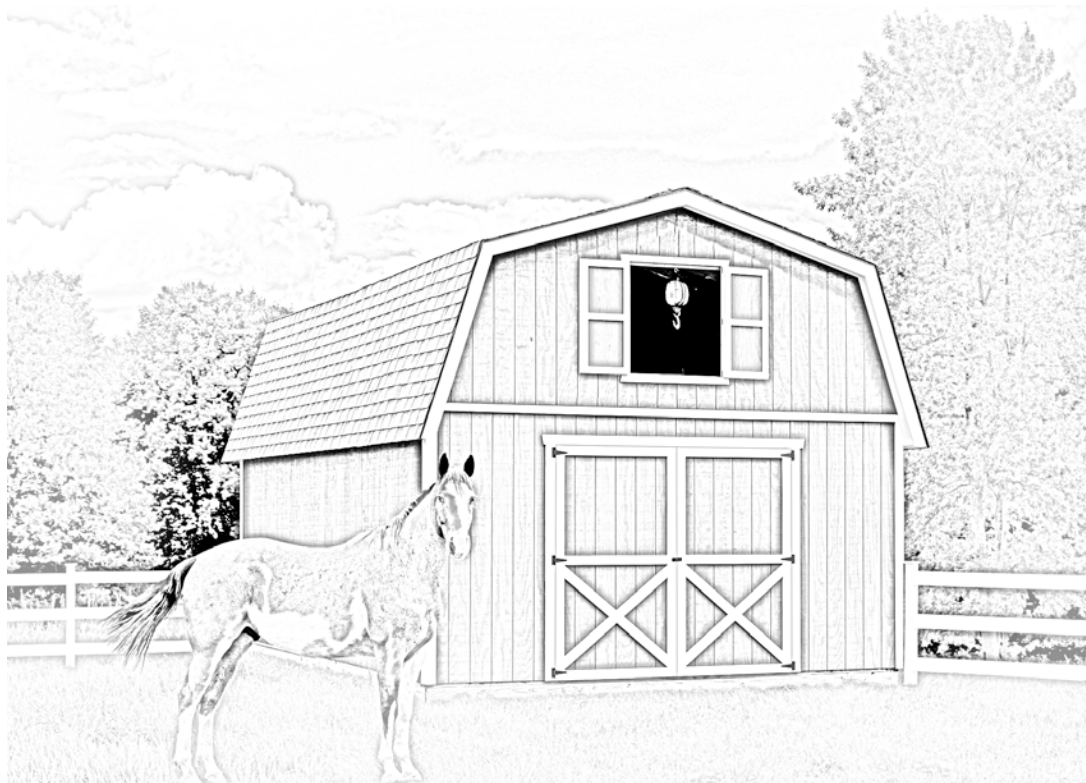




# Sentry Buildings

## Assembly Book

Revised October 10, 2024



## *the Roanoke*

16'x32' Building

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**Manufactured by RBS Holdings, LLC**

205 Arlington Drive

Greenville, PA 16125

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## IMPORTANT INFORMATION ABOUT YOUR KIT

**Building Permits:** Check with your local HOA or building code office for any requirements, restrictions or permits necessary for construction.

**Foundation:** By owner. Refer to next page for foundation suggestions and size.

**What's Included:** Our package includes pre-cut materials for the 2nd floor roof gables, roof trusses, gable trim and pre-built loft and barn doors. The nails and hardware necessary to construct the lower walls are packed in the top of 'A' pallet. The other materials on the pallet will not be used until the first floor walls and loft floor are completed. This material is delivered, *curb side in covered van*, on two 4'x7' pallets. See back page for material list.

Framing lumber for the first floor walls and loft floor, exterior siding, loft flooring and roof sheathing will be delivered by a local supplier. This will be a separate delivery and you will be notified before that delivery takes place. Material is listed on the back pages. Someone will need to sign for both deliveries.

**Owner Supplied:** Roof shingles, metal roof edge, felt and ventilation accessories. See the back pages for quantity needed. Paint for siding and trim.

**Assembly Help:** Monday thru Friday 800-245-1577 8:00 to 5:00 ET  
Weekend - after hours 724-866-4357  
email to: [questions@barnkits.com](mailto:questions@barnkits.com) (normal business hours)

**Care of product prior to assembly:** Do not expose lumber and sheet goods to inclement weather. Assembly should begin promptly to prevent the twisting of lumber. Notify our company within 30 days of any damage or missing items for full replacement.

**Building Tips:** Follow the assembly Steps in sequence. Skipping steps will result in components not fitting properly. The nails, hardware and header material needed to assemble the lower walls and loft floor are packaged on the top of pallet 'A'. The other materials on the pallet will not be used until the first floor walls and loft floor are completed.



### Tools

### Required:

- Hand or Circular Saw
- Cordless Drill
- Caulking Gun
- Safetyglasses: Always wear safety glasses when cutting or nailing!
- \* Scaffolding
- Level
- Measuring Tape
- 8' & 10' Ladder(s)
- Phillips Screwdriver
- Framing Square
- Hammer

- \* You will need to rent (6) six sections of scaffolding to safely install the second floor material. Use safety harnesses when on the scaffolding. Consider hiring a professional roofer to install the shingles or metal roof. They have the knowledge and equipment to do the job properly.

# Foundation Types & Measurements

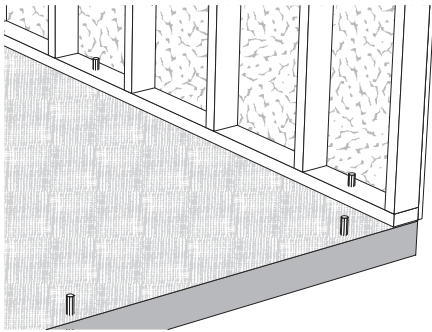
**Important:** You will need to have a proper foundation installed to support the building. Depending on the intended use determines what type of foundation is best.

**Do Not** make the foundation larger than the building size. When installing the building on a concrete slab, install the siding flush with the bottom plate. When installing on a wood floor, extend the siding 3/4" below the bottom plate to cover the edge of the flooring.

**Foundation Types:** What foundation is best depends on what type of items will be stored. The building code in your area will also determine what type of foundation can be used. A few different types of foundations are shown below. Check the zoning and building code requirements in your area.

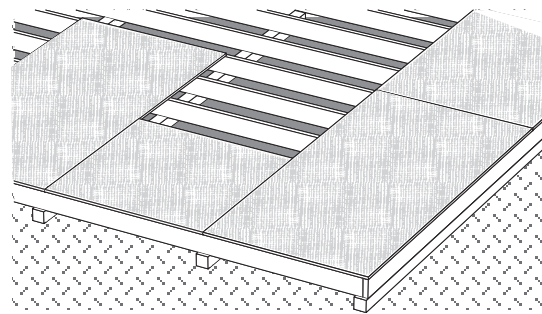
## Foundation Types

**Floating Slab** A concrete slab is ideal for storage of cars or other types of heavy items.



Floating Cement Slab

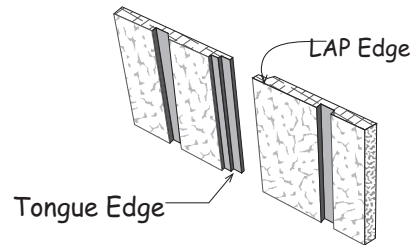
**Wood Floor on Runners:** Suitable for storage or workshop. Treated 6x6 lumber over a bed of gravel. Floor joist should be treated 2x6 spaced 16" on center and covered with 3/4" tongue and groove wood flooring.



Wood Floor on Wood Runners

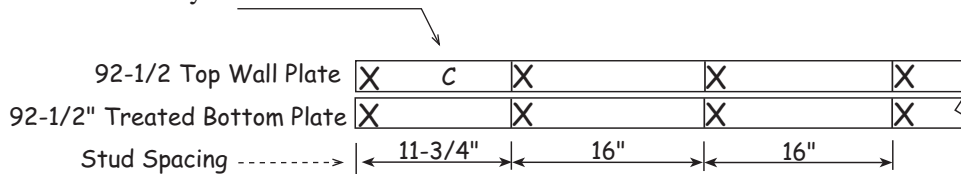
## Exterior Siding Information

**LP siding** has a 50 year warranty and is already primed. Apply two coats of latex acrylic paint for the finish coat. Paint the bottom edge of the siding, *this is important*. Maintain 6" to 8" of clearance from the bottom edge of the siding and the ground. Don't allow garden mulch to build up and keep shrubs a minimum of 1' away from the building.



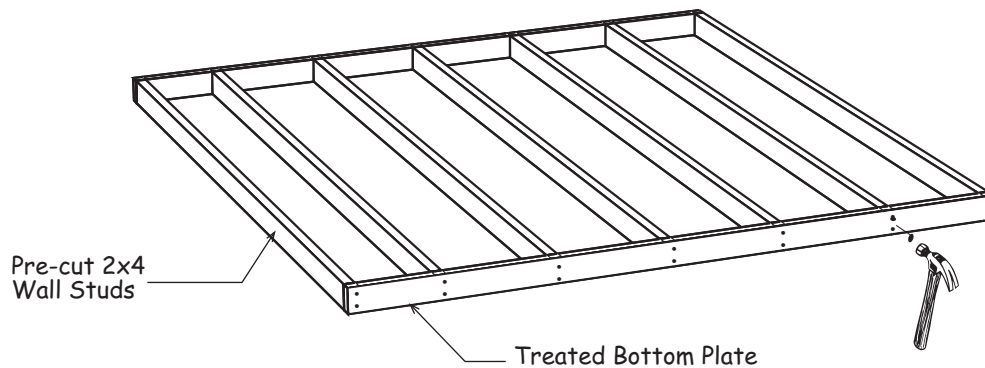
## Step 1 Assemble (2) Two 92-1/2" Rear Wall Frames

1. Cut (2) two 2x4-8' (one will be treated) to a length of 92-1/2". Position the boards together and indicate with 'X' marks where the wall studs will be located.
2. Mark a 'C' anywhere between first two stud marks. This is referenced in a later step.



 **The length of pre-cut wall studs will vary from 92-1/4" to 93" depending on your locality.**

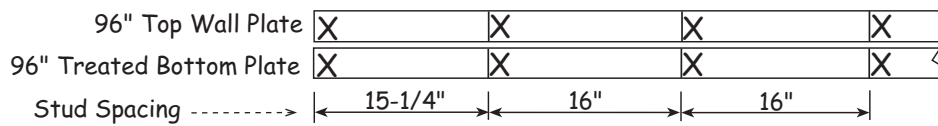
**Note:** When building the lower walls, use treated 2x4s for the bottom wall plates.



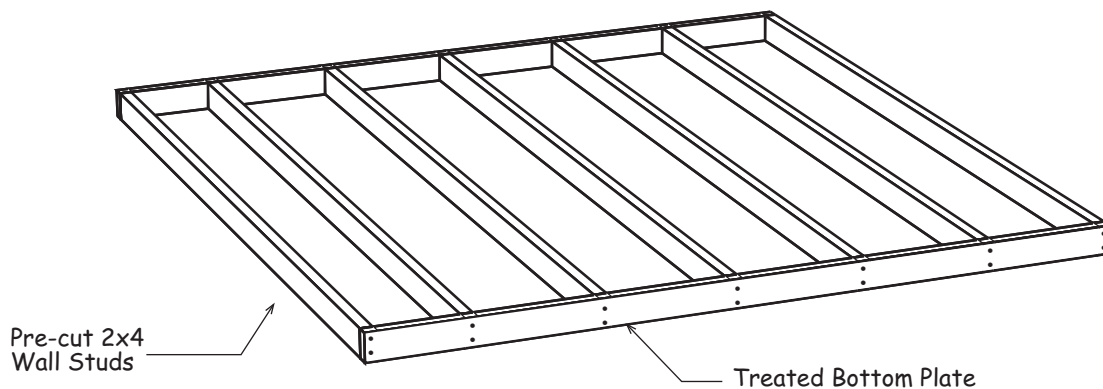
3. Install (7) seven pre-cut wall studs between the top and bottom plates. Nail the treated bottom plate to each wall stud with (2) two 16d galvanized deck nails. Use (2) two 10d coated sinker nails per stud to secure the top plate.
4. Repeat to build another 92-1/2' long wall frame.
5. Mark both frames '**Rear Wall Frames**' and set frames aside.

## Step 2 Assemble (2) Two 8' Long Side Wall Frames

1. Select (2) two 2x4-8' (one will be treated) if necessary trim to a length of 96". Position the boards together and indicate with 'X' marks where the wall studs will be located.

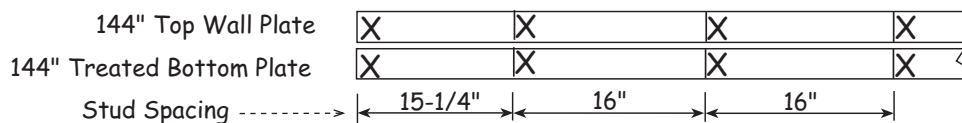


2. Install (7) seven pre-cut wall studs between the top and bottom plates. Nail the treated bottom plate to each wall stud with (2) two 16d galvanized deck nails. Use (2) two 10d coated sinker nails per stud to secure the top plate.
3. Repeat to build another 96" long wall frame.
4. Mark the frames '**Side Wall Frames**' and set frames aside.



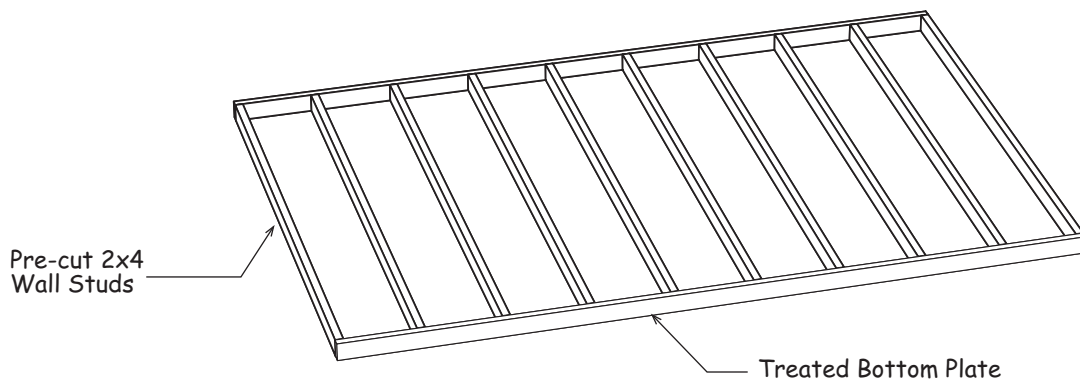
## Step 3A Assemble (4) Four 12' Side Wall Frames

1. Trim, *if necessary*, (2) two 2x4-12' boards (one will be treated) to a length of 144". Position the boards together and indicate with 'X' marks where the wall studs will be located.



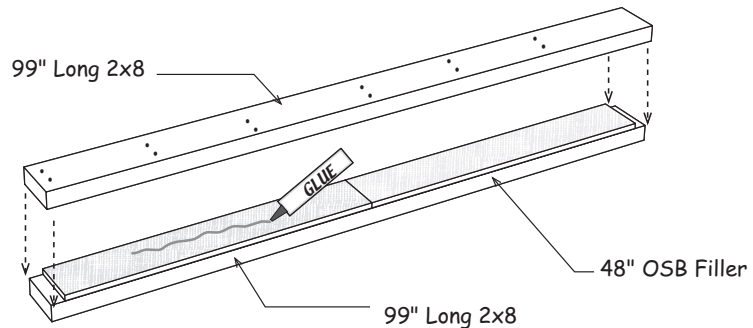
## Step 3B Assemble (4) Four 12' Side Wall Frames continued

2. Install (10) ten pre-cut wall studs between the top and bottom plates. Nail the treated bottom plate to each wall stud with (2) two 16d galvanized deck nails. Use (2) two 10d coated sinker nails per stud to secure the top plate.
3. Repeat to build (3) three more 144" long wall frame.
4. Mark both frames '**Side Wall Frames**' and set frames aside.



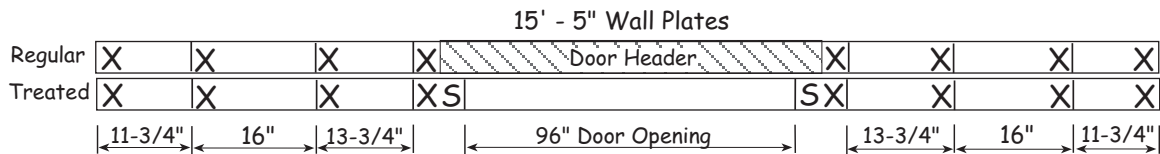
## Step 4 Assemble Door Header

1. Cut (2) two 10' long 2x8 boards to a length of 99".
2. Locate a 24" x 48" OSB panel packed in our kit. *The panel is located below the hardware in 'A' pallet.* Cut (2) two 7-1/4" x 48" fillers to fit between the 2x8 boards.
3. Take OSB filler and install in the center of the 2x8 boards. Nail together using 10d coated sinkers. Use (12) twelve nails spaced evenly on each side.

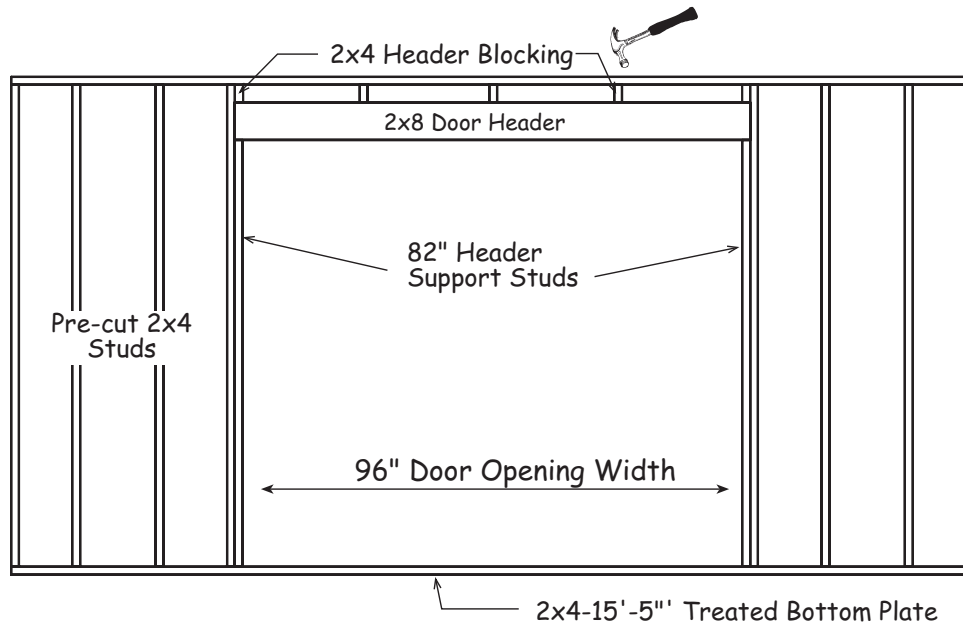


## Step 5 Assemble 15'-5" Front wall Door Frame

1. Cut (2) two 2x4-16' (one will be treated) to a length of 15'-5". Position the boards together and indicate with 'X' marks where the wall studs will be located and an 'S' where the support studs will be located..



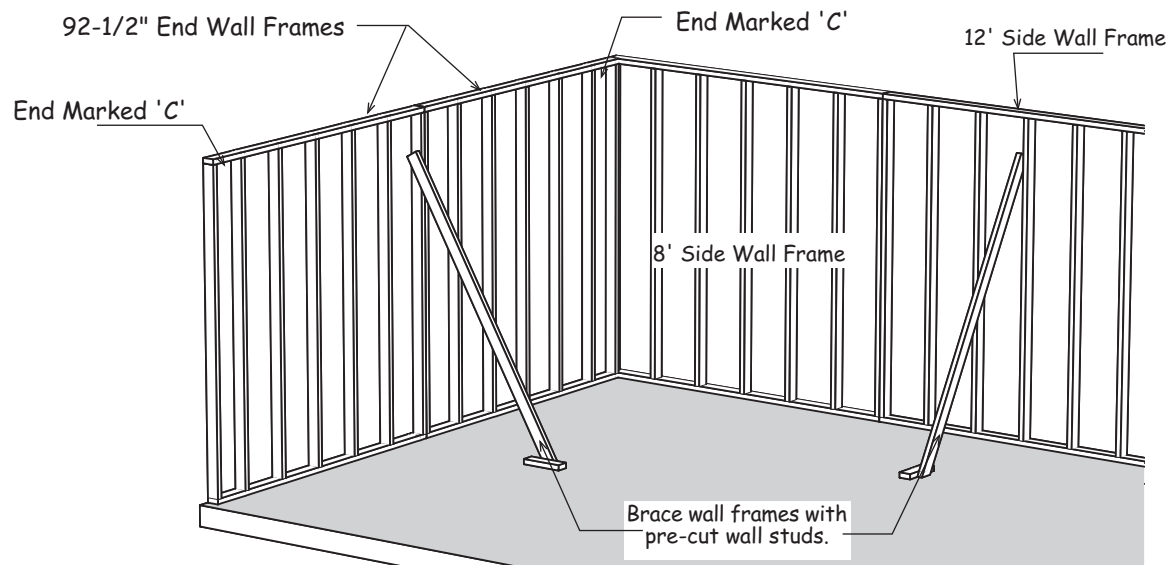
2. Assemble the front wall frame using the wall plates cut above and (8) eight pre-cut wall studs. Use 16d galvanized deck nails for the bottom plate and 10d coated sinkers for the top plate.
3. Cut (2) two pre-cut studs to a length of 82" and install them as header supports using (10) ten 10d sinkers. Install the 2x8 header by toe-nailing the ends to the adjacent studs with 10d sinkers.
4. Cut 2x4 blocks to fit between header and top 2x4 plate. Install with 10d sinkers.



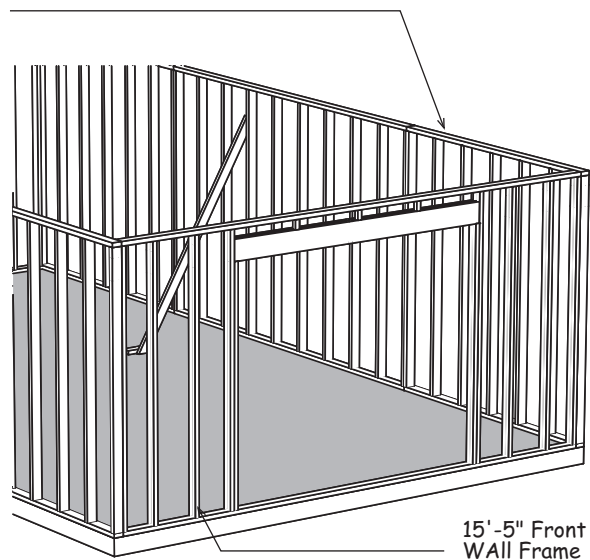


## Step 6 Set Wall Frames

1. Install one of the 92-1/2" rear wall frames against inside of a 8' side wall frame. Brace walls with pre-cut studs.
2. Install the other 92-1/2" rear wall frame to the rear wall frame. Nail the rear wall frames together where they butt with (8) eight 10d sinker (stagger nails on each side of the studs) .
3. Install a 12' frame, next to the first 8' side wall frame. Nail frames together where they butt with (8) eight 10d sinkers (stagger nails on each side of the studs).



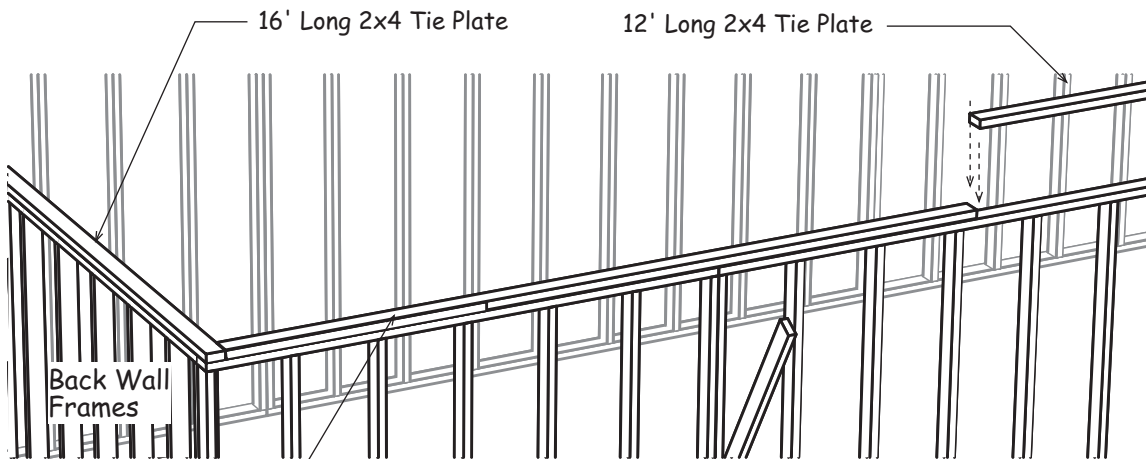
4. Install another 12' long side wall frame.
5. Install opposite side wall frames.
6. Install the front wall frame between the side wall frames. Secure frames together at the corner using (4) four 10d sinkers.
7. Nail frames to the floor using 16d Galv. spiral nails or, if erecting on a cement slab, concrete anchor bolts (*not included*) spaced 24" on center.. Do not nail the 2x4 plate in the door opening.





## Step 7 Install 2x4 Tie Plates

1. Install a 16' long 2x4 on the back wall. Use 10d sinkers space 16" apart to secure tie plates.
2. Repeat to install a 16' long 2x4 tie plate on the opposite front wall.



3. Install a 2x4-12' on the side wall. The 2x4 will butt against the 16' long tie plate on the back wall. Use 10d sinkers spaced 12" apart.
4. Install another 2x4-12' boards on the same side wall frame.
5. Cut to fit and install a 2x4-8' board to finish.
6. Repeat to install 2x4 tie plates on the opposite sidewall frames.

## Step 8A Install Siding on Wall Frames



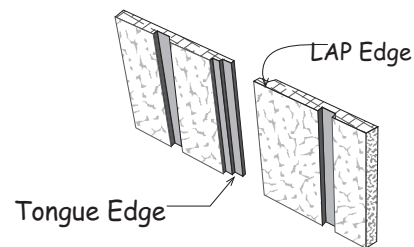
*If a siding panel has a damaged edge, install this edge at a corner where it will be covered with corner trim.*

Concrete Slab Foundation: Install siding flush with the bottom plate.

Wood Floor Foundation: Extend the siding 3/4" below the bottom plate.

### ***Exterior Siding Information***

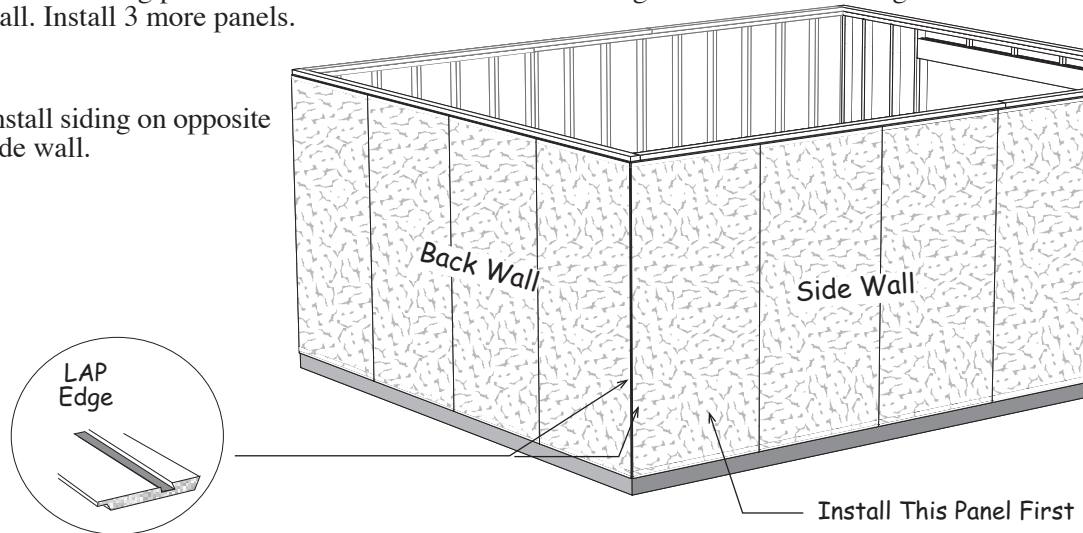
**LP siding** has a 50 year warranty and is already primed. Apply two coats of latex acrylic paint for the finish coat. Paint the bottom edge of the siding, *this is important*. Maintain 6" to 8" of clearance from the bottom edge of the siding and the ground. Don't allow garden mulch to build up and keep shrubs a minimum of 1' away from the building.



## Step 8B Install Siding on Wall Frames continued

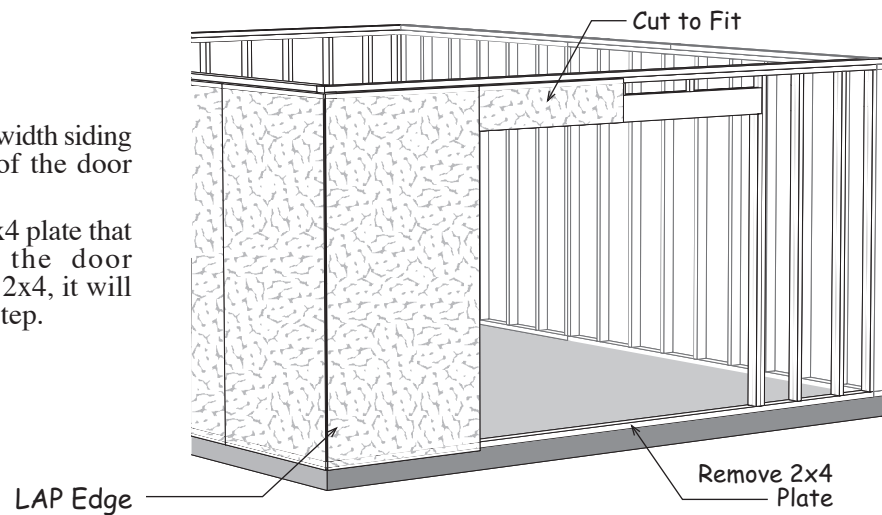
1. Install a full width siding panel on the side wall with the 'LAP' edge flush with the 2x4s on the back wall. Install (7) seven more siding panels. If necessary cut last panel flush with 2x4s on front wall. Use 8d galv. box nails spaced 8" apart.
2. Install a siding panel on the back wall with the 'LAP' edge flush with the siding on the side wall. Install 3 more panels.

3. Install siding on opposite side wall.



4. Install a full width siding panel on the front wall with the 'LAP' edge flush with the siding on the side wall.
5. Locate (2) two 14-1/2" x 48" siding panels. Cut these to fit above door opening. Make sure these are flush with bottom of door header.

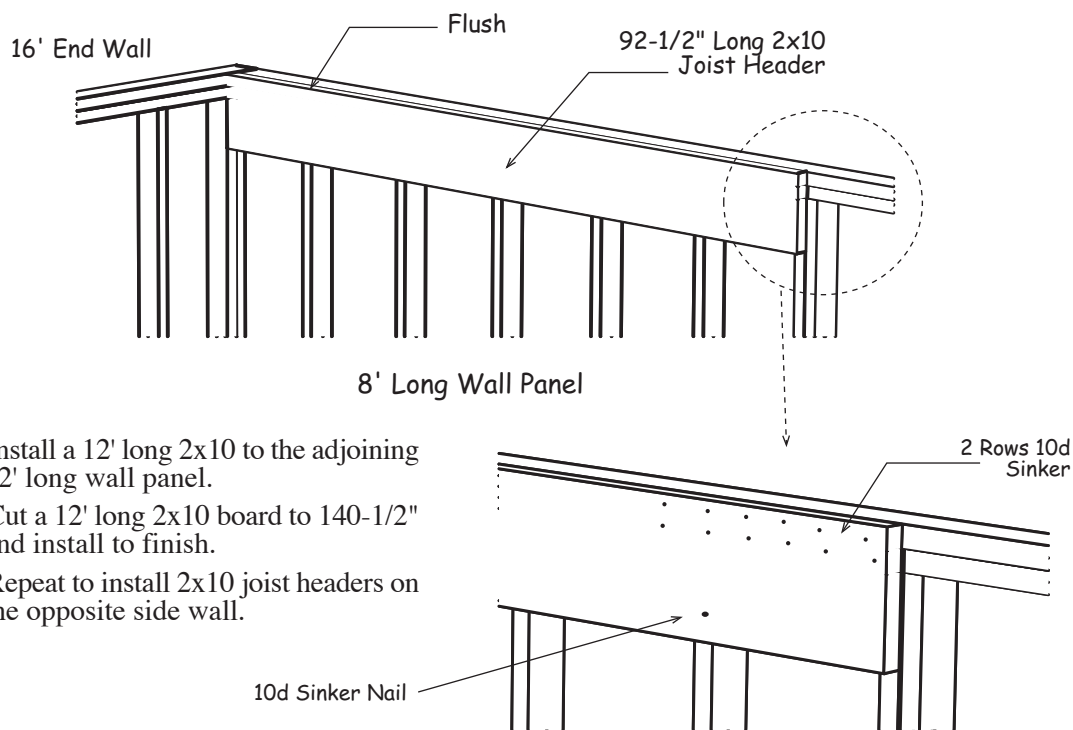
6. Install another full width siding panel on the right side of the door opening.
7. Cut and remove 2x4 plate that extends across the door opening. Save the 2x4, it will be used in a later step.



## Step 9 Install 2x10 Joist Headers

**IMPORTANT:** If you purchased the optional stair kit, go now to the instructions in the stair kit book to install the stairs, floor joist and flooring. Otherwise, modify the instructions on Step 11 to provide another way to access to the loft area.

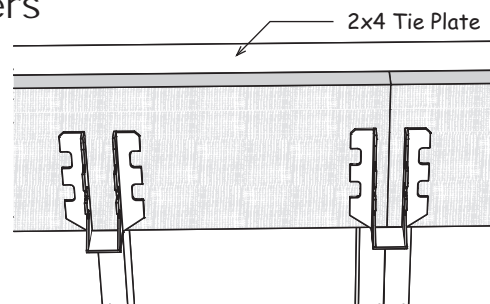
1. Cut a 8' long 2x10 board to 92-1/2". Install this 2x10 to the 8' wall panel, against the 16' end wall panel. Install the 2x10 flush with the top of the tie 2x4 tie plate. Secure with (2) two rows of 10d sinker nails spaced 4" apart across the top 2x4 plates. Nail the 2x10 to each wall stud with one 10d sinker. *See detail below.*



2. Install a 12' long 2x10 to the adjoining 12' long wall panel.
3. Cut a 12' long 2x10 board to 140-1/2" and install to finish.
4. Repeat to install 2x10 joist headers on the opposite side wall.

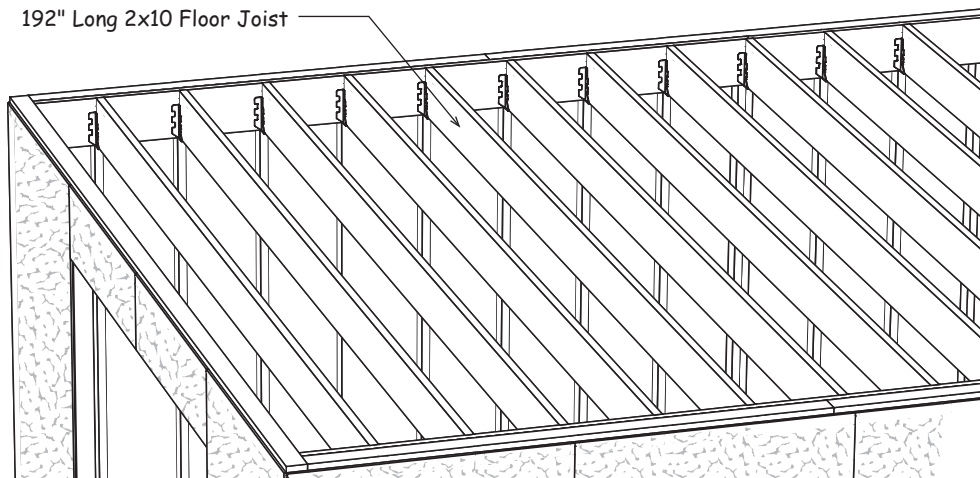
## Step 10 Install 2x10 Joist Hangers

Install metal joist hangers on the 2x10 joist header, directly above each wall stud. Where the wall panels butt together install the hanger in the center of the wall studs. Install the hanger flush with the bottom of the 2x10 so the top of the floor joist will be flush with the top of the 2x10. Install hangers with 1-1/2" hanger nails.



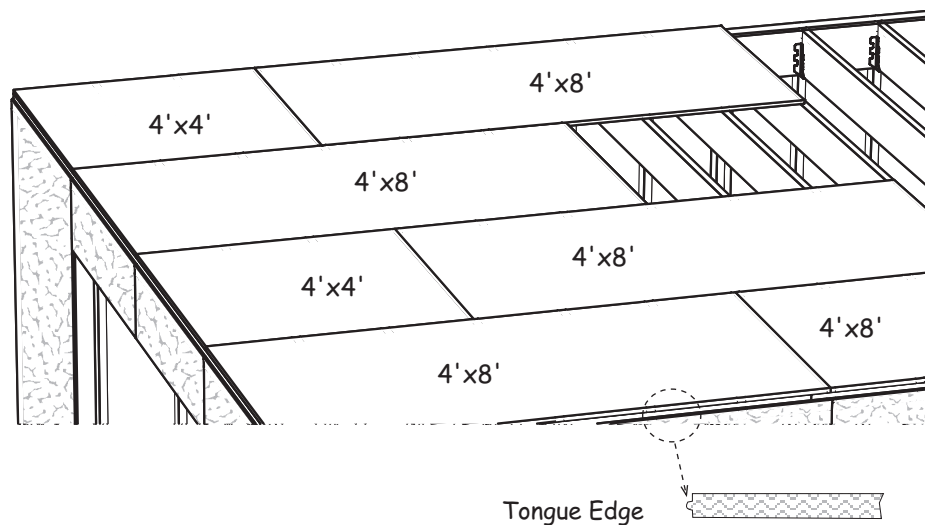
## Step 11 Install Floor Joist

Cut 2x10-16' boards to 182" length and install between the side walls. Secure to joist hanger with 1-1/2" hanger nails.




## Step 12 Install Loft Flooring

Starting at the front (door wall) install 3/4" T&G flooring with the 'Tongue' edge flush with the 2x4 tie plates on side walls. Stagger the seams in an alternating pattern (see below). Continue to back wall. Secure flooring with 8d galvanized spiral deck nails spaced 12" apart.

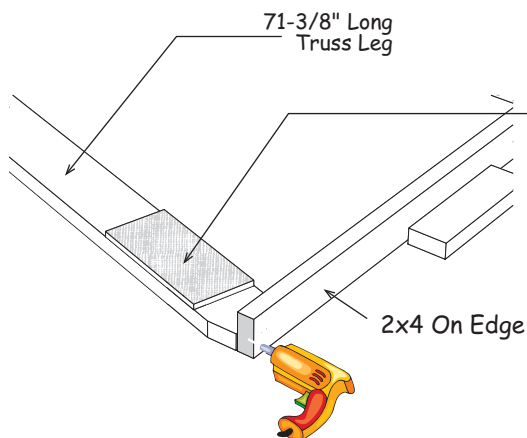
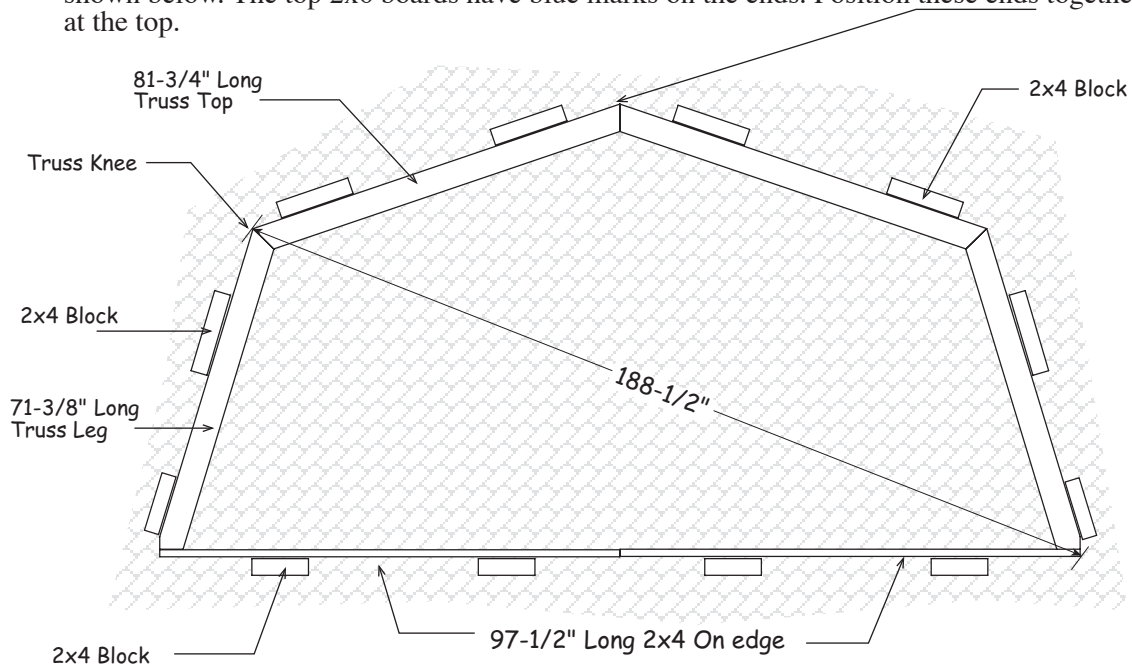


Step 13 Not needed in this size kit. Proceed to Step 14A

## Step 14A Assemble Rear Gable


 Assemble the roof gables and trusses on the center of the loft floor. This will make it easier to stand the gable upright over the lower wall.

1. Cut (2) two 2x4-10' boards to a length of  $97\frac{1}{2}$ ". Position these 2x4s, *on edge* and butt together.
2. Position (2) two  $81\frac{3}{4}$ " long 2x6s and (2) two  $71\frac{3}{8}$ " long 2x6 boards on the 2x4 plates as shown below. The top 2x6 boards have blue marks on the ends. Position these ends together at the top.

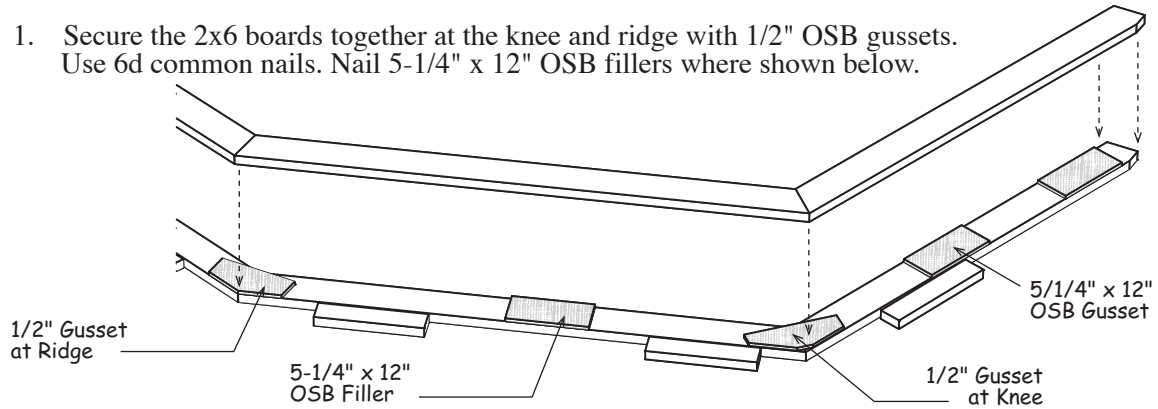


3. Secure the truss leg to the 2x4 plate with (2) two  $2\frac{1}{2}$ " long deck screws.
4. Install  $5\frac{1}{2}$ " x 12" OSB fillers on the 2x6 truss legs near 2x4 with 6d common nails. Exact spacing isn't important.
5. Square truss. Measure diagonally from the knee of the 2x6 truss to the bottom corner of the 2x4 plate. The measurements will be the same ( $188\frac{1}{2}$ ") when the truss is square.
6. Cut 2x4 removed from door opening into 8" long blocks. Tack nail or screw the blocks around the perimeter of the gable frame to prevent the gable from moving.

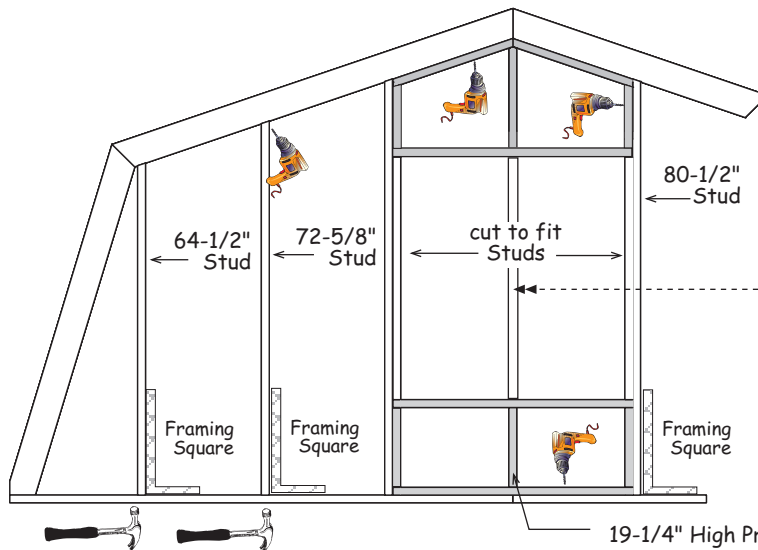
## Step 14B Assemble Rear Gable continued

 *The Ridge Gussets have equal length angle cuts. The Knee Gussets have unequal length cuts.*

1. Secure the 2x6 boards together at the knee and ridge with 1/2" OSB gussets. Use 6d common nails. Nail 5-1/4" x 12" OSB fillers where shown below.



2. Place (2) two 81-3/4" and (2) two 71-3/8" 2x6s over the fillers. Secure using (6) six 10d sinkers where fillers are located.
3. Install a 21-3/4" high pre-built gable frame at the peak of the double row of trusses. Secure the frame to the 2x6 truss boards with (6) six 2-1/2" deck screws.
4. Position a 19-1/4" pre-built frame directly below the top frame. Use (2) two 80-1/2" long studs to help align the upper and lower frames. Use a framing square to ensure the studs are plumb. Screw bottom frame to 2x4 plate using 2-1/2" screws. Secure the 80-1/2" studs to the pre-built frames using 2-1/2" screws.



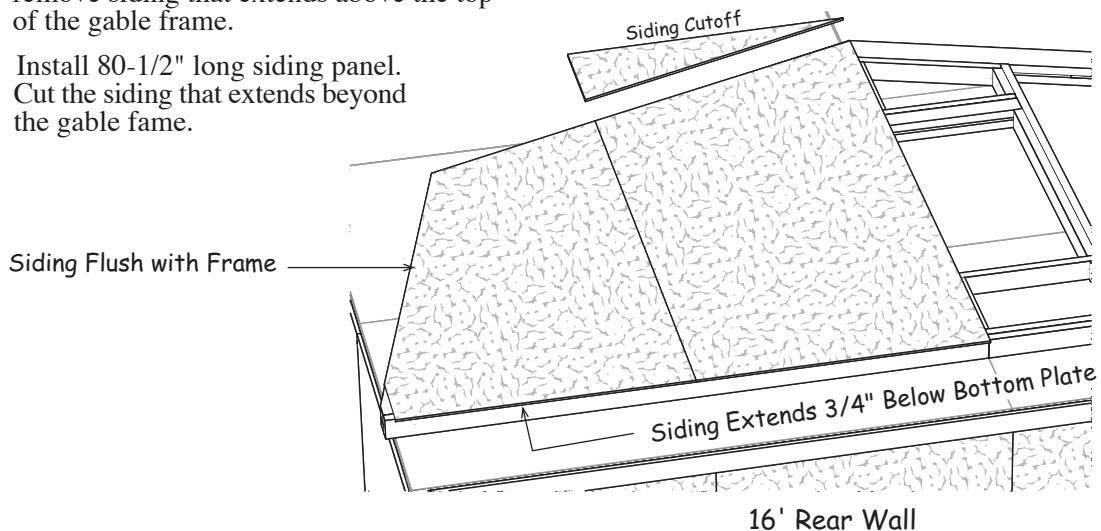
5. Locate (3) three 47-3/4" long 2x4s and trim to fit and install between frames.

*Optional: You may choose to rough-in a window opening in this area.*

6. Install a 72-5/8" and a 64-1/2" wall stud on the left side of the gable frame. Use a square to ensure the studs are plumb. Nail to 2x4 bottom plate with 10d sinkers and screw to 2x6s with 2-1/2" screws. Repeat to install studs on right side of gable frame.

## Step 15 Install Siding on Rear Gable Frame

1. Stand up the gable frame and slide it to the rear of the building. Position the frame with the bottom towards the rear wall so it can be erected after the siding is applied.
2. Install a pre-cut siding panel with the 'cut edge' flush with the left side of the gable frame. The siding should extend  $\frac{3}{4}$ " below the bottom 2x4 gable plate. Install siding with 8d galv. nails.
3. Install (2) two 4x8 siding panels. Cut and remove siding that extends above the top of the gable frame.
4. Install 80-1/2" long siding panel. Cut the siding that extends beyond the gable frame.



## Step 16 Install Trim on Front and Back Walls

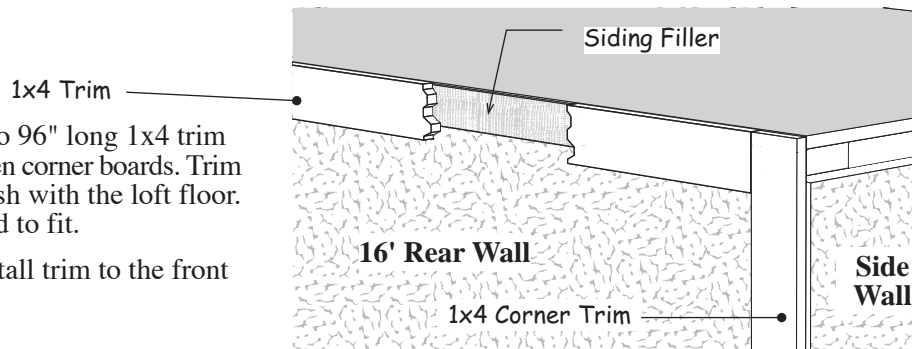
**IMPORTANT: Trim Must Be Installed Before Installing Roof Gables!**



*All trim is installed using 8d galvanized box nails spaced 12" apart.*

1. Locate (4) four 1-1/2" x 48-3/4" siding filler strips. Install these on back wall flush with top of flooring. There may be a gap between top of siding and strips. Use a few 8d galv. nails. Additional nails are applied below.
2. Cut and install (2) two 1x4 -10' trim boards flush with top of floor and bottom of the siding. Install trim flush with the siding on the side walls. Use 8d galv. nails spaced 12" apart.

3. Install (2) two 96" long 1x4 trim boards between corner boards. Trim should be flush with the loft floor. Cut 2nd board to fit.
4. Repeat to install trim to the front wall panel.

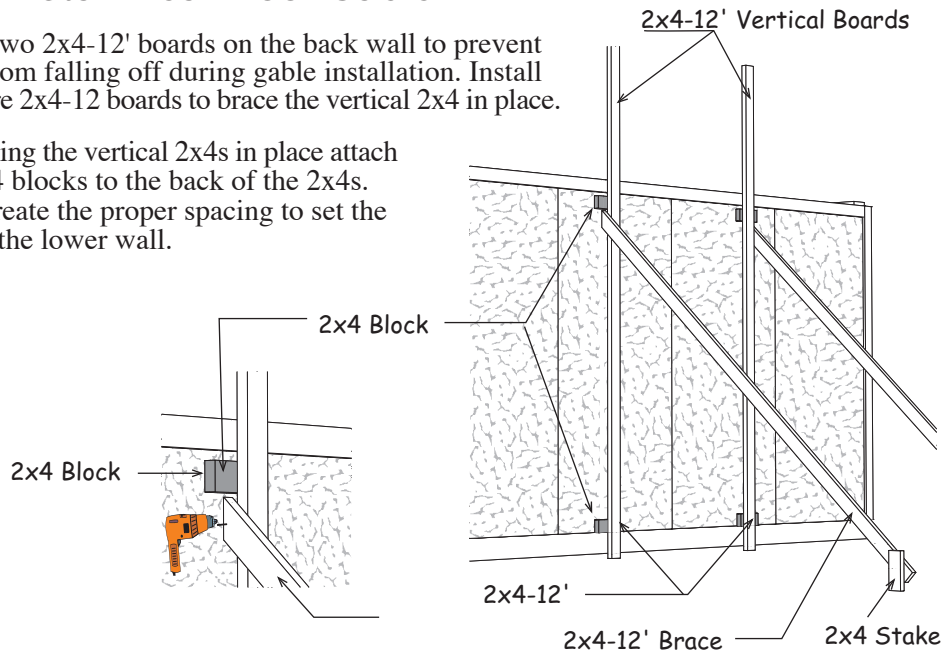




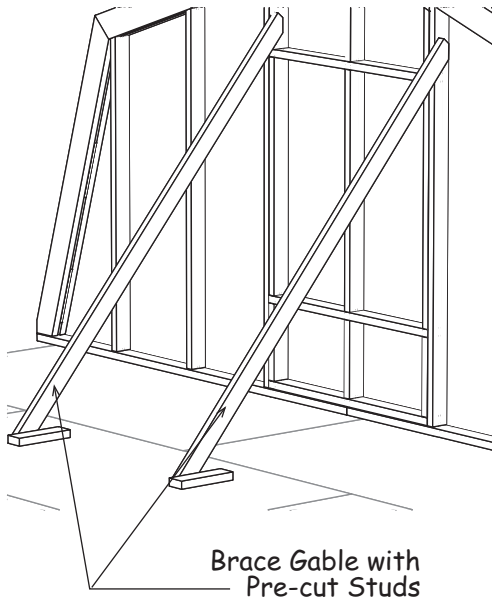
## Step 17 Install Rear Roof Gable

1. Install (2) two 2x4-12' boards on the back wall to prevent the gable from falling off during gable installation. Install (2) two more 2x4-12 boards to brace the vertical 2x4 in place.

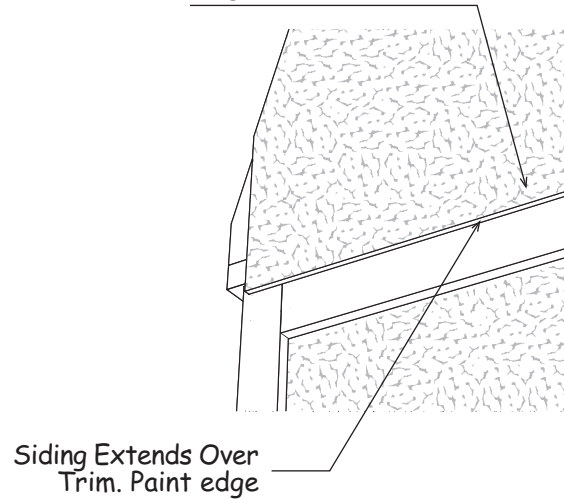
Before bracing the vertical 2x4s in place attach (2) two 2x4 blocks to the back of the 2x4s. This will create the proper spacing to set the gable over the lower wall.



2. Erect the gable on back wall. Be cautious and ensure gable siding extends over trim on back wall. Center gable with bottom 2x4 extending 1-1/2" past lower wall 2x4s on both sides. Nail to floor using 10d sinkers.
3. Remove the wall braces from interior walls and use them to brace the gable to the loft floor.



4. Nail bottom edge of siding to 1x4 trim with 8d galvanized box nails.



## Step 18 Assemble & Install Front Gable

1. Repeat **Step 14** to assemble front gable. **Do Not install** a 2x4 stud in the center of the opening if the loft doors will be installed in the opening later.
2. Stand up the gable frame and slide it to the front of the building. Position the frame with the bottom towards the front wall so it can be erected after the siding is applied.
3. Repeat **Step 15** to apply gable siding. **Note;** If you want to install the loft doors and trim as a decorative design do not cut and remove the siding from the center opening. Otherwise, cut and remove the siding from the opening.

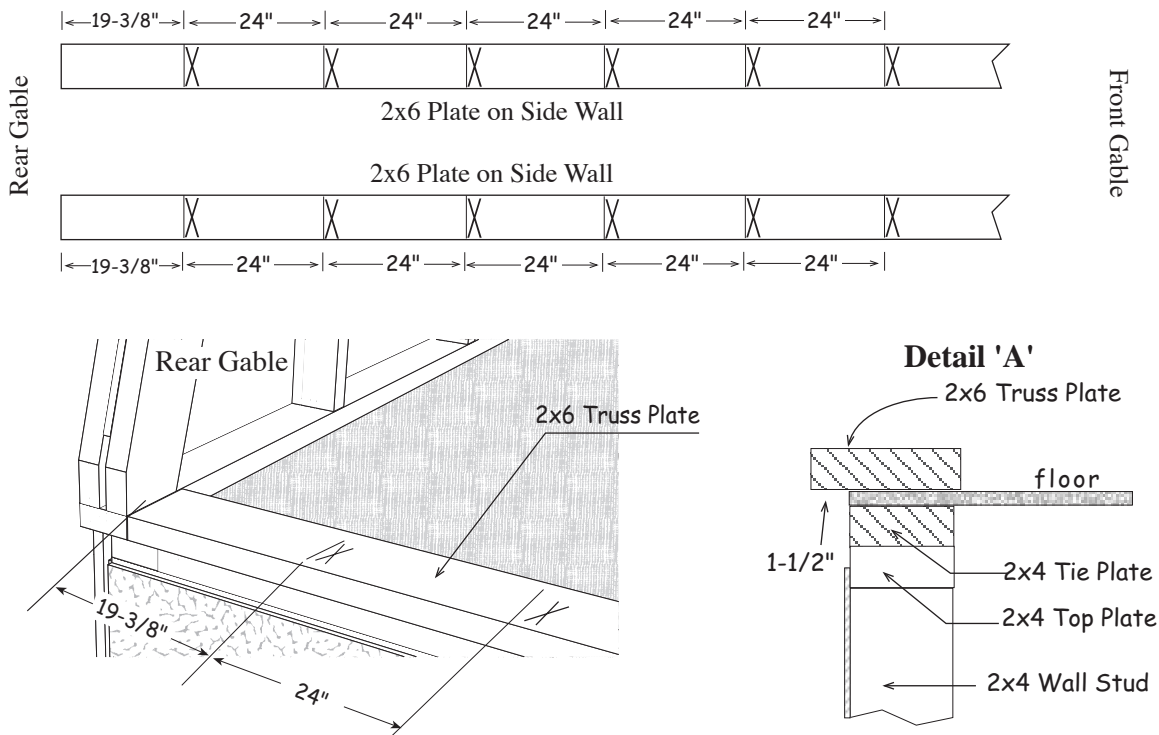


*You can install the loft doors before you erect the gable. Refer to **Steps 27 and 30** if you want to install the doors and trim now.*

4. Remove the 2x4-12' boards used for bracing on back gable and repeat **Step 17** to install the front gable. Do not remove 2x4 blocks from floor. They will be used to assemble trusses.

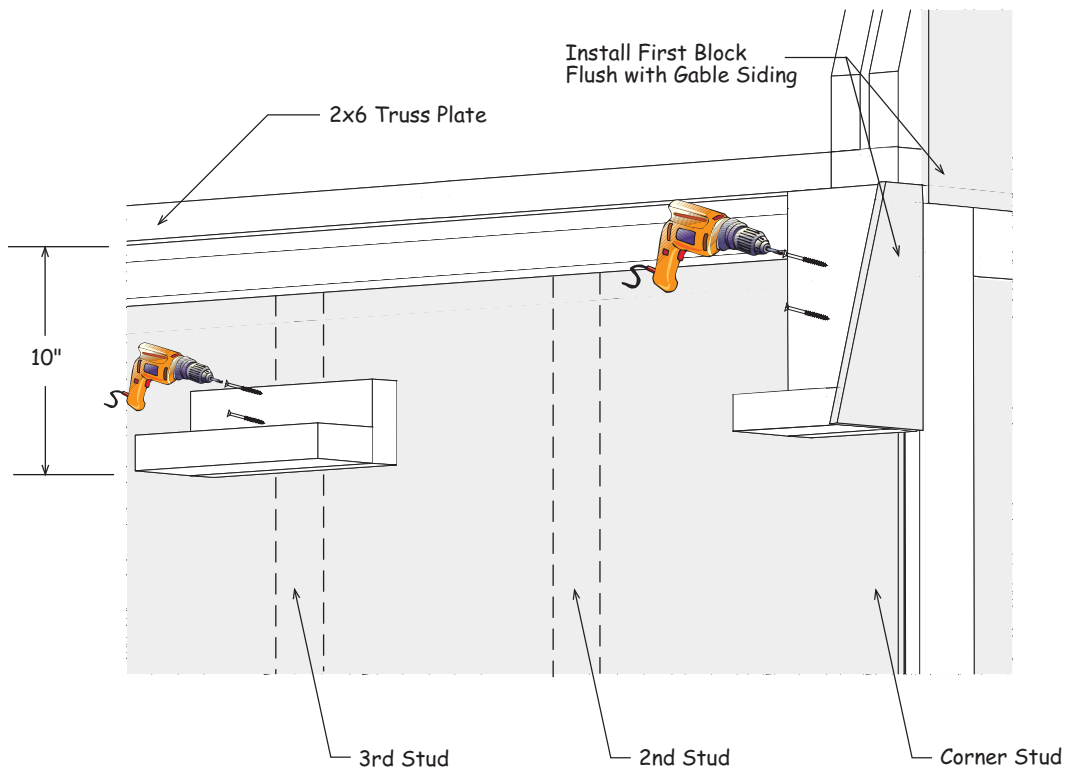
## Step 19 Install 2x6 Truss Plates

1. Install (3) three 2x6-7' and (1) one 2x6-12' as truss plates between the front and rear gable wall panels on each side wall. Cut the last 2x6 to fit. The 2x6 plates should project 1-1/2" past the 2x4 tie plate (see Detail 'A'). Nail 2x6s to the floor with 10d coated sinker nails; double row spaced 4" apart.
2. Starting at the rear gable indicate with 'X' marks where the trusses will be located. The last space will be wider than the first (19-3/8") space.



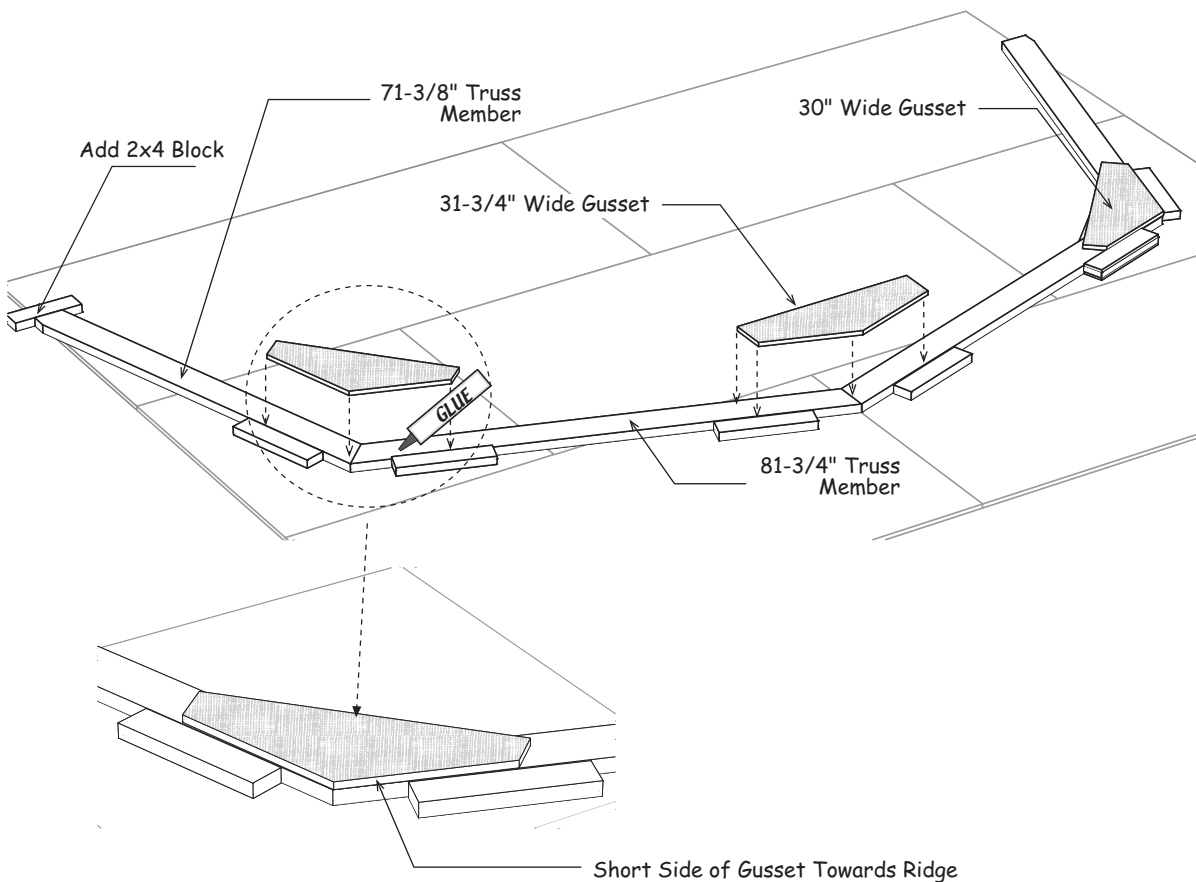
## Step 20 Install 2x6 Soffit Blocks

1. Locate (4) four pre-built 2x6 soffit blocks with siding attached. Starting from corner of the back wall position a soffit block with attached siding under bottom plate of gable and flush with face of gable siding. Secure to wall using (2) two 3" deck screws.
2. Locate 10" long pre-built 2x4 soffit blocks. Locate the third stud from the corner on the back wall. Center a soffit block over this stud with the 5" wide side facing down. Bottom of soffit block should be 10" from the underside of the 2x6" truss plate. Secure to stud with (2) two 3" deck screws. TIP: Use a 2x6 soffit block with siding as a gauge for proper distance.
3. Continue installing soffit blocks on every other stud down the length of the wall.
4. Install last block with attached siding flush with face of front gable siding.
5. Repeat on opposite wall.



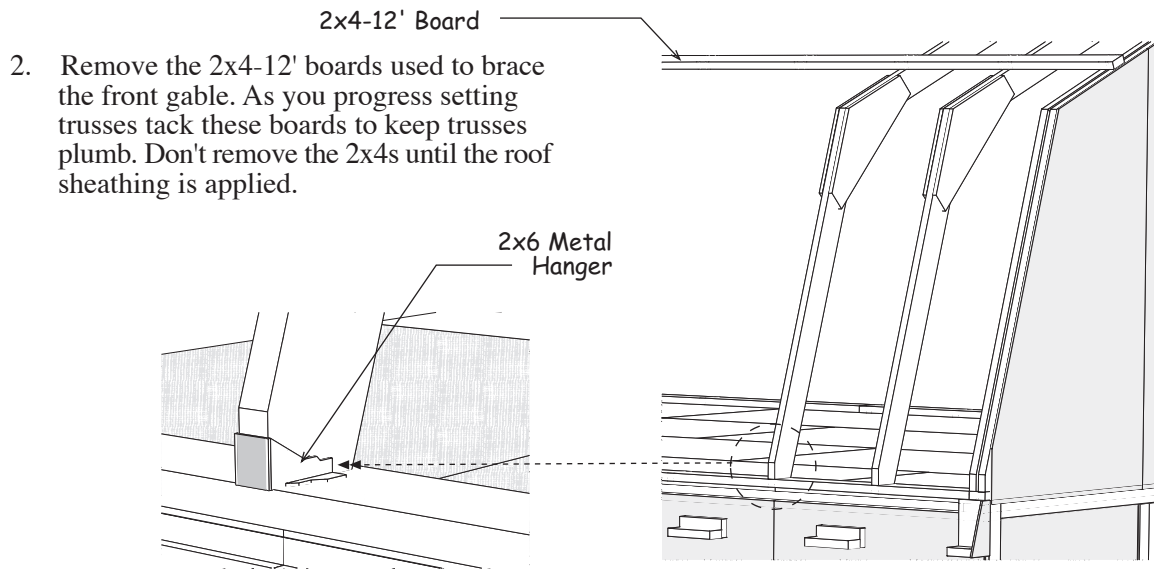
## Step 21 Assemble Roof Trusses

1. Lay truss parts inside the 2x4 blocks used around gable frames. One end of the 81-3/4" long 2x6 boards have a blue mark. Place these ends together at the ridge. Add a 2x4 block at the bottom of the truss legs to keep this 2x6 from moving.
2. Secure the 2x6 boards together using pre-cut gussets. Knee gussets are 30" wide. Ridge gusset is 31-3/4" wide. Take the gussets and the 2x6 boards and secure gussets with (3) three rows of 6d common nails spaced 6" apart. **Important**; when installing the gusset at the knee, install gusset with the shortest angled side towards the ridge. *See detail at bottom of page.*
3. Turn truss over and apply gussets to the other side. Set truss aside.
4. Assemble (14) fourteen more trusses. Remove 2x4 blocks from floor.



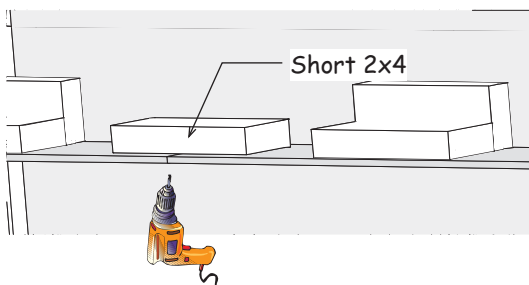
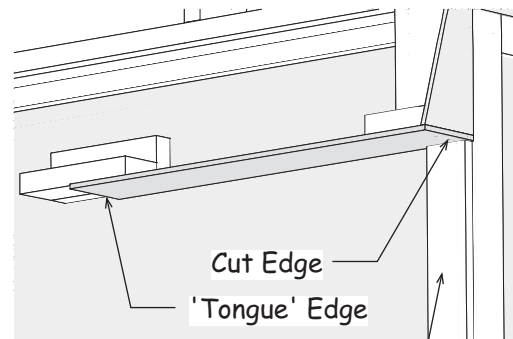
## Step 22 Install Roof Trusses

1. Install 2x6 hangers over the 'X' marks on the truss plate and flush with outside edge of 2x6. Use 1-1/2" joist hanger nails. Set truss legs into hanger. Use 10d coated sinker nails to secure the truss to the metal hanger (use hanger eyelets to guide the nails at the correct angle).



## Step 23 Install Soffit & Corner Trim

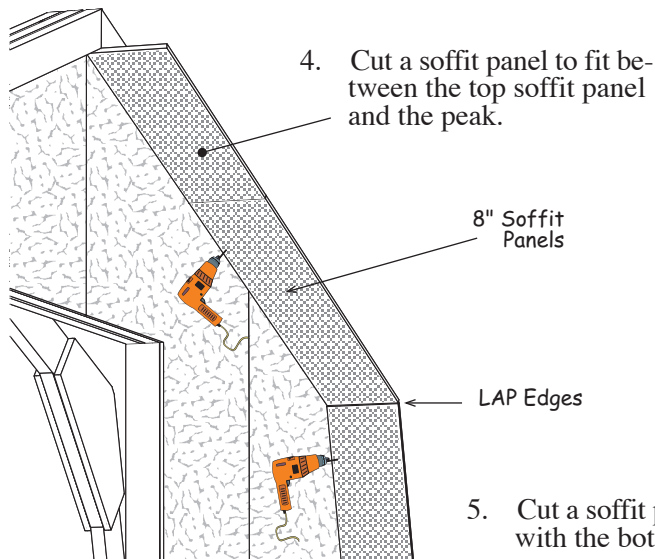
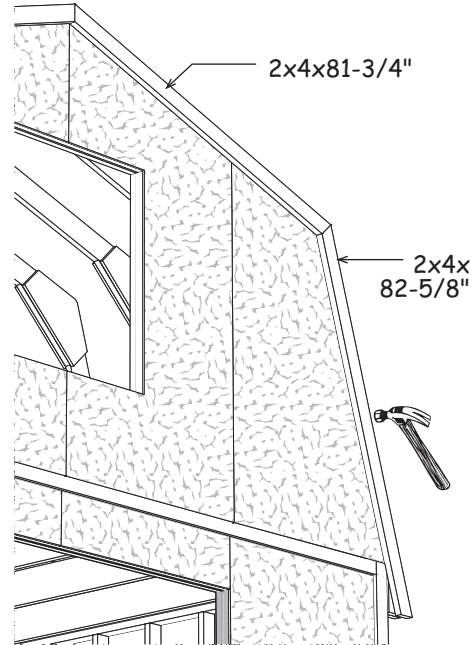
1. Gather (10) ten 5-1/2" x 48-3/4" primed soffit panels. Select (1) one soffit panel and measure from 'Tongue' edge and cut to a length of 33". Install primed side down with cut edge flush with face of siding on first soffit block. Secure to each block using (2) two 1-1/4" stainless trim screws.
2. Install full length soffit panels along the side wall. At every other seam secure a short 2x4 from cut offs with trim screws. Cut the last soffit panel flush with the face of siding of last soffit block.
3. Install soffit panels on the opposite wall.



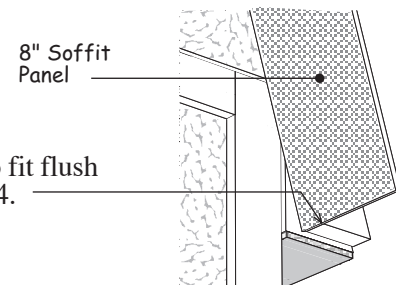
4. Install (4) four 1x4 corner trim/under soffit on side walls flush with front and back wall trim. Cut 1x4-8' trim boards flush with the bottom of the siding.

## Step 24 Install Front Gable Soffit

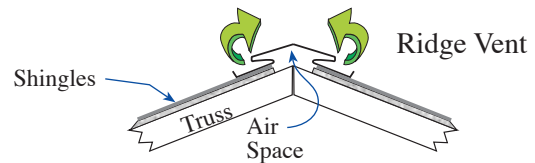
1. Install 81-3/4" long 2x4s on the top of the front gable, flush with the top of the gable frame. Install the ends with the blue mark together at the peak of the gable. Use 10d sinkers spaced 12" apart.
2. Install 82-5/8" long 2x4s on the side of the front gable, flush with the side of the gable frame.
3. Install (2) two 8" wide x 48-3/4" soffit panels under the 2x4s with primed side down and the 'LAP' edges together at the knee of the gable. Use 1-1/4" stainless trim screws spaced 12" apart.



5. Cut a soffit panel to fit flush with the bottom 2x4.

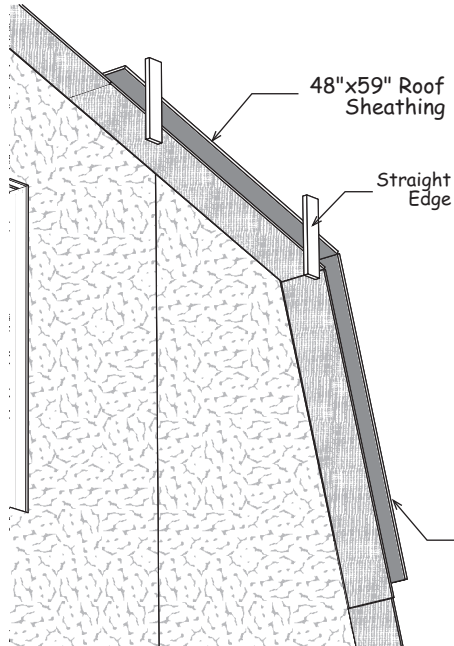


## Step 25A Install Roof Sheathing



1. Make certain the trusses and the gables are plumb. If you are installing a ridge vent, cut the top row of roof sheathing 1" below the peak of the truss to allow air circulation through the ridge vent. *See detail above.* Install sheathing using 6d common nails spaced 9" apart.

## Step 25B Install Roof Sheathing continued

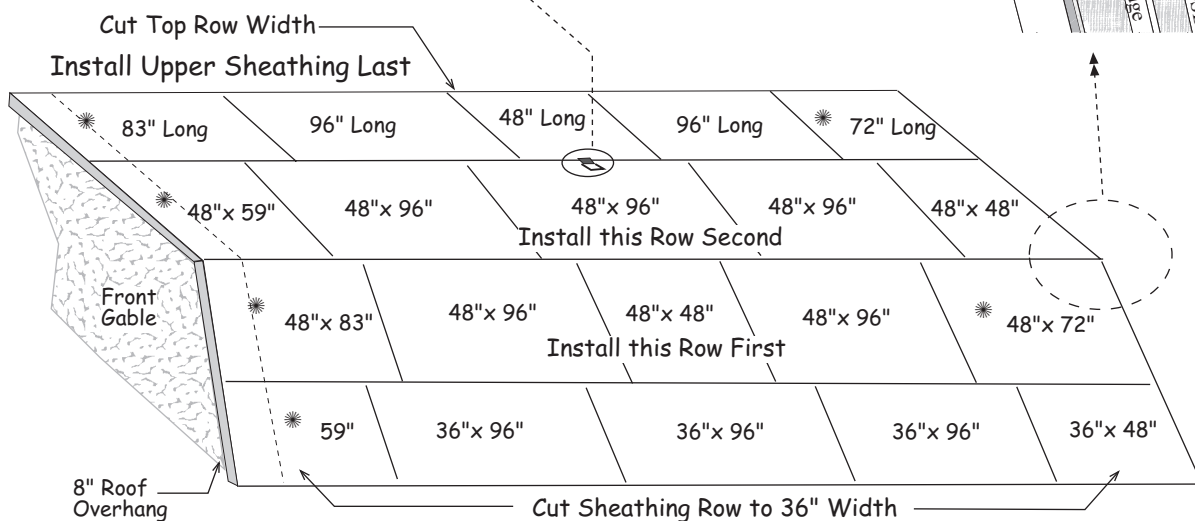
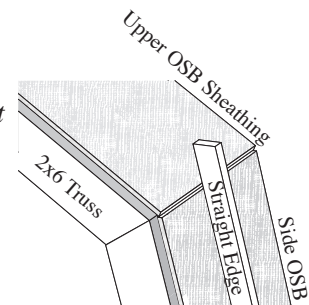


2. Cut (2) two 48"x96" OSB sheets in half to make (4) four 48"x48" sheets. Re-cut one to 36"x48".
3. Starting at gable knee install roof sheathing at the front of the building, refer to the sheathing layout below. Using a straight edge position the first sheets plumb with the soffit panels. The roof sheathing should meet at center of the trusses.
4. Cut OSB flush with back gable siding.
5. Cut the bottom row of sheathing to a width of 36" per layout.
6. Cut top row of sheathing to fit. Or, cut 1" narrower to allow for venting. Install (1) one plyclip between each truss for this row.
7. Repeat on opposite side of building.

Upper sheathing should rest on lower sheathing



Plyclip

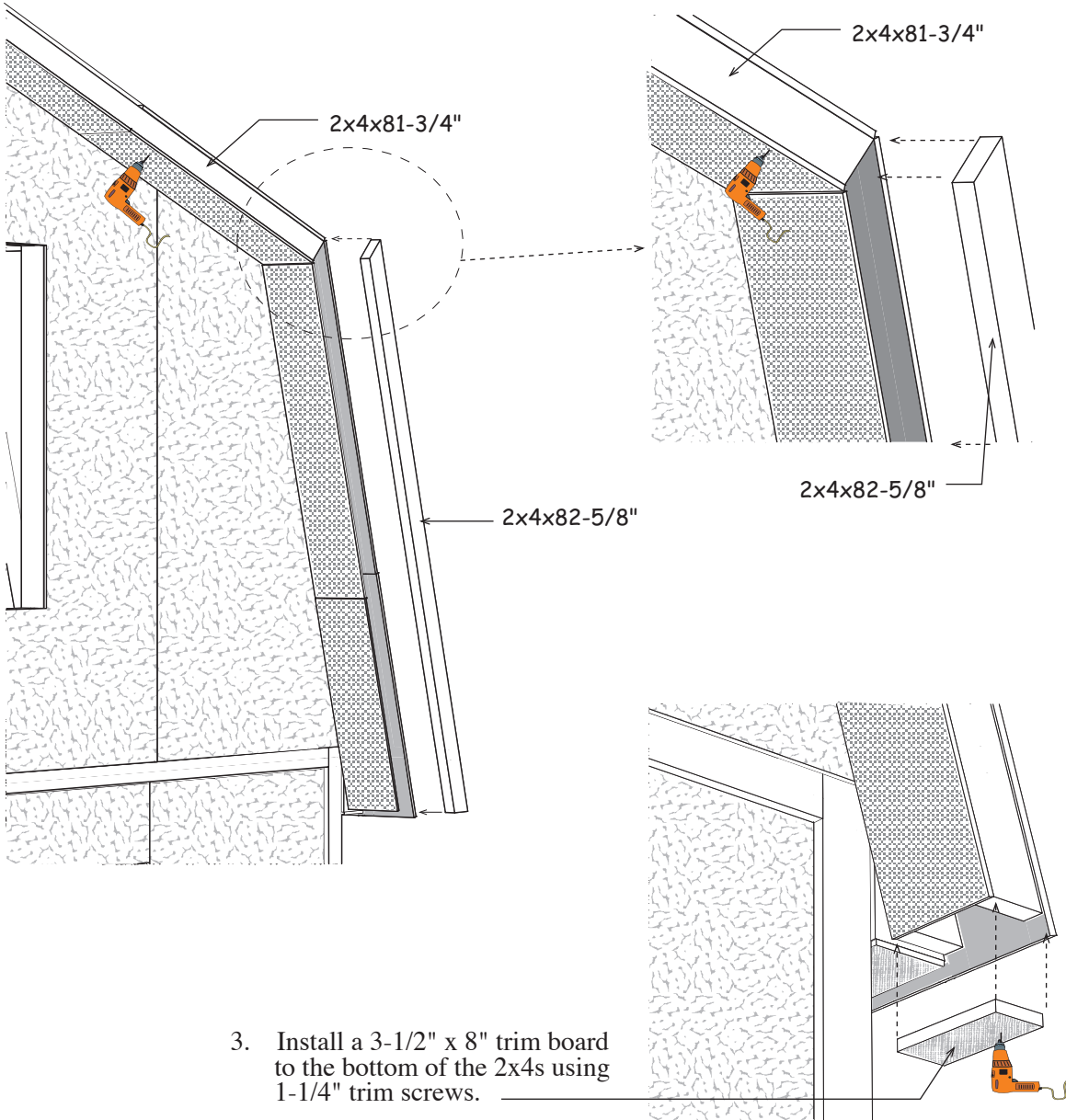


☼ 48" Wide Sheathing packed in Pallets



## Step 26A Install Gable Trim

1. Insert a 81-3/4" long 2x4 between the soffit panels and the roof sheathing on the upper gable. Use 1-1/4" trim screws to secure the soffit panels to the 2x4s. Use 7d sinkers to secure the roof sheathing to the 2x4s.
2. Insert and secure 82-5/8" long 2x4s between the soffit panels and the roof sheathing on the side of the gable.



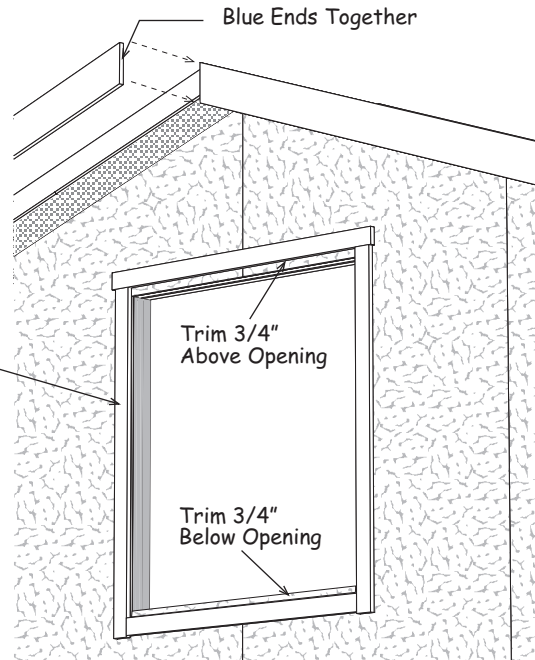
3. Install a 3-1/2" x 8" trim board to the bottom of the 2x4s using 1-1/4" trim screws.

## Step 26B Install Gable Trim continued

1. Install 82-1/4" long 1x6 trim boards at the top of the gable. Install the end with the blue marking at the ridge. Install 1x6 flush with the top of the roof sheathing. Use 8d galv. nails.
2. Install 84" long 1x6 trim boards at the side of the gable, flush with the roof sheathing.

*There is no overhang on the back gable.*

3. Repeat steps to install gable trim directly to the siding on the back gable.

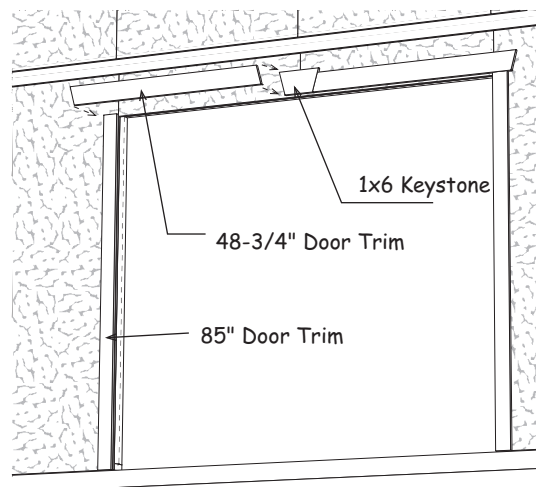


## Step 27 Install Loft Door Trim

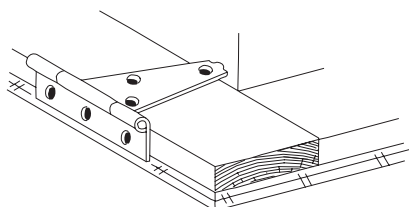
1. Install (2) two 51-1/2" long 1x3 trim boards 3/4" above the opening and flush with the sides of the loft door opening. Use 8d galv nails.
2. Install a 51-1/2" long 1x3 trim board across the top of the loft door opening.
3. Cut and install a 51-1/2" long trim board to fit between the side trim. Install trim 3/4" below the door opening..

## Step 28 Install Door Trim

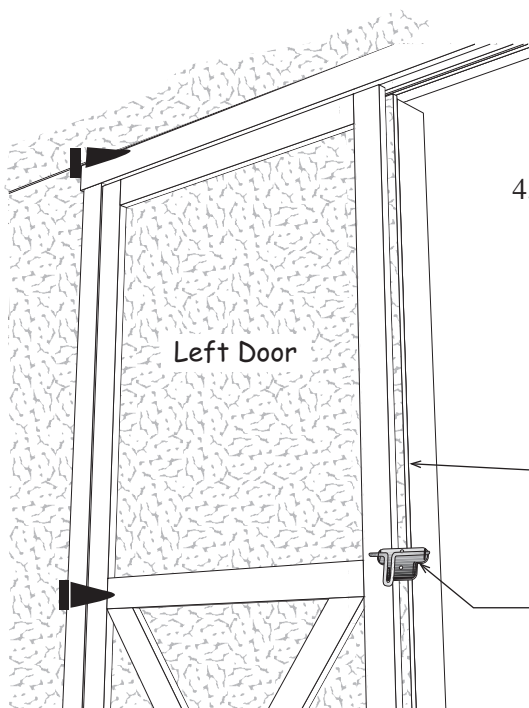
1. Install a keystone trim board 3/4" above the center of the door opening. Use 8d galv. nails. The exposed siding will serve as a door stop when the doors are closed.
2. Install 48-3/4" long 1x4 trim boards on each side of the keystone.
3. Install (2) two 1x4-85" long trim boards flush to the sides of the door opening. Tack these boards with a couple nails, you may want to reposition the trim when you install the doors. The space around the doors will not be even. If your door opening is out of square. 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. Use 8d galv. nails.



## Step 29 Install Doors



1. Lay the left door with the trim facing up. The 2x4 frame on the left door extends past the door trim. See detail below.
2. Install (3) three 6" hinges to the left side of the door frame. To position the hinge properly, hold the rectangular plate against the frame. To keep the frame from splitting, drill 1/8" holes. Use 2" black screws.
3. Install hinges to the right side of the other door.

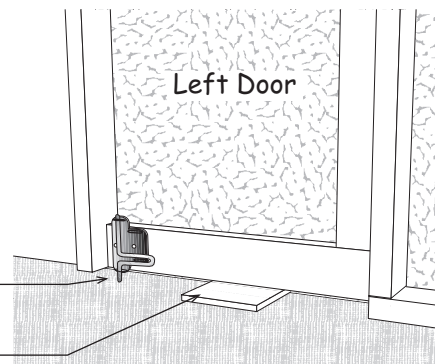


4. Before you fasten the hinges to the door trim, temporarily prop the doors in the opening. Set the door on a piece of OSB, see detail below. Leave a space at the top of the doors and between the doors and the side trim to allow room for the doors to expand when they absorb moisture. Secure hinges to door trim with 2" screws.

5. Install a sliding 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.

Sliding Bolt on the back of left door

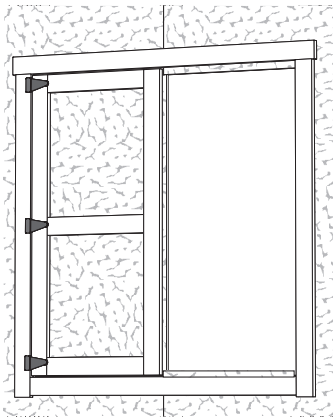
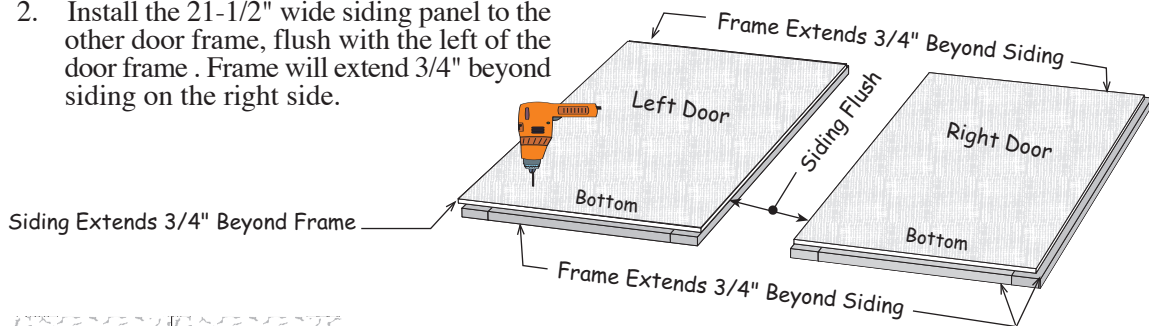
OSB Shim



## Step 30 Install Gable Loft Doors

If you removed the siding from the opening in the front gable follow the directions below to install siding on the loft door frames. *Suggestion; Paint siding and trim before assembling.*

1. Lay both door frames on a flat surface. Install the 23" wide siding panel on the left door. Install siding, *back side facing up*, flush with the right side of the door frame. The siding will extend 3/4" beyond the left side of the frame. The top and bottom of the door frame will extend 3/4" beyond the siding. Use (20) twenty 1" screws. Label door as shown below.
2. Install the 21-1/2" wide siding panel to the other door frame, flush with the left of the door frame. Frame will extend 3/4" beyond siding on the right side.



3. Install 4" door hinges to the loft doors. Drill 1/8" holes to keep the frame from splitting. Use 1-1/4" black hinge screws.
4. Install the left door first. The siding on the left door extends beyond the door frame. Secure the hinges to the 1x3 trim with 1-1/4" screws.
5. Install the right door. Install barrel bolts, *to the back of door*, at the top and bottom to secure the doors closed. You will need to drill a hole for the round shaft to drop into.

## Install Roofing — Not Supplied in Kit

Install metal roof 'drip' edging along the perimeter of the roof. Install shingles according to the instructions on the wrapper.

<b>Optional Roof Covering</b>		
29	bdl.	Roof Shingles
14	pcs.	Roof 'drip' Edge-10'
1200	sq. ft.	Felt Paper

<i>Qty. Material in 4' Extension Kit</i>			
4 ea.	2x6	x 81-3/4"	Truss Top Cord
4 ea.	2x6	x 71-3/8"	Truss Leg
4 ea.	2x4	x 10"	Soffit Blocks
4 ea.	10-1/2"	x 31-3/4"	Truss Gusset
8 ea.	11-3/4"	x 30"	Truss Gusset
2 ea.	5-1/4"	x 48"	Primed Soffit Panels
4 ea.	2x6		Metal Hangers
6 ea.	2x10		Metal Hangers
1 lb	6d common and 10d sinker nails		

<i>Material Shipped in Door Carton</i>			
<i>Qty. Lower Barn Door Material</i>			
2 ea.	48"	x 84"	Barn Doors
2 ea.	1x4"	x 84-3/4"	Door Trim
2 ea.	1x4"	x 48-3/4"	Door Trim
1 ea.	1x6"	x 10"	Keystone
6 ea.	6" Door Hinges .		
3 ea.	Sliding Door Latch		
48 ea.	2" Hinge Screws		
<i>Qty. Loft Door Material</i>			
2 ea.	22-1/4"	x 48-1/2"	Door Frames
4 ea.	1x3"	x 51-1/2"	Loft Door Trim
1 ea.	23"	x 47"	LP Siding Panel
1 ea.	21-1/2"	x 47"	LP Siding Panel
6 ea.	4" Door Hinges .		
2 ea.	4" Barrel Bolt		
36 ea.	1-1/4" Hinge Screws		
40 ea.	1" Wood Screws		

<i>Qty. Material Shipped by Local Supplier</i>			
82	2x4	-	Pre-cut Wall Studs
4	2x4	8'	Wall Plates (treated)
4	2x4	12'	Wall Plates (treated)
1	2x4	16'	Wall plates (treated)
6	2x4	8'	Framing Lumber
4	2x4	10'	Framing Lumber
12	2x4	12'	Framing Lumber
3	2x4	16'	Framing Lumber
2	2x6	12'	Framing Lumber
8	1x4	8'	Trim Boards
4	1x4	10'	Trim Boards
2	2x8	10'	Door Header
16	4x8	3/4"	T&G Loft Flooring
26	4x8	3/8"	LP Primed Siding
24	4x8	7/16"	OSB Sheathing

<i>Material Shipped by Local Supplier</i>			
<i>Qty. Without Stair Kit</i>			
2	2x10	8'	Floor Joist Headers
4	2x10	12'	Floor Joist Headers
23	2x10	16'	Floor Joist
<i>Qty. With Optional Stair Kit</i>			
3	2x10	8'	Floor Joist & Headers
8	2x10	12'	Floor Joist & Headers
17	2x10	16'	Floor Joists
19	2x4	-	Pre-cut (Additional)
2	2x4	8'	Treated (Additional)

Packing List

Roanoke 16' Wide x 32' Building Kit

Qty.	Material Shipped on 'A' Pallet		
2	Pre-built Gable Frames	21-3/4" x	48"
2	Pre-built Gable Frames	19-1/4" x	48"
26	Truss - Legs	2x6 x	71-3/8"
6	Truss Plates	2x6 x	84"
4	Gable Overhang	2x4 x	82-5/8"
4	Gable Wall Studs	2x4 x	80-1/2"
4	Gable Wall Studs	2x4 x	72-5/8"
1	Gable Wall Studs	2x4 x	64-1/2"
6	Gable Wall Framing	2x4 x	47-3/4"
2	Front Gable Overhang Trim	1x4 x	8"
18	Soffit Blocks	2x4 x	10"
4	Soffit Blocks w/Siding	2x6 x	10"
3	7/16" OSB Sheathing	48" x	83"
2	7/16" OSB Sheathing	48" x	72"
4	7/16" OSB Sheathing	48" x	59"
1	OSB Header Fillers	23-3/4" x	48"
4	Truss Gussets	11-3/4" x	30"
18	1/2" OSB Gable Fillers	(see detail below)	
8	LP 3/8" Siding Fillers	1-1/2" x	48-3/4"

Qty.	Material Shipped on 'B' Pallet		
26	Truss - Top Cord	2x6 x	81-3/4"
4	Gable Overhang	2x4 x	81-3/4"
3	Gable Wall Studs	2x4 x	64-1/2"
4	Gable Trim	1x6 x	84"
4	Gable Trim	1x6 x	82-1/4"
4	LP Siding Panels	80-1/2" x	48-3/4"
2	LP Siding Panels	14-1/2" x	48-3/4"
14	LP Primed Soffit Panels	5-1/4" x	48-3/4"
8	LP Primed Soffit Panels	8" x	48-3/4"
1	7/16" OSB Sheathing	48" x	83"
2	7/16" OSB Sheathing	48" x	72"
18	Truss Gussets	10-1/2" x	31-3/4"
32	Truss Gussets	11-3/4" x	30"

Qty.	Hardware Breakdown 'A' Pallet		
5 lbs.	16d	Galvanized Spiral Nails	
10 lbs.	10d	Coated Sinkers	
15 lbs.	8d	Galvanized Nails	
7 lbs.	8d	Galvanized Spiral Nails	
15 lbs.	6d	Common Nails	
7 lb.	1-1/2"	Hanger Nails	
150	1-5/8"	Stainless Soffit Screws	
75	2-1/2"	Wood Screws	
100	3"	Wood Screws	
18	2x6	Joist Hangers	
28	2x10	Joist Hangers	
40	7/16"	Plyclips for roof sheathing	

