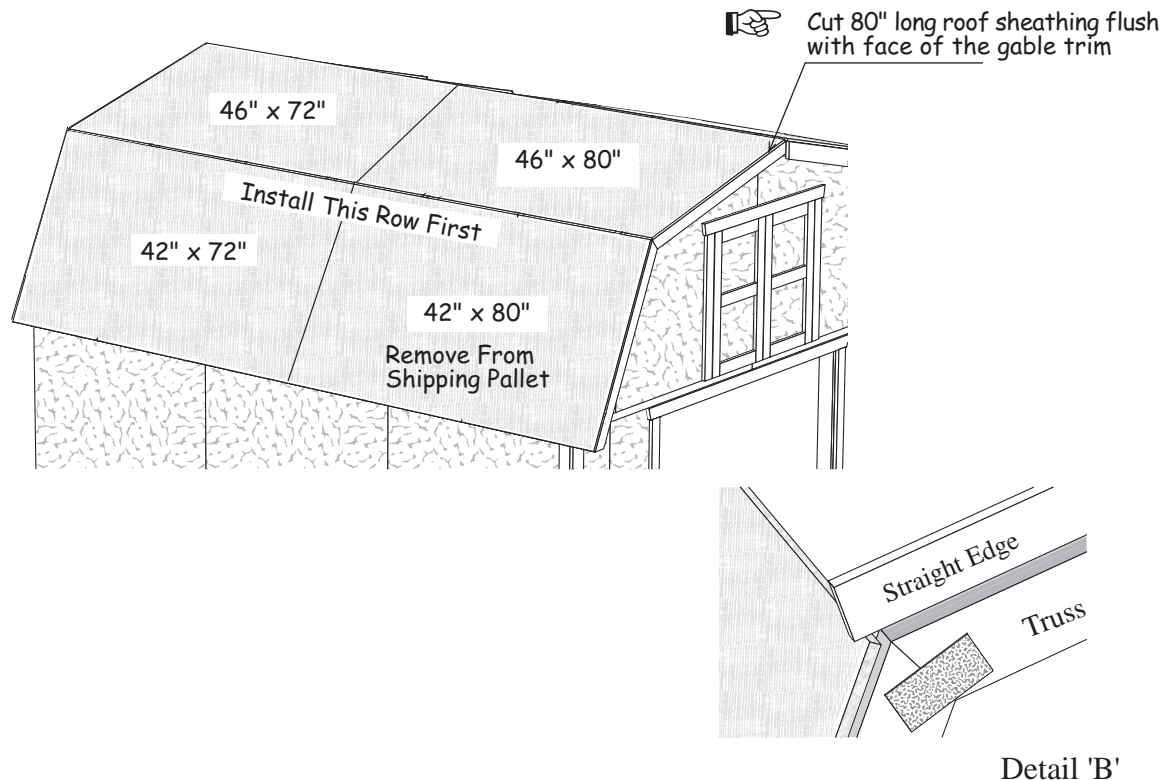




## Step 14 Install Roof Sheathing

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 7d sinkers spaced 12" apart.

Install first sheet flush with back gable trim. Work back to front. The top roof sheathing will not extend to the ridge. This will allow an opening for air ventilation when you install a ridge vent.



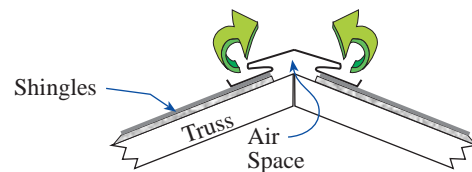
## Install Shingles - not included in kit

1. Install felt paper and metal roof edge the perimeter of the building.
2. Install shingles according to the instructions on the wrapper. If you need more detailed instructions on installing shingles, there are good publications at book stores or newsstands.

Roof Shingles            7 bdl.

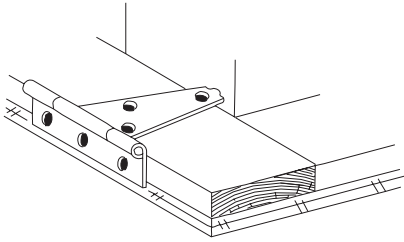
Roof 'drip' Edge        6 pcs.

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

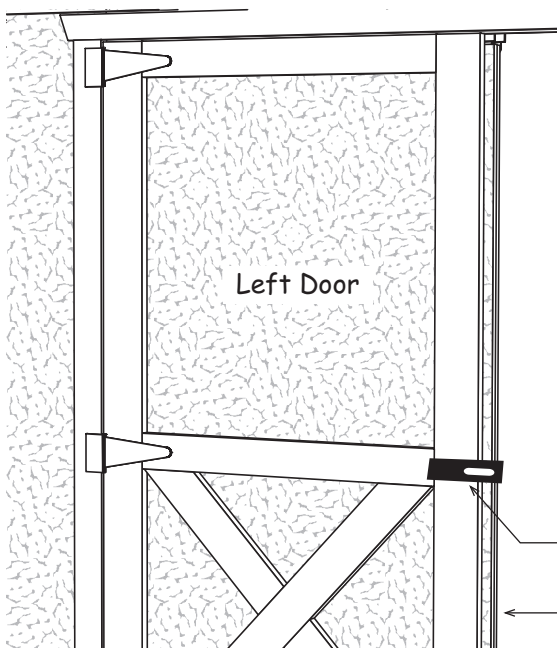




## Step 15 Install Doors & Hardware



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 1-3/4" 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.

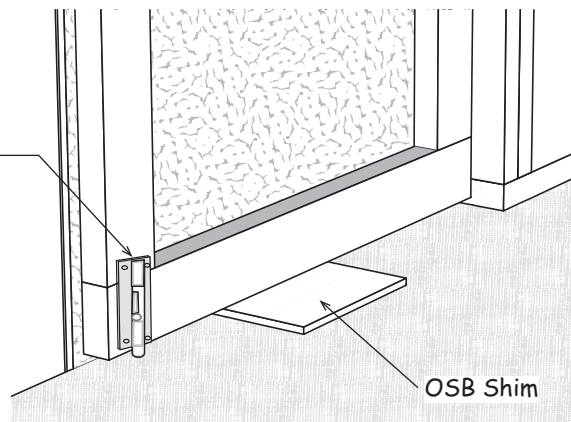
5. Install hinges to trim with 2" screws.

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.





# Meadowbrook and Woodville 10'x 12' Barn kit

Qty.	<i>2x4 &amp; 2x6 Framing</i>		Size
4	Wall Plates		120 "
8	Truss - Bottom Cords		116 1/4"
8	2x4 Boards Attached to Pallet		80 "
31	Wall Studs		72 "
4	Wall Plates		68 1/2"
4	Wall Plates		65 1/2"
4	Wall Plates		56 1/2"
1	Gable Studs & Framing		36 "
1	Gable Studs & Framing		42 "
4	Gable Studs & Framing		34 1/4"
4	Gable Studs & Framing		21 1/2"
6	Gable Nailing Blocks		15 3/4"
4	2x6 Tie Plates for Sidewalls		70 1/2"
	<i>2x3 Framing</i>		
4	Gable Overhangs		47 "
4	Gable Overhangs		42 1/4"
2	Gable Blocks		6 1/4"
	<i>Pre-built Components</i>		
14	Pre-built Truss Halves		
2	32" x 72" Pre-built Barn Doors		
2	18" x 29" Loft Door Frames		
1	2x3 Door Header		67-1/2"
	<i>Loft Floor &amp; Roof Sheathing</i>		
2	42" x 80"	2	42" x 72"
2	46" x 80"	2	46" x 72"
2	48" x 48"	4	24" x 48"
	<i>Miscellaneous Lumber</i>		
12	Wood Truss Ridge Gussets		8" x 24"
20	Wood Bottom Truss Gussets		12" x 12"

Qty.	Description		Size
	<i>White Pine Trim</i>		
4	1x4 Gable Trim		47 1/2"
4	1x4 Gable Trim		43 "
4	1x4 Corner Trim		75 3/4"
4	1x4 Corner Trim		74 3/4"
2	1x4 Door Trim		72 "
1	1x3 Top Door Trim		72 "
4	1x3 Lower Wall Trim		62 "
2	1x3 Loft Door Trim		29 1/4"
1	1x3 Loft Door Trim		43 "
	<i>Exterior Siding &amp; Soffit</i>		
3	48" x 77-1/4"	2	12" x 77-1/4"
2	36" x 77-1/4"	4	48" x 75-3/4"
2	16" x 77-1/4"	2	6" x 32-1/4"
4	Siding for Roof Gables		48" x 48"
4	Siding for Roof Gables		16" x 30"
2	Siding For Door Header		6" x 32-3/4"
4	8" x 48" Front Soffit Panels (Woodville model)		
	<i>Hardware</i>		
3	lb. 10d Sinkers	20	Truss Hangers
4	lb. 6d Galv.	75	Hinge Screws
2	lb. 7d Sinkers	1	Door Hasp
3	lb. 6d Common	2	4" Barrel Bolts
		2	6" Barrel Bolts
3	lb. Hanger Nails	12	2-1/2" Screws
4	4" Door Hinges	36	1" Screws
6	5" Door Hinges	24	1-5/8" Screws
22	1x4 Drive-on Plate		
	<i>Miscellaneous</i>		
2	Center Truss Blocks w/gusset		3-1/2"x7-1/2"

Roof Material  
by Owner

Roof Shingles	7 bdl.
Roof 'drip' Edge	6 pcs.