

How to build a double decker playhouse

Step 1: Mark the Area and Set Up Support Posts

Determine the size and location of your play structure, then stake out the area and mark the corners. Dig four postholes to a depth of 36" for the tower of the structure. Add at least 3" of gravel in the bottom of each hole for proper drainage. Tamp gravel down with posts. Place 4" x 4" x 12' posts in holes, making sure they are level and plumb. Fill holes with fast-setting concrete. Brace posts with stakes while they set.

Step 2: Attach the Joist Banding

Determine the desired height of lower and upper decks. When posts are set, temporarily attach 2" x 6" joist banding around the outer edges of the posts at lower-deck height. Make sure the joists are level. Permanently fasten the joists by drilling pilot holes through the joists and posts then securing with 3/8" x 5" carriage bolts. Repeat the process for the upper deck at desired height.



Step 3: Attach the Floor Joists and Decking

Use joist hangers to attach 2" x 6" floor joists to the outer banding, spacing them 16" on center (Image 1). Cut 1" x 6" decking planks to span the platform, making sure to place boards perpendicular to joists. It is okay if the boards hang over the edge. Attach planks to joists with 3" deck screws. To trim the overhanging deck boards, snap a chalk line on the ends of the planks and use a circular saw to saw them flush. Notch the planks as necessary to fit around the posts (Image 2). Repeat the process to install the upper deck.



Image 1



Image 2





Step 4: Cut the Upper-Deck Hatch

Mark out an area on the upper deck for an access hatch. Before cutting, fasten two boards to the underside of the hatch to keep the planks together when cut. Affix 2" x 4" boards to the joists where the front and back of the hatch will rest. These boards will support the hatch when closed. Cut out the opening for the hatch using a circular saw. Sand to remove any sharp edges. Fasten the access hatch door using 3" hinges.



Step 5: Build the Swing Support Ladder

Install two 4" x 4" x 12' posts in holes in line with the tower posts to serve as swing support ladder. These posts should be 12' from the tower. Set the posts in concrete in the

same manner as with the tower posts. When set or braced, cut 2" x 4" ladder rungs to the appropriate length to fit between the posts. Use 3" galvanized screws to attach the rungs to the posts at 14" on center. Attach the 4" x 6" x 12' swing support beam to the ladder post and tower with carriage bolts. Attach swing to swing support beam.

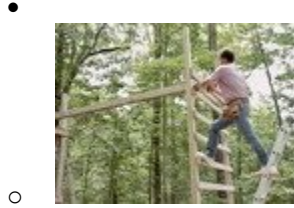


Image 1



Image 2





Step 6: Build the Ladders

Build the ladder that extends from the ground to the lower deck using 2" x 4" x 6' boards for the rails and 2" x 4" x 2' boards for the rungs. Attach the rungs 14" apart on center with 3" deck screws (Image 1).

Attach the ladder to the tower by toe-nailing it with deck screws. Assemble the ladder for the upper deck in the same manner. Attach it to the upper deck with 3" deck screws and to the lower deck with screws that come up through the bottom of the lower deck (Image 2).



Image 1



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Image 2





Step 7: Install the Railings

For the lower-deck railings attach 2" x 4" boards to the support posts at a height of 36" above the deck floor. Attach the slats between the railings and the deck floor leaving gaps no larger than 6". Repeat for upper-deck railing.



Step 8: Add Monkey Bars

Set two 4" x 4" x 6' posts at the desired distance from tower to support the monkey bars. Build monkey bars using 1 1/2" hardwood dowels set in 2" x 8" boards. Drill 1-1/2" holes into the supports with a spade bit every 12". Secure the dowels by drilling pilot holes and screwing long screws through dowels from the top of the supports. Attach the monkey bars between posts and tower using carriage bolts.

Consider attaching optional accessories such as a slide, fireman's pole, or trapeze rings.

