

IMPORTANT INFORMATION ABOUT YOUR SHED KIT

Thank you for purchasing our shed kit. Read the instructions before starting the assembly of the building. If you have any questions about assembling the kit, call 800-245-1577. Business hours (8:00-5:00 ET) Monday thru Friday. After business hours call 724-866-HELP (4357) or email to help@barnkits.com.

The material that is included in our kit is listed on the back page. The optional floor package, if purchased, will be supplied by a local lumber supplier.

Our kit does not include the shingles, the quantity needed is listed on the back page. The siding is primed. You will need to apply a finish coat using latex acrylic paint.

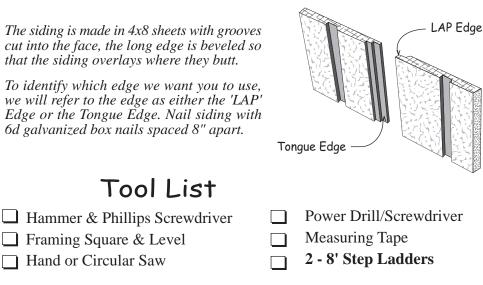
Most buildings are installed on a wood floor and the siding was designed to extend over the wood flooring. If the foundation is a concrete floor cut the siding flush with the bottom of the wall plate to prevent the concrete from contacting the siding.

The (2) two center boards on the shipping pallet can be removed and used for wall bracing.

Stacking the boards, according to size, will make them easier to find when needed. Some boards may have colored ends. **Do Not** discard any material until your building is complete.

Before you begin construction, be sure to study this assembly manual. Also, obtain a building permit and check all pertinent building code regulations.

Thank you for your purchase.



Always wear safety glasses when cutting or nailing!

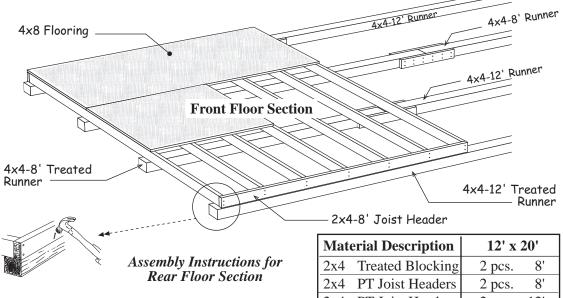
Constructing Details for Deluxe Floor System

Foundation size is $12'-0" \ge 20'-0"$. 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. Stagger the 4x4 timbers as shown below. Cut (2) two 2x4- 8' boards into 2' long blocks to secure the 4x4s where they butt together.
- 2. Cut (2) two 2x4-8' to a length of 8' -0". They will be used for the joist headers. Layout, from left, for 16" on center joist spacing. 'X' marks where floor joist will be placed.

15-1/	/4" 16	<u> </u>	" 		
Х	X	X	X	X	\langle
Х	X	X	X	X	\langle

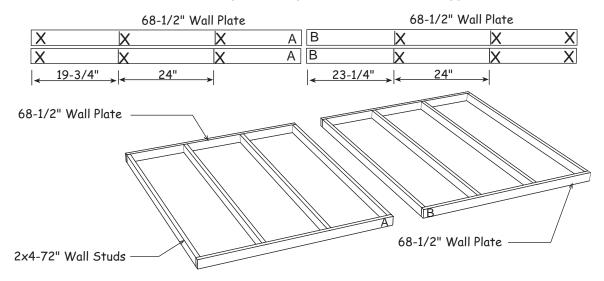
- 3. Cut (17) seventeen 2x4-12' treated boards to 11' -9". These will be the floor joists. *Treated lumber may be thicker than 1-1/2". Take this into account when cutting the length of floor joists. Shorten joist measurements if necessary to obtain 12'-0" building width.*
- 4. Install the floor joists cut above between the 8' joist headers. Secure with 16d galv. deck nails.
- 5. Place floor assembly over the 4x4s. Square floor assembly. Measure the floor diagonally (corner to corner) and then the opposite corners; these measurements will be the same when the floor is square. Toenail frame (headers & joists) to the 4x4 runners.



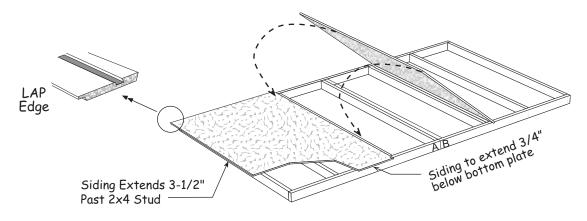
- 6. Cut (2) two 2x4-12' to a length of 12' -0". Layout for 16" joist spacing, *See above*.
- 7. Install floor joists between the joist headers. Square the floor section and install against the section assembled above. Toenail to the 4x4s runners.
- 8. Install 4x8 flooring over the 2x4s. Use 8d galv. spiral nails spaced 8" apart.
- 12' 2x4 PT Joist Headers 2 pcs. 2x4 PT Floor Joist 17 pcs. 12' 4x4 **Treated Runners** 4 pcs. 8' 4x4 Treated Runners 12' 4 pcs. Flooring 5/8" or 3/4" 8 pcs. 4x8 Galv Spiral Floor Nails 3 lb. 8d Galvanized Deck Nails 5 lb. 16d

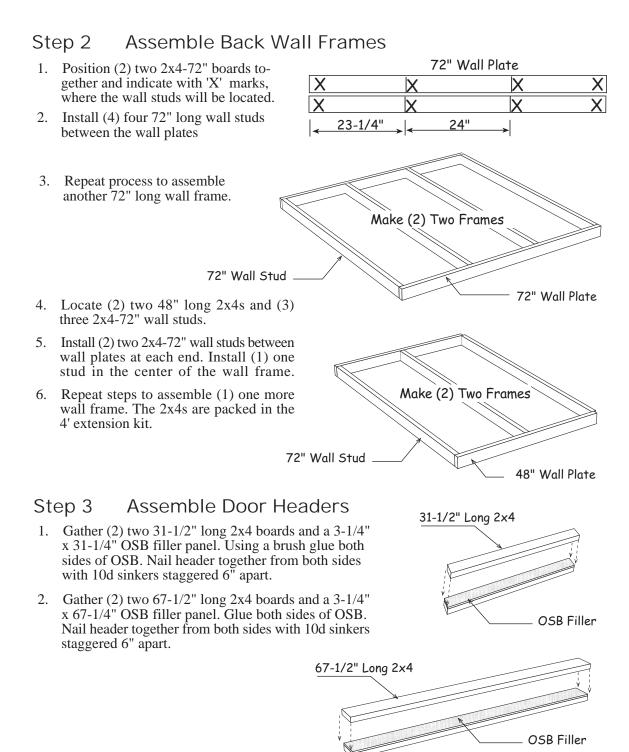
Do not discard any material until construction is complete. Including short blocks of 2x4s. Step 1 Assemble 12' Side Wall Panel

- 1. Position (4) four 68-1/2" 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'.
- 2. Install (8) eight 72" long wall studs between the wall plates. Use 10d sinkers, (2) two nails at each end of stud. Nail frames together using (4) four 10d sinkers (stagger nails on each side).



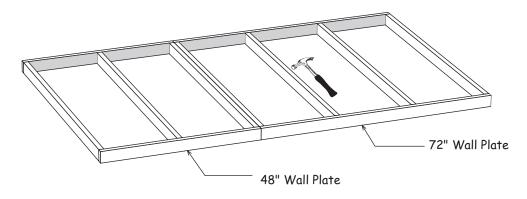
- 3. Square wall frame. *Measure diagonally (corner to corner)*. *The measurements will be the same when the wall is square.*
- 4. Install the 1st siding panel with the 'LAP' edge extending 3-1/2" past the wall frame. The bottom will extend 3/4" below the bottom plate. Tip; use a 1x4 trim board as a gauge. Use 6d galv. nails spaced 8" apart.
- 5. Install (2) two more siding panels. Cut the last panel to extend 3-1/2" beyond the wall frame.





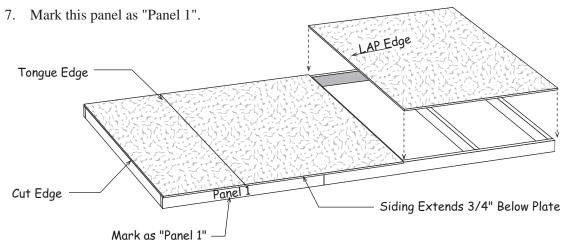
Step 4A Assemble (2) Two Back Wall Frames

- 1. Position a 48" wide wall frame against a 72" wall frame as shown below. Nail frames together with 10d sinkers.
- 2. Square wall frame. *Measure diagonally (corner to corner)*. *The measurements will be the same when the wall is square.*



- 3. Repeat to assemble another 10' long wall frame,
- 4. Select one of the wall frames.

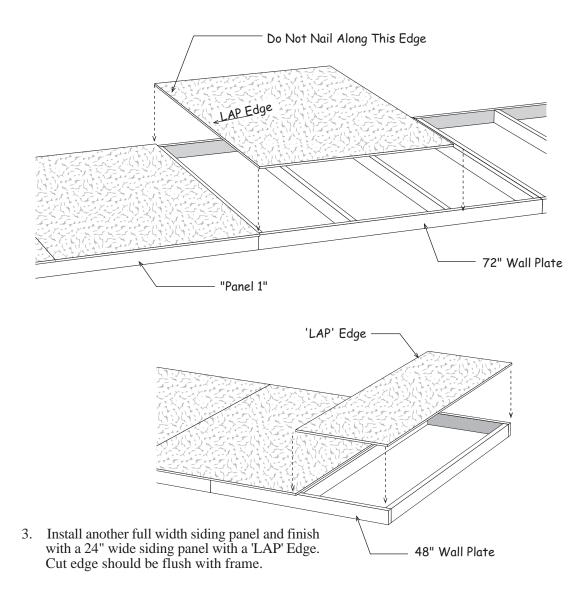
- 5. Select a 24" wide panel, *with a 'tongue' edge*, and install this panel with the 'cut' edge' flush with the end of the wall and extending 3/4" below the bottom plate.
- 6. Install (2) two more siding panels.



Step 4B Assemble Back Walls for 20' Building Length

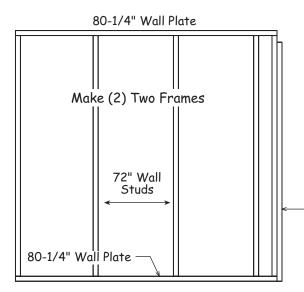
1. Select the 10' wall frame, *without siding*, assembled in **Step 4A**. Position this wall frame, against the wall panel so the 72" wall plates are against the sided panel as shown below. DO NOT nail these frames together so they can be separated later.

2. Square the wall frame. Install a full width siding panel but do not nail along the long edge that overlaps the other wall frame. You can nail this edge after the wall panels are installed. This will enable you to separate the wall panels making them easier to handle.



Step 5 Assemble (2) Two Front Wall Frames

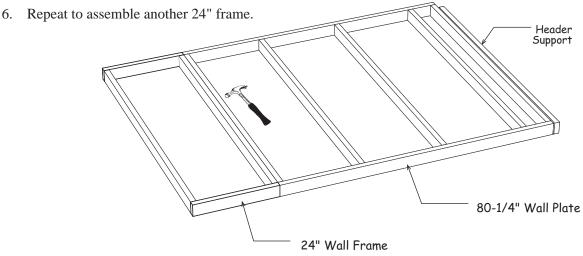
1. Locate (2) two 80-1/4" long boards. Position boards together and indicate with 'X' marks where the wall studs will be located.



80-1/4" Wall Plate

Х	Х		Х		X	Х
Х	X		X		X	Х
23-1/4"		24"		24"	_	

- 2. Install (5) five 72" wall studs between the 80-1/4" wall plates.
- 3. Locate (1) one 72" long 2x4 and cut to a length of 71-1/2". Install as a header support on the wall frame flush with bottom plate. Use 10d sinkers.
- 4. Repeat steps to assemble another wall frame.
 - 71-1/2" Header Support
- 5. Locate (2) two 24" long 2x4s. Install (2) two 72" wall studs between the 24" boards. One at either end.



- 7. Butt a 24" frame to the the 80-1/4" frame opposite the header support. Secure with 10d sinkers.
- 8. Repeat to extend second 80-1/4" frame.

Step 6 Apply Siding to Left Front Wall Frame

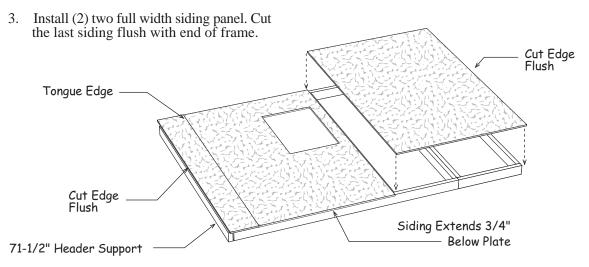
1. Select one of the wall frames from **Step 5**. Position frame with the header support on the right. Install a siding panel with the 'LAP' edge' flush with the end of the wall frame. Siding should extend 3/4" below bottom plate.

2 Install a full width siding panel.

3. Install a 9-3/4" wide siding panel with a 'LAP' edge. Cut edge should be flush with header support.
'LAP' Edge Flush
'LAP' Edge Flush *Siding Extends 3/4 If installing windows you can cut the opening now. Instructions are in the window box.*

Step 7 Apply Siding to Right Front Wall Frame

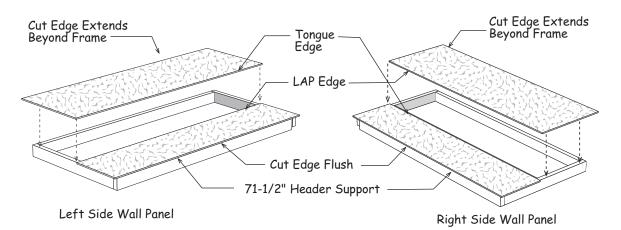
- 1. Select the remaining wall frame. Position wall frame with the header support on the left.
- 2. Install a 9-3/4" wide panel with a 'Tongue' edge. The 'cut' edge should be flush with the header support. Siding should extend 3/4" below bottom plate.



Step 8 Assemble Double Door Wall

	1.	Locate (2) two 34-3/4" long 2x4s and position them together. Indicate with 'X' marks where studs will be located 34-3/4" Wall Plate X X X X X X X $ $ X X $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $
Make (2) Two Frames		
	2.	Install (3) three 72" wall studs between 34-3/4" wall plates.
	3.	Locate (1) one $2x4-72"$ and cut to $71-1/2"$. Install as a header support on right side as shown and flush with bottom plate. Use 10d sinkers.
	4.	Repeat to assemble another wall frame.
	<	71-1/2" Header Support

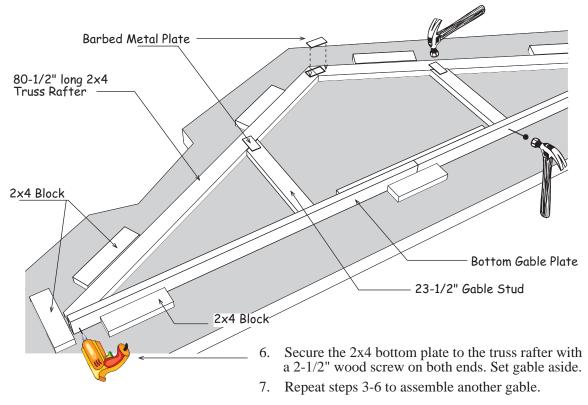
- 5. Select one frame and position so header support is on right.
- 6. Locate a 16" wide siding panel with a 'LAP' edge. Install this panel with the <u>cut edge</u> flush with the 2x4 header support. Bottom edge should be 3/4" below bottom plate. Only nail along cut edge until next panel is installed.
- 4. Select a 24" siding panel with a 'Tongue' edge. Install this panel so cut edge extends 3-1/2" beyond the end of the frame and tongue edge under the 16" panel. The siding should extend 3/4' below the bottom plate. Nail both siding panels to frame.



7. Locate a 16" wide siding panel with a 'Tongue' edge and the remaining 24" wide cut panel. Install these on remaining frame. **Make sure header support is oriented to the left.**

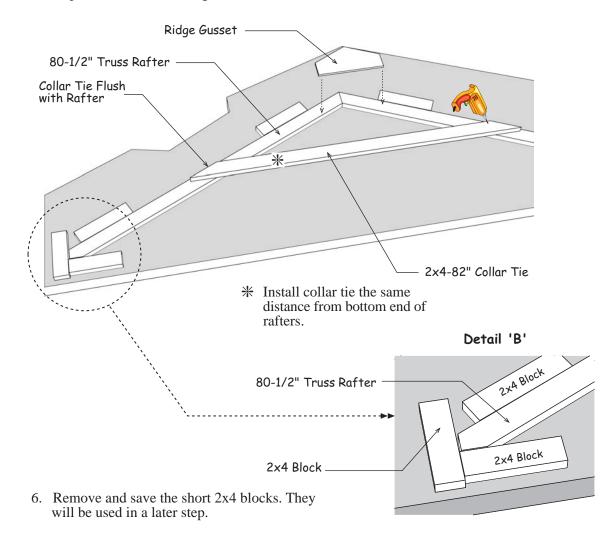
Step 9 Assemble Roof Gables

- 1. Butt (2) two 72" long 2x4s together and secure them with a 3-1/2" x 31-3/4" long plywood gusset across the top where they butt together. Use glue and (12) twelve 6d common nails. This will be used as the bottom plate on the roof gables.
- 2. Repeat to assemble another 12' long bottom plate. 3/4" Plywood Gusset
- 3. Place the bottom gable plate on the floor along with (2) two 80-1/2" long 2x4 truss rafters as shown below. Bottom plate will be on edge. There are short 2x4s, *that may have an angle on one end*, supplied in the kit. Use these to hold the truss rafter and bottom gable plate together by temporarily screwing the blocks to the floor using 2-1/2" screws. This will ensure that the gable frames and the trusses, *assembled next*, are identical.
- 4. Secure the top of the truss rafters together with a 1"x4" barbed metal drive-on plate.
- 5. Install (2) two 23-1/2" gable studs with angle cut at one end. Nail through the bottom plate with 10d sinkers and secure the top with barbed metal drive-on plates.



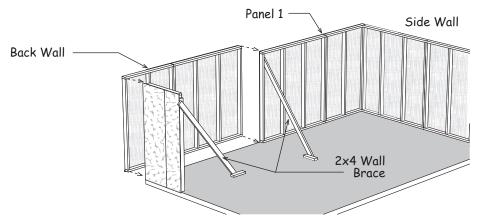
Step 10 Assemble Roof Trusses

- 1. Place (2) two 80-1/2" long 2x4 truss rafters and a 82" long collar tie together as shown below. The collar tie has an angle cut on both ends. Reposition the lower 2x4 blocks to hold the truss rafters in place. See '**Detail B**'.
- 2. Secure the 2x4 truss rafters at the top with a 8" x 16" wood gusset. Apply wood glue between the 2x4s and the gusset. Nail the gusset to the 2x4s with (14) fourteen 6d common nails,
- 3. Secure the 2x4 collar tie with (4) four 3" long wood screws at each end. Tip: Pre-drill holes with an 1/8" bit to prevent wood splitting at ends.
- 4. Turn this truss over and apply a wood gusset to the opposite side at the ridge.
- 5. Repeat to assemble (8) eight more trusses.

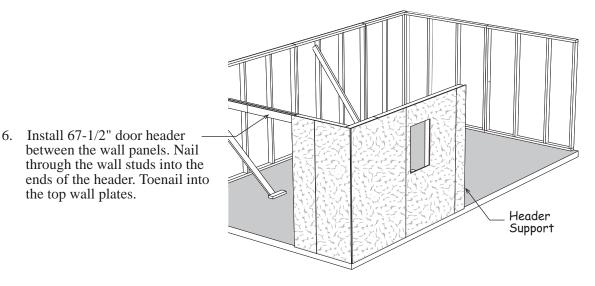


Step 11 Set Wall Panels

- 1. Erect 12' side wall panel and the Panel 1 from Step 4a. **IMPORTANT make sure walls are plumb and square**. Secure wall panels together at the corners. Use (4) four 10d coated nails per corner.
- 2. Install remaining 10' back wall panel.
- 3. Install left sid door panel from Step 8 and secure to back wall.
- You can use 2x4-72" boards to brace walls to help hold them straight. You will need to remove them later to use as tie plates. Or unscrew the center 2x4s from the shipping pallet to use as wall braces.



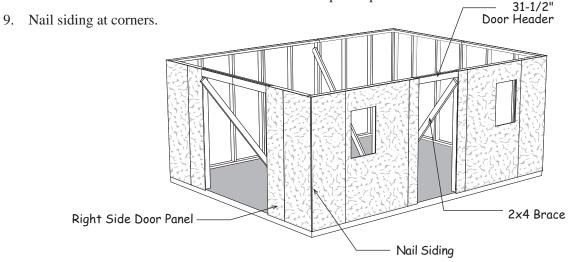
- 4. Nail wall panels to the floor through the bottom plate. Space 10d sinkers 24" apart.
- 5. Install right side door panel and front left wall panel from Step 5.



Step 11 Set Wall Panels Continued

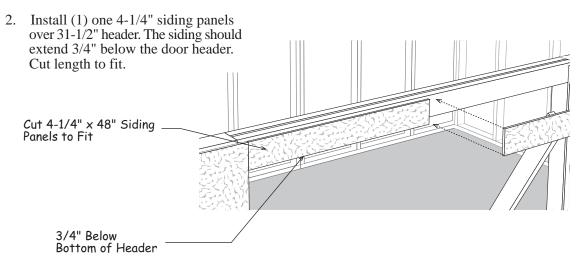
7. Set the remaining the front right wall panel.

8. Install 31-1/2" door headers between the wall panels. Nail through the wall studs into the ends of the header. Toenail into the top wall plates.



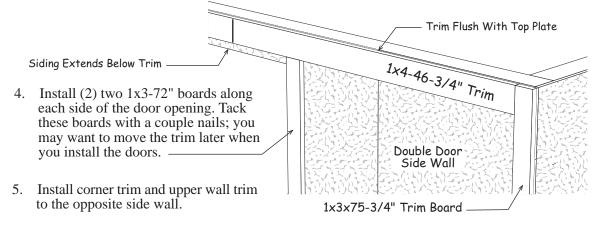
Step 12 Install Header Siding

1. Install (2) two 4-1/4" siding panels over 67-1/2" door header on the end wall. The siding should extend 3/4" below the door header. Cut length to fit. Wall trim, installed later, will hide where the siding butts the end wall siding.



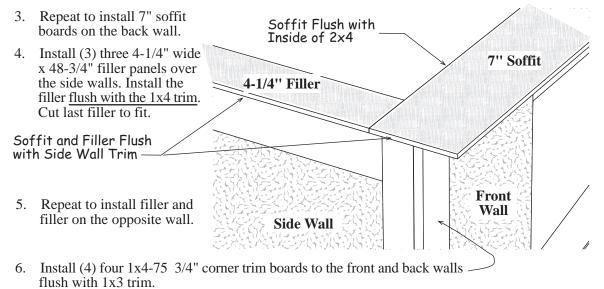
Step 13 Install 12' Side Wall Trim

- 1. Install (2) two 75 3/4" long 1x3 corner trim boards to the side wall. Install trim flush with top plate and flush with the siding on the front and back walls. Use 6d galv. nails, spaced 12" apart.
- 2. Gather (3) three 1x4-46-3/4" trim boards. Butt (1) one trim board against 1x3 corner trim and flush with top plate. Nail along top with 6d galv. nails.
- 3. Install another 46-3/4" long trim board next. Cut to fit the last 46-3/4" long trim board.



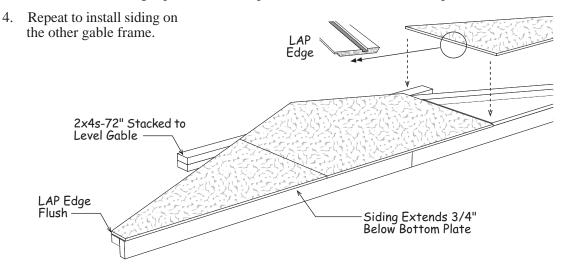
Step 14 Install Primed Soffit, Filler and Trim

- 1. Locate (1) one 7" wide x 48-3/4" long siding panel and cut in half. Install one half over the front wall with the primed side facing down. Cut edges should be flush with the inside of the top 2x4 wall plate and flush with the trim on the side wall. Tack the soffit with a couple 6d common nails. Installing 2x4 tie plates in a later step will provide more nailing.
- 2. Install (5) four more 7"x48-3/4" soffit panels cutting the last panel flush with the side wall trim.



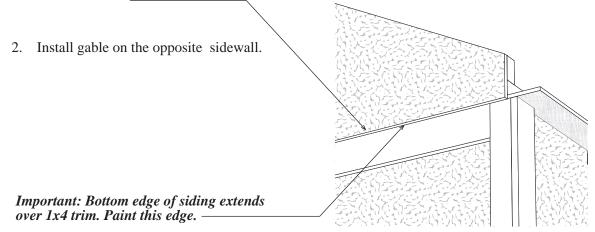
Step 15 Install Siding on Gables

- 1. Select one of the gable frames. Turn the gable over so bottom plate is on edge on floor. Support gable studs and rafters with (2) two 2x4-72" boards stacked. This will give you a solid surface when nailing siding.
- 2. Install left gable siding panel with the 'LAP' edge flush with the end of of bottom plate. Use 6d galv. nails across the top of the 2x4 frame and gable studs. Use 6d galv. nails across the bottom plate. The siding will extend 3/4" below the bottom 2x4.
- 3. Install center and right panels. Cut last panel flush with end of bottom plate.



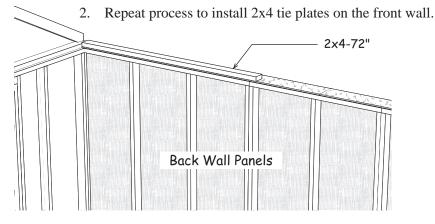
Step 16 Install Gables

1. Install a gable on the left sidewall. The gable siding will extend over the 1x4 trim on the lower wall. Secure gable to wall by nailing through the gable plate with 10d sinkers. Nail siding along the 1x4 trim board with 6d galv. nails.



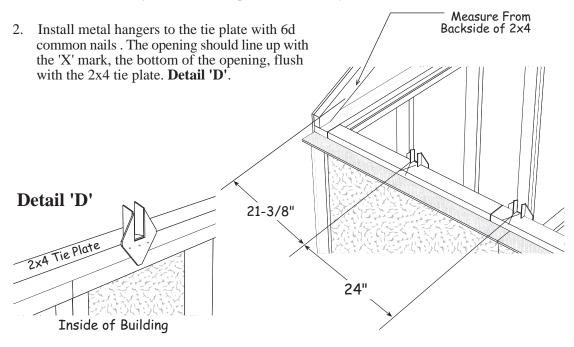
Step 17 Install 2x4 Tie Plates

1. Install (3) three 72" long 2x4s over the soffit panels on the back wall. Install the 2x4s flush with the inside of the back wall. Use 10d sinkers. Cut to fit a 2x4-4' to finish.



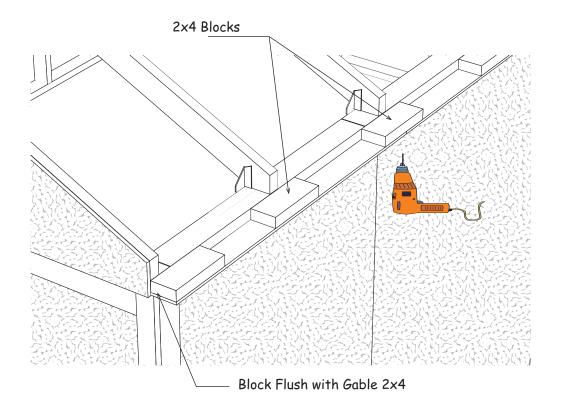
Step 18 Layout Roof Trusses

1. Layout the truss spacing from the left sidewall of the building. Measure from the <u>backside</u> of the 2x4 gable frame when marking the location of the first truss. Continue 24" spacing to other gable. **Important:** When marking the opposite wall, place the 'X' mark on the same side of the line so your trusses are parallel when they are installed.



Step 19 Set Roof Trusses and Soffit Blocks

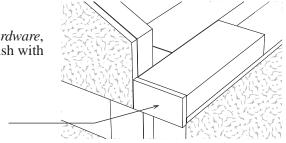
- 1. Set roof trusses. Secure trusses to metal hangers with 6d common nails.
- 2. Install short 2x4 blocks in front of each truss. Secure 2x4 blocks to the soffit panel using (2) two 1-1/2" long exterior screws.
- 3. Install a 2x4 block at each end of the soffit, flush with the 2x4 gable frame.



Siding Filler

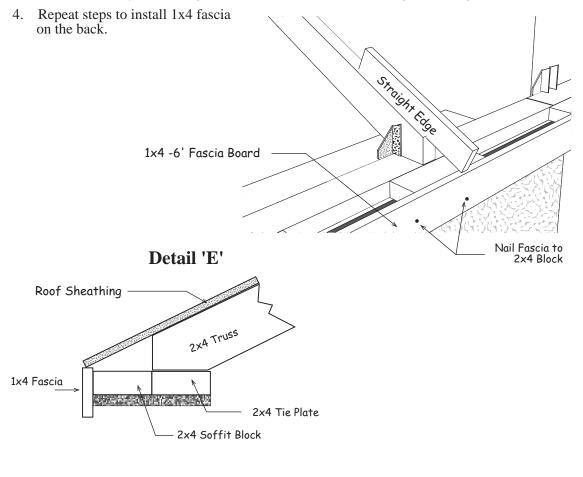
Step 20 Install Siding Filler

Install small primed siding fillers, *packed with the hardware*, over the 2x4 soffit blocks. Siding fillers will be flush with the gable siding. Use 6d galv. nails.



Step 21 Install 1x4 Fascia

- 1. Starting at the front left of the building, install a 1x4-6' fascia board flush with the face of the siding on the left gable. Install the fascia so the bottom edge of the roof sheathing will rest on the edge of the 1x4. **See Detail 'E'**. Use a straight edge to align the 1x4 boards with the top of the trusses. Install fascia with 6d galv. nails.
- 2. Install another 72" long 1x4 and then a 48" long 1x4.
- 3. Cut, if necessary, a 52" long 1x4 fascia board to fit flush with gable siding.



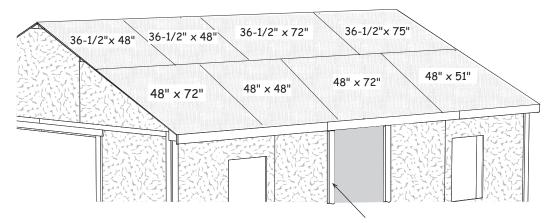
Step 22 Cut Roof Sheathing

1. Locate (2) 48"x85-3/4" OSB sheets. Cut both sheets to the these measurements.

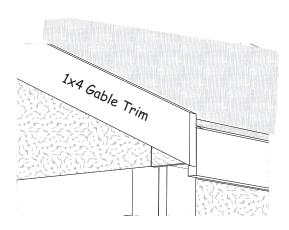
→ 48" x 48" 48" x 36-1/2"	>	48" x 48"		-
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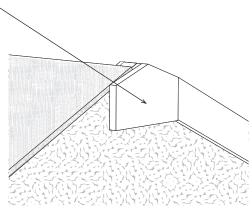
Step 23 Install Roof Sheathing, Gable and Door Drim

- 1. Install roof sheathing per layout below. Make sure the trusses are plumb and the sheets meet at the center of truss. Starting on lower front left corner install sheathing flush with gable siding. Use 6d sinkers spaced 12" apart. The top row of roof sheathing will be about 1" below the ridge to allow for ventilation.
- 2. Repeat on back of building.



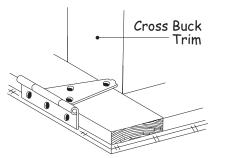
- 3. Install a 35" long 1x3 board over the singe door opening. Position this board 3/4" above opening and centered.
- 4. Install (2) two 1x3x73-1/4" boards along each side of the front door opening and butted too the bottom edge of 35" trim. Tack these boards with a couple nails; you may want to move the trim later when you install the doors.
- 5. Install a 8-1/2" long trim board, *called a keystone*, at the top of the gable flush with the top of the roof sheathing. Use 6d galv. nails.





- 2. Install (2) two 82-1/2" long 1x4 trim boards flush with the top of the roof sheathing. Use 6d galv. nails.
- 3. Repeat to install trim on other gable end.

Step 24 Install Hardware



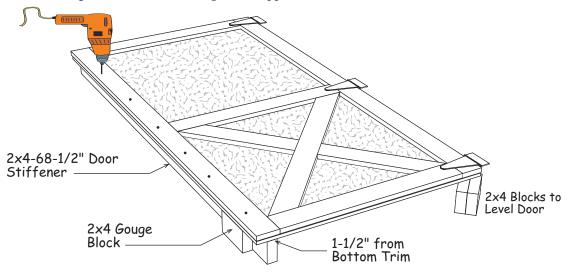
Install Hinges on Double Barn Doors

- 1. Locate the door that has a 2x4 fastened, *on edge*, to the back side of the door. When doors are closed this 2x4 will be in the center where doors meet. Lay the door with the trim facing up and install (3) three 5" hinges to the right side. To position the hinge properly, hold the rectangular plate against the frame. Use 1-1/4" black screws.
- 2. Install hinges on the left side of the other door.

Step 25 Install Door Stiffener on Single Door

Locate the 28" wide door. This door will be installed in the front door opening. The instructions below describe installing a 2x4 as a door stiffener. Decide which way the door will open and secure the 2x4 on the opposite side where the hinges will be installed.

- 1. Locate a 68-1/2" long 2x4 and position the 28" door with trim facing up. Place the 2x4 on edge under the door. The 2x4 should be 1-1/2" from long edge of trim and 1-1/2" from bottom of trim. Use a 2x4 block as a gauge and another to help level door while installing 2x4.
- 2. Fasten the 2x4 to the door using (6) six 2-1/2" long deck screws. Install the first screw 6" from the bottom of the door. Space the remaining screws 12" apart.
- 3. Install hinges as described in **Step 24** on opposite side of 2x4.





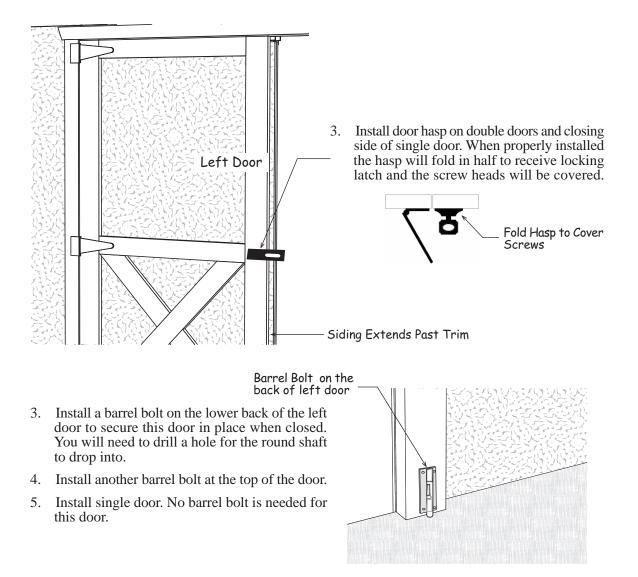
Reverse the position of 2x4 and hinges if you want the door to open in the opposite direction

Step 26 Install Doors

1. 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.

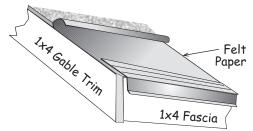
If your door opening is out of square, the space around the doors will not be even. You can remove and re-position the side trim to make allowances for this. The side trim does not have to be flush with the frame of the door opening. You can move the trim in or out to make the door spacing equal.

2. Determine position of hinges and install to side trim with 2" screws.



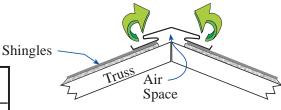
Step 27 Install Roofing — Not Supplied in Kit

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



2. Install shingles according to the instructions on the wrapper. If you need more detailed instructions on installing shingles, there are good publications online.

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



Buildir 16' x 12'	ng Size 20' x 12'	Material List
9 bdl.	11 bdl.	Roof Shingles by Owner
8 pcs.	9 pcs.	Roof 'drip' Edge-10' by Owner

Optional ridge vent provides ideal ventilation.

	Packing List for 4' Extension Kit							
2 4 9 2 4 4 4 2	Collar Ties Rafters Wall Studs Wall Plates Wall Plates Soffit Blocks Fascia Trim	2x4 2x4 2x4 2x4 2x4 2x4 2x4 2x4 1x4	Packing Li 82" 80-1/2" 72" 48" 24" 5" approx. 48"	st j	for 4' 2 2 2 1 4	Sidng Panels Soffit Panels Roof Sheathin Lb. 10d S Lb. 6d Co	3/8 3/8	48" x 85-3/4" ails fails
4	Gussets	7/16	8" x 16"					

		2000000 12001					
7	2x	4 for Collar Ties 82"					
	2x	2x4 for Truss Rafters 80-1/2"					
4	2x	2x4 for Wall Plates 80-1/4"					
51	2x	2x4 for Wall Studs & Plates 72"					
5	2x	2x4 for Wall Plates 68-1/2"					
2	2x	4 for Door Header 67-1/2"					
4	2x	4 for Wall Plates 48"					
4	2x	4 for Wall Plates 34-3/4"					
4	2x	4 for Gable Studs 23-1/2"					
2	2x	4 for Door Header 31-1/2"					
22	2x	4 for Soffit Blocks 5" or longer					
14	Tr	uss Gussets 7/16" 8" x 16"					
2	Pl	ywood Gusset 3/4" 3-1/2" x 32"					
1	ea	Pre-built Doors 28" x 71-3/4"					
2	ea	Pre-built Doors 32" x 71-3/4"					
		LP Primed Exterior Siding					
9	ea	Siding Panels 48" x 75-3/4"					
4	ea	Siding Panels 24" x 75-3/4"					
2	ea	Siding Panels 16" x 75-3/4"					
2	ea	Siding Panels 9-3/4" x 75-3/4"					
2	ea	Gable Siding 48" x 40" angle cut					
4	ea	Gable Siding 48" x 28" angle cut					
9	ea	Soffit Panels 48" x 7"					
6	ea	Filler Panels 48" x 4-1/4"					
3	ea	Siding Panels 48" x 4-1/4"					
4	ea.	Siding Fillers 3-1/2" x 2-1/2"					
1	ea	OSB Door Filler 3-1/4" x 67-1/4"					
1	ea	OSB Door Filler 3-1/4" x 31-1/4"					

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Easton	12x16	Material List	
Lauston	THAT		

	ial Lis	51		
3	1 lb.	box	10d	Sinkers
_2	1 lb.	box		Hanger Nails
_5	1 lb.	box	6d	Galv.
3	1 lb.	box	6d	Common
9	ea.	5"	Door	Hinges
_2	ea.	4"	Door	Latch
2	ea.	6"	Barre	l Bolts
38	ea.	2"	Hinge	e Screws
38	ea.	1-1/4"	Hinge	e Screws
45	ea.	1-1/2"	Exter	ior Screws
25	ea.	2-1/2"	Deck	Screws
16	ea.	3/4"	Pan H	lead Screws
90	ea.	3"	Deck	Screws
6	ea.	1"x4"	Metal	Plates
14	ea.	H1 Metal	Truss	Hangers
1	ea.	Bottle Gl	ue	
4	ea.	1x4 Gabl	e Trim	82-1/2"
4	ea.	1x4 Fasci	ia Trim	72"
2	ea.	1x4 Fasci	ia Trim	52"
4	ea.	1x4 Corn	er Trin	n 75-3/4"
4	ea.	1x3 Corn	er Trin	n 75-3/4"
6	ea.	1x4 Wall	Trim	46-3/4"
4	ea.	1x3 Door	Trim	72"
1	ea.	1x3 Door	Trim	35"
2	ea.	1x6 Keys	stone	8-1/2"
		Roo	f Shea	thing
4	ea.	Sheathing	g 7/16"	48" x 72"
2	ea.	Sheathing	g 7/16"	48" x 51"
2	ea.	Sheathing	g 7/16"	36-1/2" x 75"
2	ea.	Sheathing	g 7/16"	36-1/2" x 72"
2	ea.	Sheathing	g 7/16"	36-1/2" x 48"

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