

Build your own



Figure #1
Completed Playhouse

Playhouse

Site Preparation and Foundation

Begin this project by selecting a clear and level building site, approximately 8 ft. by 8 ft. If necessary, firm and level the site.

MATERIALS NEEDED	
Quantity	Materials
4	8' Treated Landscape Timbers (Foundation)
5	4"x 4" x 8' Pine (Porch Post)
7	2"x 4" x 8' Treated Pine (Floor Joists)
3	4' x 8' x 15/32" Plywood Sheathing (Roof)
2	4' x 8' x 23/32" CCX Plywood Treated Flooring
9	4' x 8' x 19/32" T1-11 Siding
1	4' x 8' x 1/4" BC Plywood (Door)
3	2" x 2" x 10' SPF #2 (Hand Rail)
4	1" x 4" x 12' Pine Trim Boards (Trim)
6	1" x 6" x 10' (Window & Door Jambs)
22	1" x 4" x 8' (Trim boards)
6	2" x 4" x 12' (Trusses)
65	2" x 4" x 8' (Framing)
4	1" x 2" x 8' (Door stop/Shutters)
8	3/4" quarter round 12' (Window Mounting)
4	18 x 28 x 1/8" Plexiglass (Windows)
1 Roll	15# felt paper
4 Bundles	Asphalt Shingles
5 lbs.	16d Cement Coated Sinkers (For Framing)
5 lbs.	8d Common Nails (For Roof and Floor)
5 lbs.	8d Nonstaining Nails (For Siding)
5 lbs.	1" Galvanized Roofing Nails (For Shingles)
2 lbs.	6d Galvanized Finishing Nails (For Trim)
6	Face Mount Hangers 2 x 4 (Floor Joists)
10	Hurricane Ties 2 x 4 (Roof Trusses)
8	4 x 4 post connectors
52	Mend plates 2" x 4" (Roof Truss)
8	Ply Clips
5	Drip Edge
3 lbs.	1 1/4" galvanized deck screws for post connectors & Hardware
1	Door Hardware (Hinges and Handle)
	Exterior Paint and Exterior Caulk

Step 1

Foundation preparation and floor framing - figure #2.

Place 4 P.T. landscape timbers horizontally on the ground at 32" intervals. These will serve as the foundation. In highwind areas check with the local building code authority for anchoring requirements. Frame the floor perpendicular to the landscape timbers. Nail through the front and rear 2 x 4's and into the P.T. floor joists. Note the front and rear boards are 8' long. The sides and intermediate supports are 7' - 9" long. This will form a square that is 8' x 8'. Check for square by measuring diagonally from corner to opposing corner (forming an X). These measurements should be the same. Adjust to square as necessary. Once square, toe nail all framing members to the landscape timbers every 24".

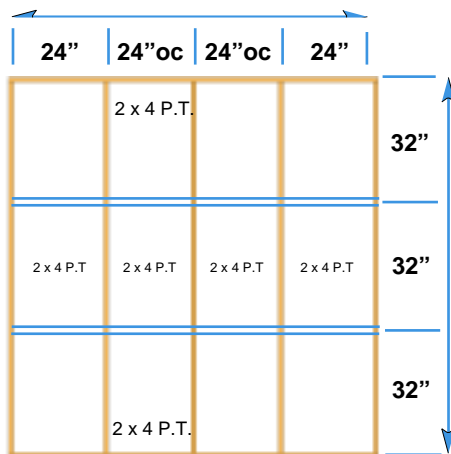


Figure #2
Floor Framing

Step 2

Floor panels - figure #3.

Install P.T. plywood floor panels perpendicular to the framing members. Use 8d common nails. Nail 6" at supported edges and 12" at intermediate supports. All lumber framing and plywood for the floor should be preservative treated.

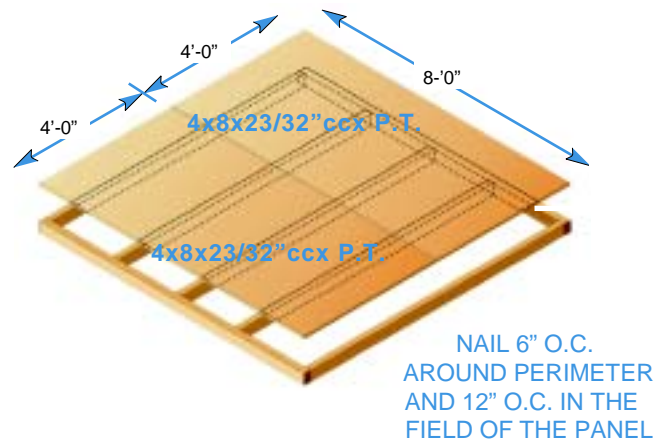


Figure #3
Floor Sheathing

Step 3

Frame left and right side walls - figure #4.

Windows are optional. If no windows are needed, frame the walls with studs 24" o.c. Wall studs should be 7' long and cut from a 2" x 4" x 8'.

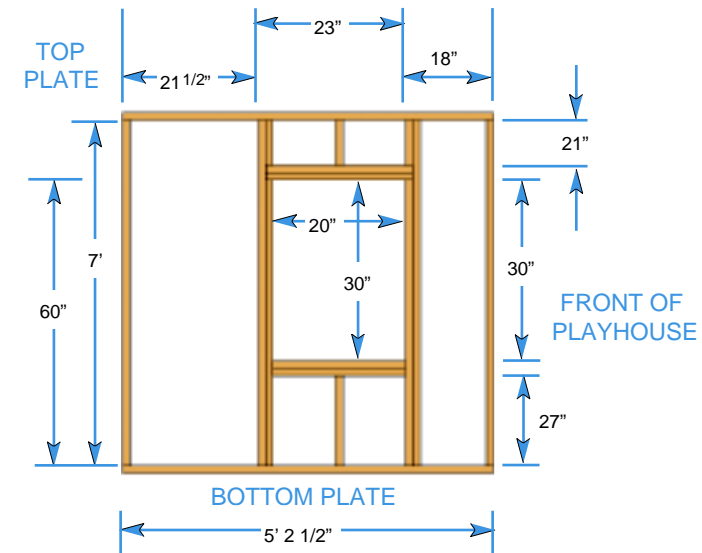


Figure #4
Side Wall Framing

Step 4

Sidewall installation - figure #5.

To install the left and right framed walls, use 16d cement coated sinkers. Nail through the bottom plate and the plywood floor into the floor joists every 6" on center. Note the walls should be off set 3 1/2" from the back edge of the floor. You may temporarily nail a 2 x 4 to the floor to insure proper spacing for the back wall. Level and plumb the walls. Temporarily brace walls until at least the two remaining walls are installed.

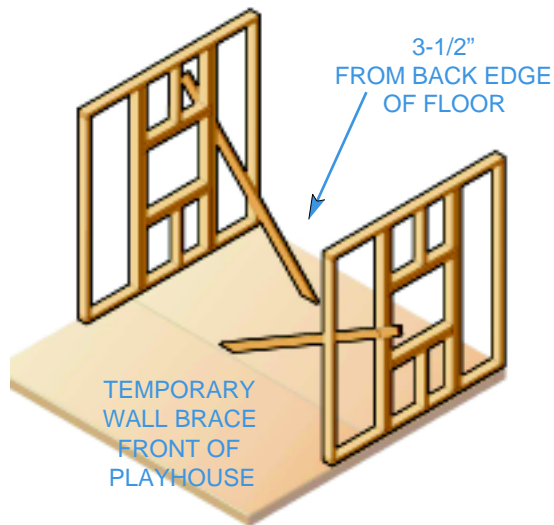


Figure #5
Left and Right Wall Installation

Step 5

Front and back wall framing - figures #6 and #7.

Use 16d cement coated sinkers nailing through the top and bottom plates and into the end of the studs. Fasten with two nails per stud to the top and bottom plates. As with the sidewalls, the wall studs should be 7' long and cut from 8' long lumber.

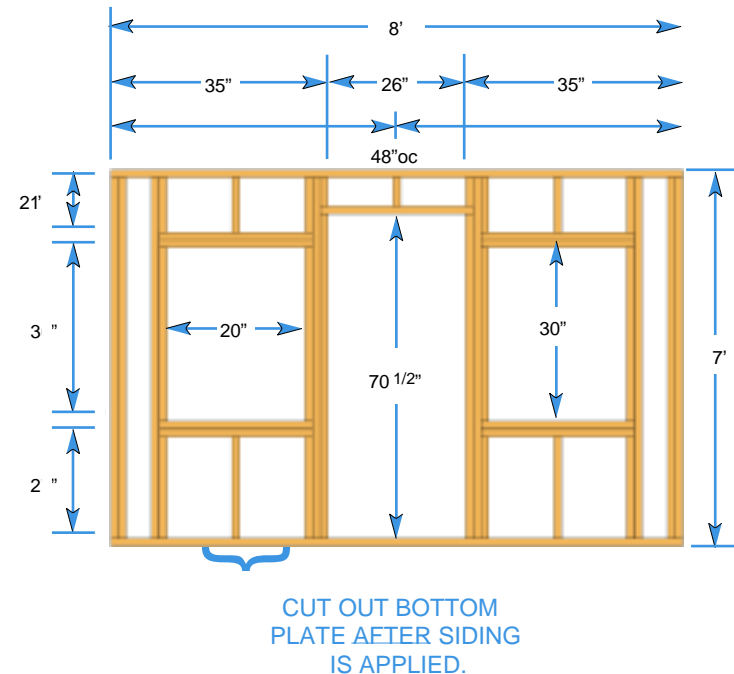


Figure #6
Front Wall Framing

Step 6

Front and back wall installation - figure #8.

If a temporary bottom plate has been installed in step #4, remove it at this time. Install the framed front and back walls - figure #8. Use 16d cement coated sinkers 6" on center. Nail through the bottom plate and into the floor joists. Square and level all walls as necessary. Connect the sidewalls to the front and back walls. Nail through the outside studs of the sidewalls and into the adjoining stud of the front and back walls. After all the walls are securely fastened to one another, you can then remove the temporary bracing.



Figure #8
Front And Back Wall Installation

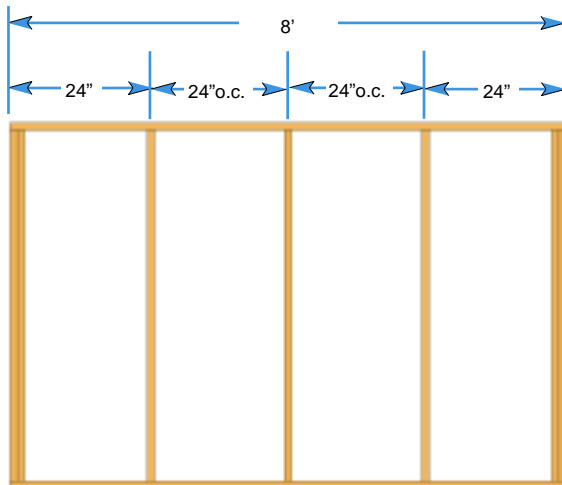


Figure #7
Back Wall Framing

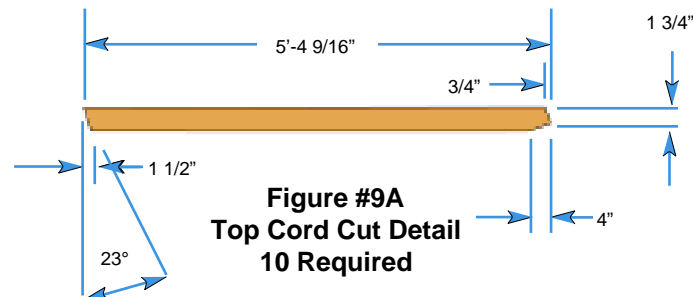


Figure #9A
Top Cord Cut Detail
10 Required

Step 7

Truss framing - figures #9 and 9A.

Construct 5 trusses per figure #9. The bottom cord should lay on the 1 1/2" edge. Cut top cords per dimensions and angles in figure #9A. The middle vertical support of the truss should be 17 1/2" long. Connect all components of the truss with mend plates on each seam both front and back.

TOP CORD OF TRUSS
SEE FIGURE 9A
FOR DIMENSIONS

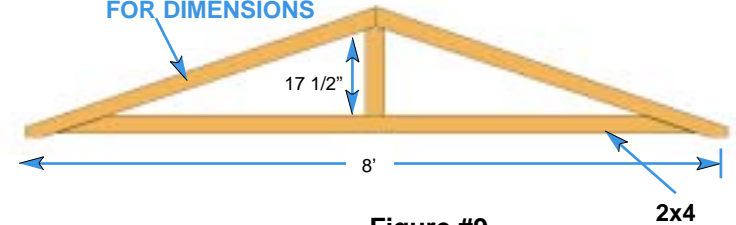
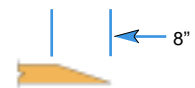


Figure #9
Roof Truss Framing
5 Required



Step 8

Gable truss installation - figure #10.

To install the gable end trusses make certain to align the back end of the bottom cord with the back edge of the top wall plate of the back wall.

NAIL WITH 16d
CEMENT COATED SINKERS



Figure #10
Gable Truss Installation

Step 9

Porch post and beam installation - figure #11.

First install the left and right outside porch posts. Place the porch beam on top of the porch posts and underneath the trusses. Install the two inside porch posts. Nail the bottom cords of the trusses to the porch beam.

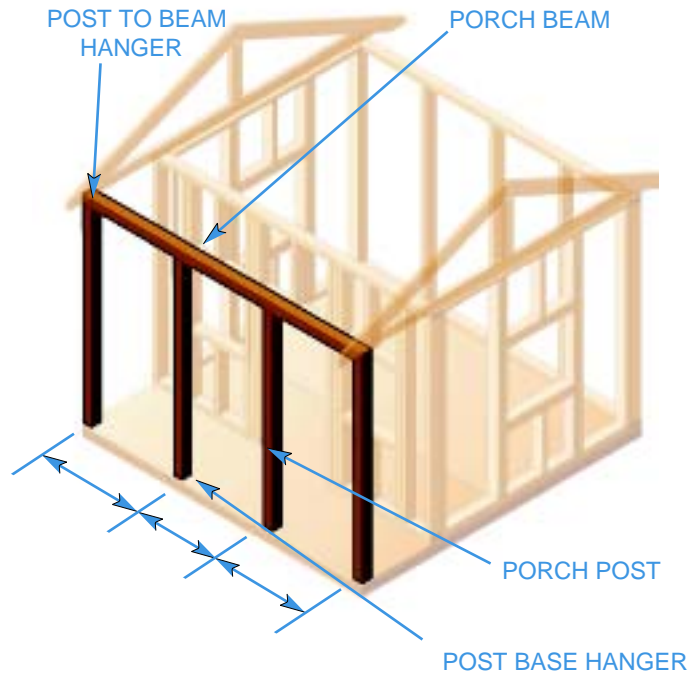


Figure #11
Porch Post/Beam Installation

Step 10

Roof truss installation - figure #12.

Install the three remaining roof trusses (constructed in step #7) 24" o.c. Use hurricane ties to fasten the trusses to the porch beam and the rear wall.

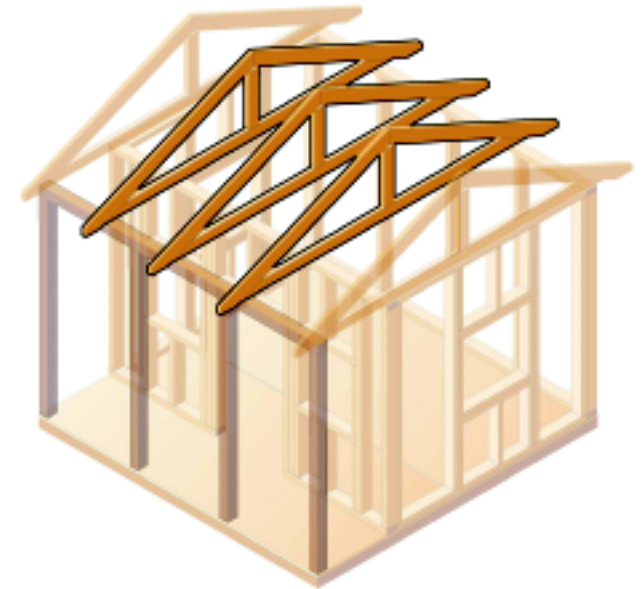


Figure #12
Roof Truss Installation

Step 11

Siding installation - figure #13.

If prefabricated windows are to be installed, do so now before the siding is installed. Follow manufacturer's installation instructions.

Install plywood siding as shown in figure #13. Measure and cut out all door and window openings before installing siding to the walls. Use 8d non-staining siding nails. Nail every 6" o.c. at supported edges and every 12" o.c. at intermediate supports.

Note the plywood siding cut out for the door opening will be used later to construct the door. Siding cut out at the porch should be installed on the porch overhang.

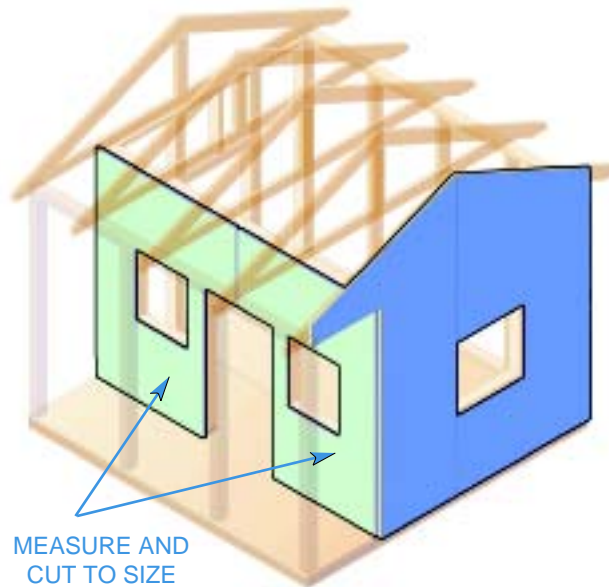


Figure #13
Siding Installation

Step 12

Roof sheathing installation - figure #14.

Nail a full 4' x 8' panel (as the first panel) to the front and back slope of the roof. Measure from the edge of the installed plywood to the ridge. Cut the panels to this dimension and install. Use 8d common nails. Nail every 6" o.c. at supported edges and 12" o.c. at intermediate supports. Space all plywood 1/8" at the edges. The use of ply clips is recommended.

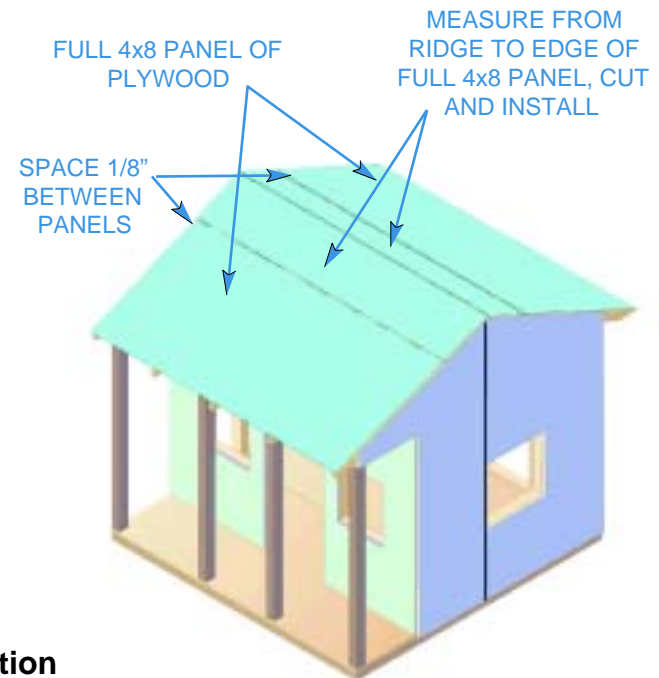


Figure #14
Roof Sheathing Installation

Step 13

Trim installation - figures #15 and #15A.

Start with the gable ends. Measure the length from the peak of the ridge (along the top of the roofline) to the end of the roof truss. Cut the gable fascia board as shown in figure 15A. Install with 6d galvanized finishing nails. Repeat this process for the three remaining gable fascia boards.

Measure and cut the front fascia board. Nail with 6d galvanized finish nails into the truss ends. Repeat for the back fascia board.

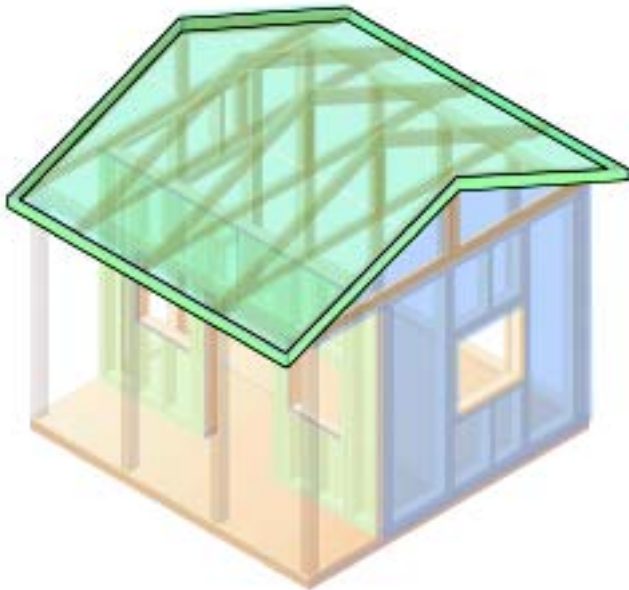


Figure #15
Fascia Trim Installation

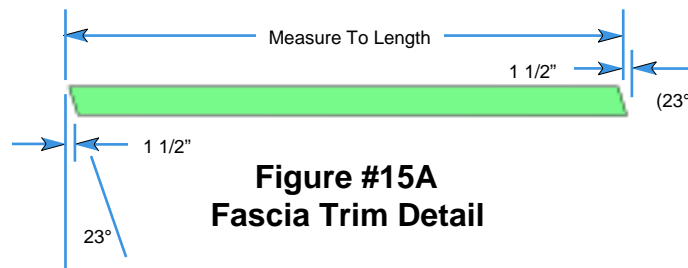


Figure #15A
Fascia Trim Detail

Step 14

Doorframe - figure #16.

Cut all doorframe members as per the dimensions in figure #16. Assemble the frame with mend plates on both sides of the seam. The frame will be strengthened with the addition of plywood to the face and back of the door frame. Cut a piece of 1/4" BC plywood 24" x 70 1/2". Glue and nail to the backside of the doorframe.

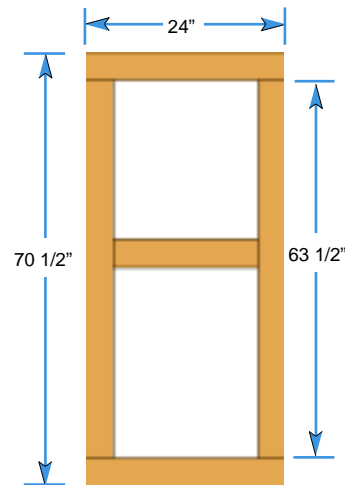


Figure #16
Doorframe Detail

Step 15

Jamb and doorstop installation - figure #17.

Install 1" x 6" as jamb stock to the sides and top of framed door opening. Install flush with the siding. Use 1" x 2" for door stop. Install flush with the back the 1" x 6".

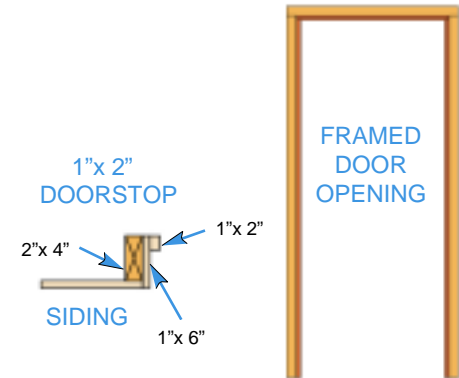


Figure #17
Door Stop Installation

Step 16

Door installation - figure #17.

The 2 pieces of overlapping siding that were cut out for the door opening will now be used to finish the door. Match the groove pattern of the 2 pieces of siding. Glue and nail the siding to the doorframe constructed in step #14. If not already done, cut out the bottom plate in the door opening. See step #5. After completion, hang the door with door hardware of your choice.

Step 17

Trim installation - figure #18.

Finish all rough window openings with 1" x 6". Install flush with the siding as in step #15 for the door opening. Trim the finished window openings with 3/4" quarter round mouldings and install plexiglass windows.

Install all the trim (1" x 4") around windows, doors and corners. The trim may be mitred at a 45° angle or square cut at 90°. Measure, cut and install vertical trim boards around doors and windows first. Place the horizontal trim board above the vertical boards and mark to the correct length. Cut and install with 6d galvanized finish nails.

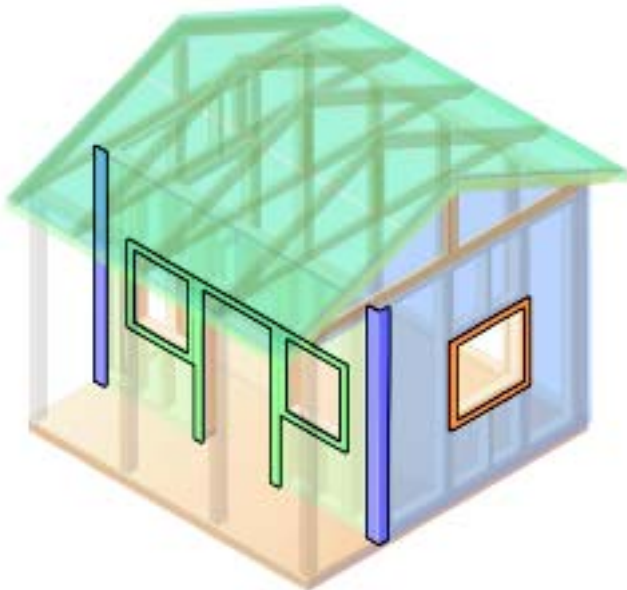


Figure #18
Trim Installation

Step 18

Handrail installation - figure #19.

Make the top and bottom rails from 2" x 4"s. Measure the distance between porch posts and playhouse to get the correct dimension of top and bottom rails. Cut handrail rungs from 2" x 2"s. Cut 12 rungs 30" long. Install equally spaced with 6d galvanized finish nails.

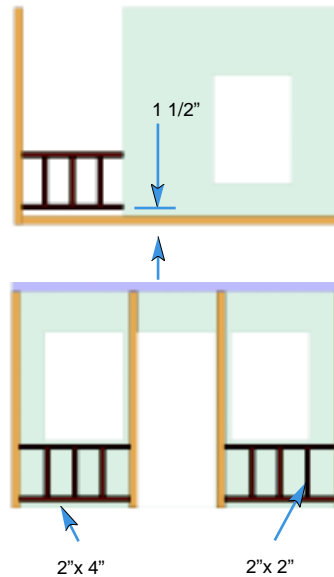


Figure #19
Handrail Installation

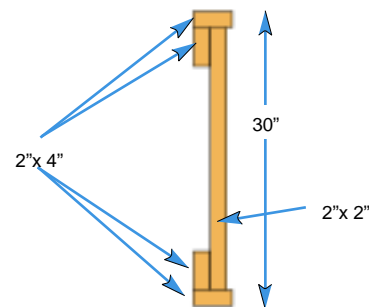


Figure #19 A
Side view of porch rails

Step 19

Shingling and finishing the Playhouse.

Install 15# felt paper on the roof. Install asphalt shingles according to manufacturer's instructions. Caulk around all window, door, and corner trim boards. Paint the playhouse following the paint manufacturer's instructions. Interior finishing is optional. Inspect the playhouse and make sure no nails are sticking through that could injure the children. Congratulations! You have successfully completed this project.



Figure #20
Shingling and finishing

Step 20

Optional Finishing Details

The interior walls and ceiling of the playhouse may be finished with 4' x 8' Ply-Bead Classic panels.

Nine panels (not included in the materials list) are needed.

Window boxes of owner's design are optional. The use of preservative treated boards is recommended (not included in the materials list).

Optional window shutters may be installed. See figure #21 and materials list (door stop and shutters).

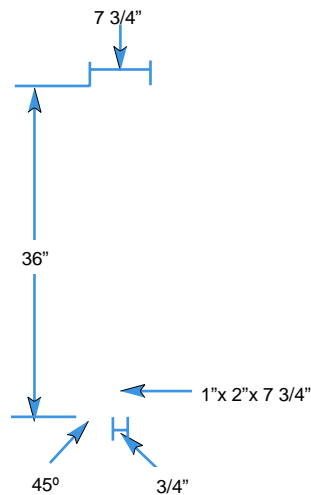


Figure #21
Window Shutters