



## Steps:

Adjust the depth of the saw blade to just cut into the surface of a scrap piece of wood

Cut a long thin measured line

Measure the two sidepieces to 13 9/16" along one edge and 16" along the other edge. This will give you a fifteen-degree angle across the end of the board and will provide a slope for the roof. Cut on the marked line.

Measure and cut an 8" square piece for the floor of the birdhouse. Birds are very particular about their floor space, and the birds we're building for like an 8" x 8" floor. If your wood is not exactly 8" wide, measure and cut and glue in an extra piece that brings the floor to the correct dimension. The bottom should fit tightly inside the four walls.

When cutting with a circular saw, place the wood flat on the bench surface to prevent kickback from a binding blade. To protect the surface of your bench, cover it with a piece of scrap wood. Adjust the depth of the saw blade so that it just reaches the top of the scrap wood below and doesn't reach the tabletop. Be sure to clamp the wood in place so that it doesn't move around while you're cutting. Don't forget your hearing and eye protection.

The side walls have a 15 degree angle for the roof line

Adjust the saw blade to 15 degrees

If you have a bevel gauge on your saw, set it to 15 degrees

Mark the board at 16 inches

Draw the direction for the angle on the edge of the board

Cut the angle along the line

Measure and cut the back wall of the birdhouse. The length is 16" to the short side of the fifteen-degree angle. Adjust the saw blade to 15-degrees. If you don't have a gauge for the angle, just set the foot of the saw on one of the angled walls and adjust the blade to match the angle. Don't forget to readjust the depth of the saw blade to cover the greater thickness of board created by the angle.

Drill ventilation holes and attach the side walls, back and floor

Drill four or five holes in the floor for drainage

Drill three  $\frac{3}{4}$ " holes along the top edge of both side walls for ventilation. Drill four or five holes in the bottom for drainage.

Attach the sides, back and the bottom together with 2" screws. Pre-drill before driving the screws to prevent splitting the wood.

Cut an angle on the top front for the roof and an opposite angle in the middle

Next, cut the front wall 16 inches long. The top edge must match the 15-degree angle of the roof. Cut the bottom edge square. Cut across the front piece at the center, using the same 15-degree angle slanted the opposite direction from the roofline. This will stop wind-driven rain from blowing into the birdhouse and soaking the baby birds.

Use a 3 inch hole saw to cut the entry opening

Attach the top front piece with screws

Attach little extender strips to the inside if necessary

Drill a 3" entry hole in the center of the upper front piece with the hole-saw. Clamp the wood in place and drill from both sides if necessary to penetrate the thickness of the wood. Use a pilot bit to drill all the way through the piece first; this will act as a guide for the hole saw, especially if you have to turn the wood over and drill from the back because the wood is too thick for the hole saw to get all the way through in one pass.

Attach the entry-hole piece to the side walls of the birdhouse using long screws. If your lumber is shaped irregularly, you may need to attach little strips of wood on the inside corners to provide extra thickness to catch the screws.

Attach a twig ladder to the inside for the fledglings

Attach twigs or a piece of old carpet to the inside of the lower front wall to provide a ladder for the fledglings to climb up when it's time to leave the nest. Another alternative is to cut shallow grooves in the wood with chisels or a circular saw.

Attach the bottom 'trapdoor' section using a spring

Open birdhouse for cleaning in the fall      Closed birdhouse for nesting

Attach the bottom front wall to the frame with springs and short screws. Attach the springs low on the front piece and then slant the springs up as you pull them around to the sides. Put some tension on the springs so that the wood will want to stay pulled up and in place. If necessary, attach small pieces of wood to the inside of the lower front piece to help guide it, and also lock it in place when it is in the closed position.

Attach an oversized roof with screws

To create the roof, use long screws to attach an oversized piece of wood to the top. It can be bark-covered slab-wood or milled wood, depending on what is large enough and available. Allow an overhang on the sides and front but flush it up on the back so that the birdhouse can be easily hung on a vertical surface.

Also, cut a shallow line or two across the underside of the front overhang to prevent water from running down its underside and seeping into the house. A groove will provide a place for the water to stop and drip off, keeping the nest dry.

The birdhouse is mounted by driving screws into the exposed bottom section of the back wall. Also, you should open the bottom front 'trapdoor' section and drive a screw or two through the back and into the vertical mounting surface. Putting some grease on the springs will protect them from the weather and they can last for years.

Refer to bird books to figure out the most appropriate outdoor location for your birdhouse, and then watch daily for tenants, or advertise in the local bird tabloids if you want to move things along faster.