



Sentry Buildings Assembly Book

Revised November 12, 2019



Optional Stair kit for 16' wide buildings.
Ravenna, Richmond or the Roanoke.

Manufactured by Reynolds Building Systems, Inc.

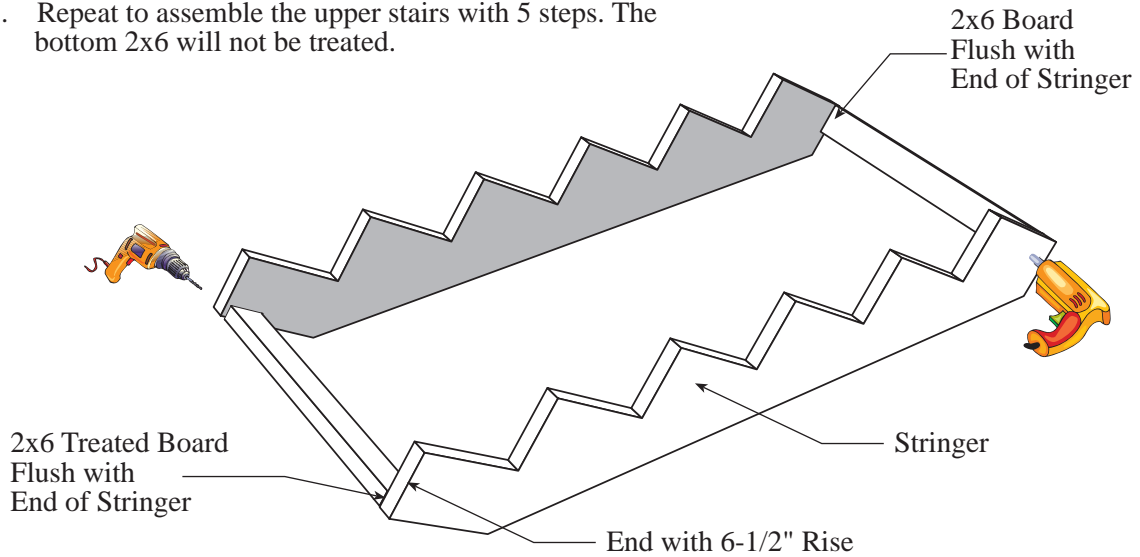
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Greenville, PA 16125

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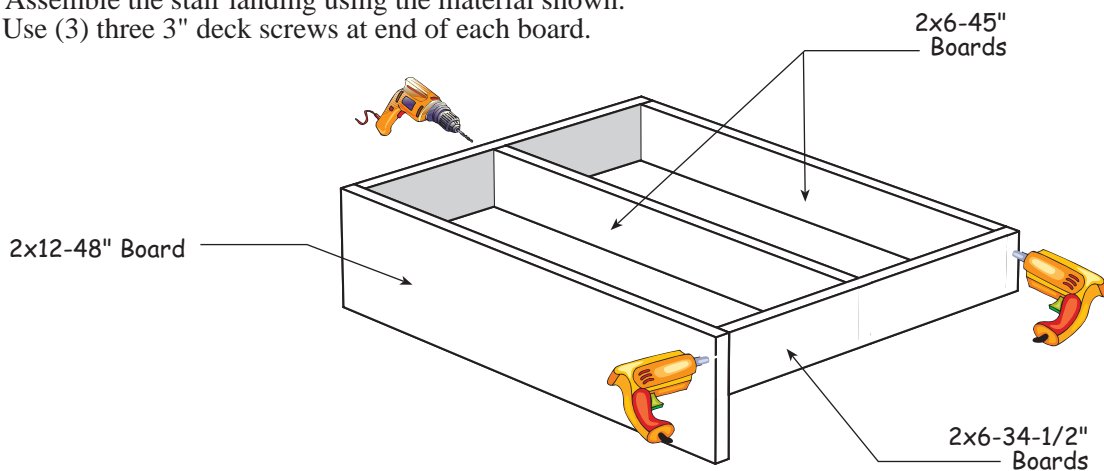
Step 1 Assemble Stairs

1. Locate the longer stair stringers with 6 steps. Place on the floor as shown below.
2. Locate (2) two 32-1/2" long 2x6 boards. One will be pressure treated. Install boards between the stair stringers as shown. Use the treated 2x6 for the bottom of stairs. Secure with (2) two 3" deck screws on each end of 2x6.
3. Repeat to assemble the upper stairs with 5 steps. The bottom 2x6 will not be treated.



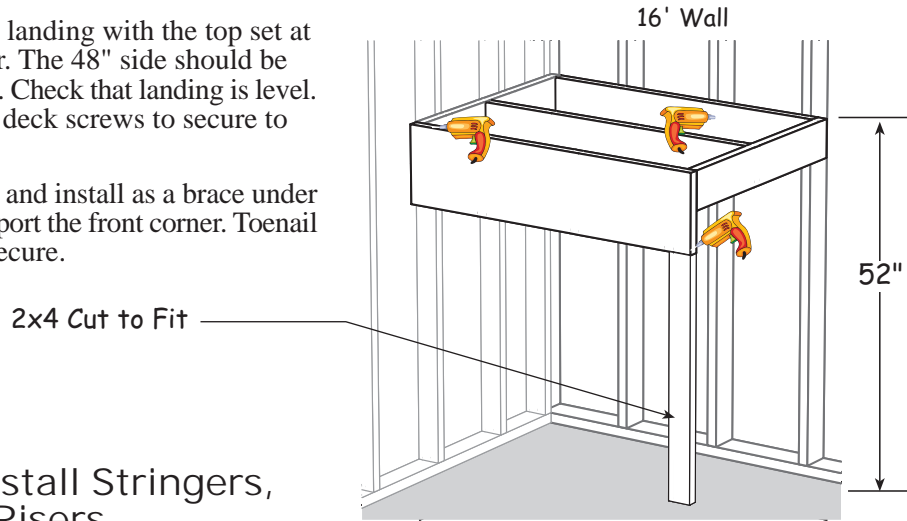
Step 2 Assemble Stair Landing

1. Assemble the stair landing using the material shown. Use (3) three 3" deck screws at end of each board.



Step 3 Install Lower Stairs

1. Install the stair landing with the top set at 52" above floor. The 48" side should be against 16' wall. Check that landing is level. Use (2) two 3" deck screws to secure to each stud.
2. Cut a 2x4 to fit and install as a brace under the 2x12 to support the front corner. Toenail a 3" screw to secure.



2x4 Cut to Fit

Step 4 Install Stringers, Treads and Risers

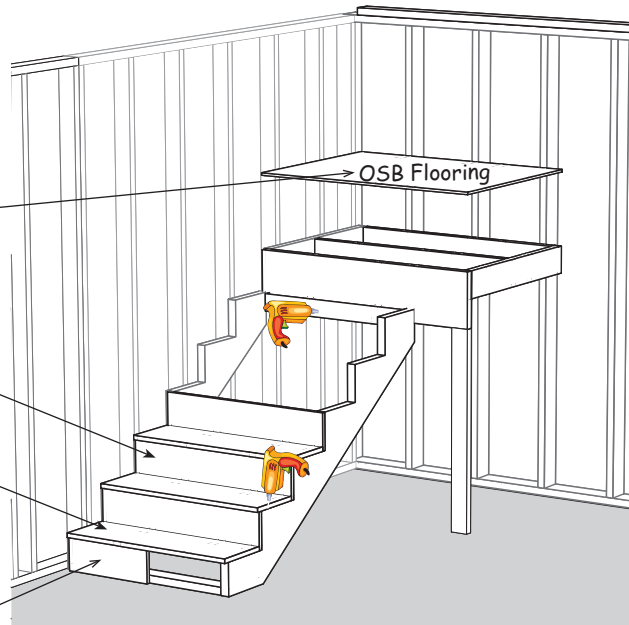
If installing on a cement slab secure pressure treated 2x6 to floor with concrete anchor screws or bolts (not included). Use a moisture barrier (not included) under stringers.

1. Secure 6 step stringer assembly to the landing and against wall studs with the pressure treated 2x6 on floor. Insure stairs are level. Use (2) two 3" deck screws per stud and (6) six 3" deck screws for landing.
2. Starting at the bottom, install a 6-1/2" x 36" riser so the top of the board is flush with first step. Pre-drill holes for (2) two 2-1/2" screws on each end and (3) three along 2x6 board.
3. Install (5) five 7-1/4" x 36" risers.
4. Glue bottom of tread to the stringers and risers. Pre-drill holes and secure to stringers with (3) three 2-1/2" screws on each end.
5. Cut a 36" x 48" from a piece of 23/32 OSB sub floor. Install on landing using 2-1/2" screws and glue.

7-1/4" High
White Pine Riser

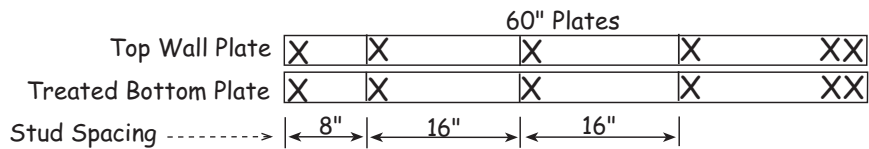
Stair Tread

6-1/2" High
White Pine Riser.

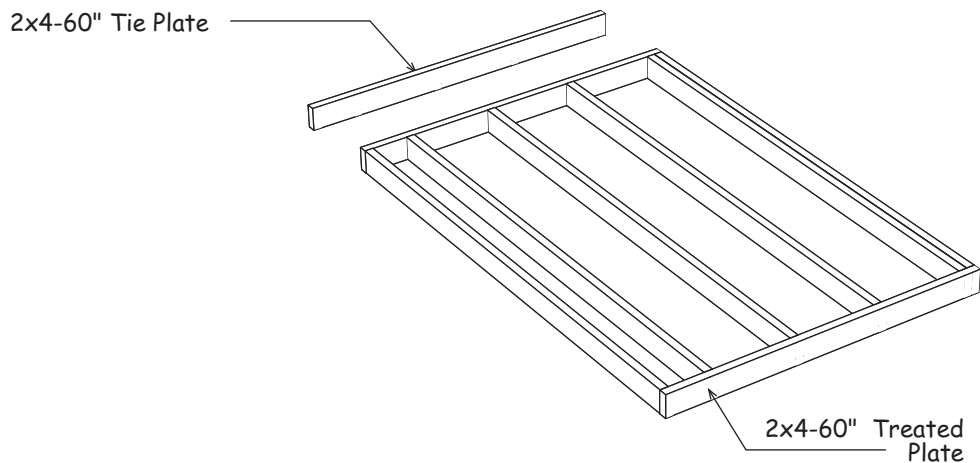


Step 5 Assemble Stair Wall

1. Cut (2) two 2x4-8' (one will be treated) to a length of 60". Position the boards together and indicate with 'X' marks where the wall studs will be located.

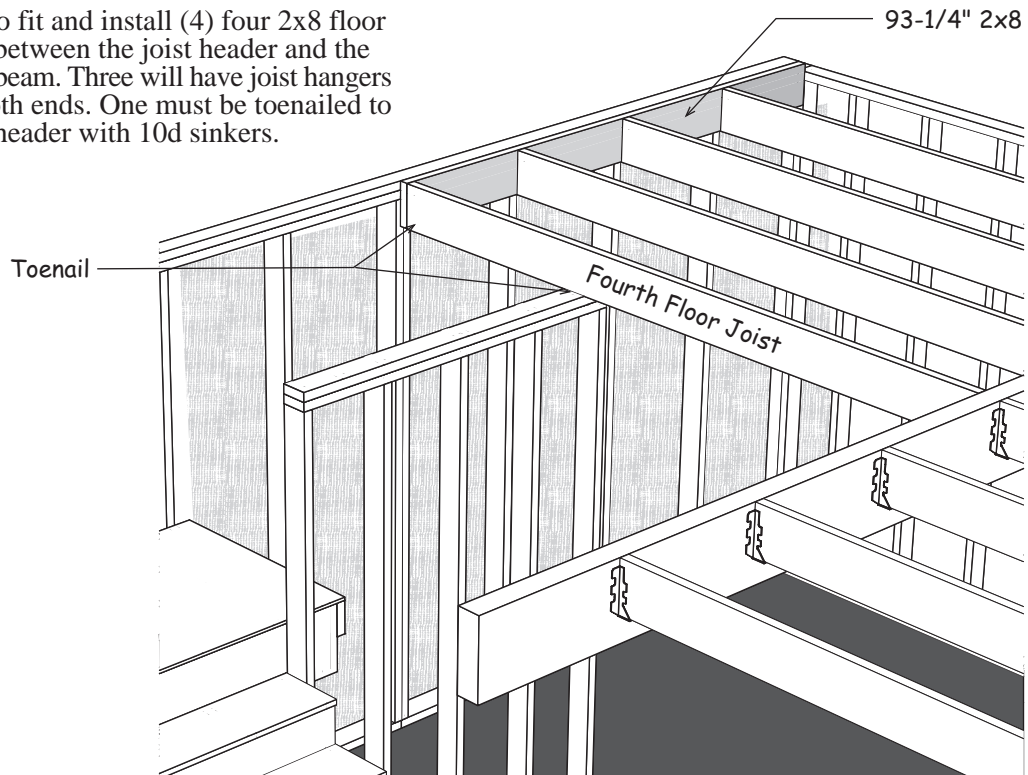


2. Measure the distance between the floor and the bottom of a loft floor joist. Subtract 4-1/2" from this measurement and cut (6) six pre-cut wall studs to this length.
3. Install the cut studs between the top and bottom plates. Nail top plate to studs with (2) two 10d sinkers. Nail bottom plate to studs with (2) two 16d galv. nails.
4. Cut a 2x4-8' to 60". Install as a tie plate on the top of the wall frame. Nail with 10d sinkers.

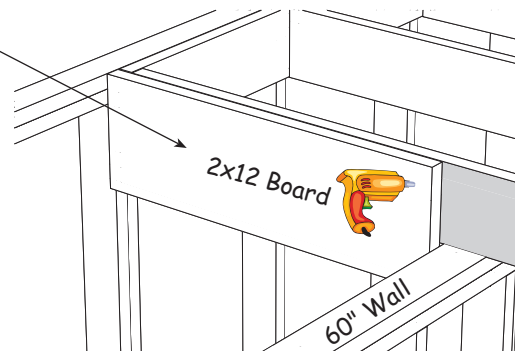


Step 6 Set Wall & Install Floor Joists

1. Stand wall up and secure to landing and stringer with 3" deck screws. Insure wall is plumb and square to 16' wall. Secure bottom plate to floor.
2. Cut a 2x8 to a length of 93-1/4" and install it on 16' wall as a joist header flush with the top of the tie plate and butted against long wall. Secure the 2x8 to the top plate, tie plate and wall studs with 10d nails.
3. Cut to fit and install (4) four 2x8 floor joist between the joist header and the LVL beam. Three will have joist hangers on both ends. One must be toenailed to joist header with 10d sinkers.

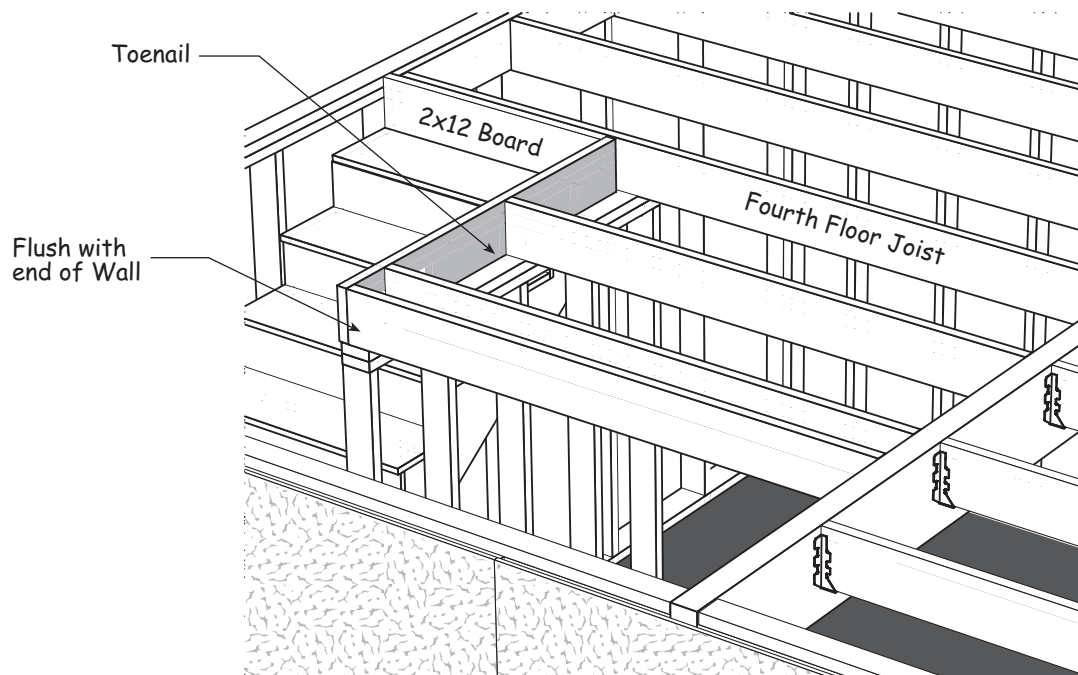


4. Install a 36" long 2x12 board flush with top of the fourth floor joist. Use 3" deck screws.



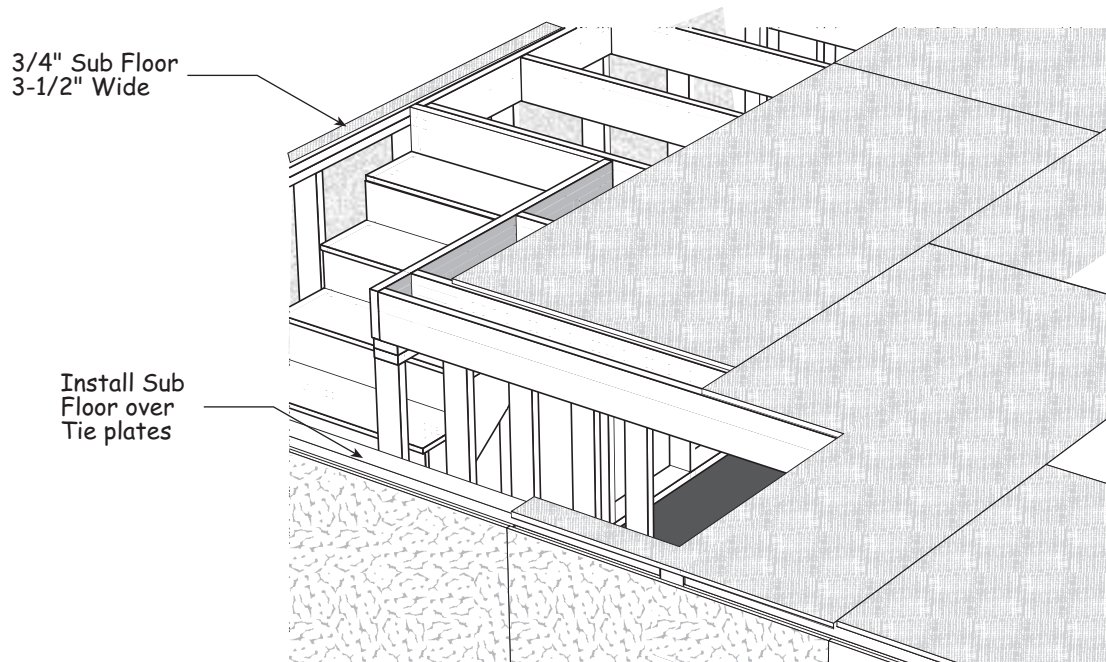
Step 7 Install Upper Stairs and Floor Joists

1. Install 5 step stringer on top of landing. Secure to walls and 2x12 with 3" deck screws. Install risers and stair treads as previously instructed.
2. Measure from end of 2x12 to LVL. Subtract 1-1/2" from this measurement and cut (3) three 2x8 boards to this length.
3. Continuing with 24" o.c. spacing set (2) two 2x8s on 60" wall and secure to LVL with joist hangers.
4. Set the last 2x8 on the end of the 60" wall and secure to LVL with joist hanger.
5. Measure from the fourth floor joist to the end of the 60" wall. Cut a 2x8 to this length. Set this board on top of the wall and against the ends of the floor joists. Nail board to ends of floor joists. Toenail to top of wall. Use 10d sinkers.



Step 8 Install Balance of Loft Flooring

1. Install remaining 3/4" sub floor. Install flooring flush with the outside edge of the 2x4 tie plates and edge of 2x8s and the 2x12 of the stairwell. Secure flooring with 6d sinkers.
2. Cut strips of 3/4" sub floor to a width of 3-1/2" and install over 2x4 tie plates around the stair opening.



Packing List

<i>Qty.</i>	<i>Material Packed in Kit</i>		
2	1x12	-	6-Step Stair Stringer
2	1x12	-	5-Step Stair Stringer
9	1x8	36"	Stair Riser (7-1/4")
2	1x8	36"	Stair Riser (6-1/2")
1	2x6	32-1/2"	Treated
3	2x6	32-1/2"	Framing Lumber
2	2x6	34-1/2"	Framing Lumber
2	2x6	45"	Framing Lumber

<i>Qty.</i>	<i>Material Packed in Kit</i>		
1	2x12	36"	Framing Lumber
1	2x12	48"	Framing Lumber
11	-	36"	10-1/2" Stair Treads
100	ea.	2-1/2"	Wood Screws
50	ea.	3"	Deck Screws
1	ea.	2"	Star Screw Bit