Titmouse House

Woodworking plans: cut list, drawings, and step-by-step assembly

Titmice favor forests, parks, and neighborhoods with large deciduous trees. This box has a 1 1/4" entrance on a 5 1/2" square floor with 8" of depth. This design is a classic side-opening box: one side panel swings open on two pivot nails, so you can check the nest and clean it out at the end of the season without taking anything apart.

Design Specs

Spec	Measurement
Entrance hole	1 1/4" round
Floor (inside)	5 1/2" x 5 1/2"
Depth (inside)	8" (floor to underside of roof, measured at the front)
Mounting height	5 to 15 ft
Hole direction	Away from the prevailing wind
Spacing between boxes	580 ft
Habitat	Forests, parks, and neighborhoods with large deciduous trees
Fledgling ladder	Shallow horizontal kerfs below the hole, inside

Materials

Item	Qty	Notes
1x6 cedar board (actual 3/4" x 5 1/2")	1 @ 4 ft	Floor and both side panels
1x10 cedar board (actual 3/4" x 9 1/4")	1 @ 4 ft	Front, back, and roof (front and back ripped to 7" wide)
1 5/8" exterior deck screws (coated or stainless)	About 20	Main assembly, plus 1 for the door latch
6d galvanized finishing nails (2")	2	Door pivots
Exterior wood glue	Optional	Do not glue the door side

Tools

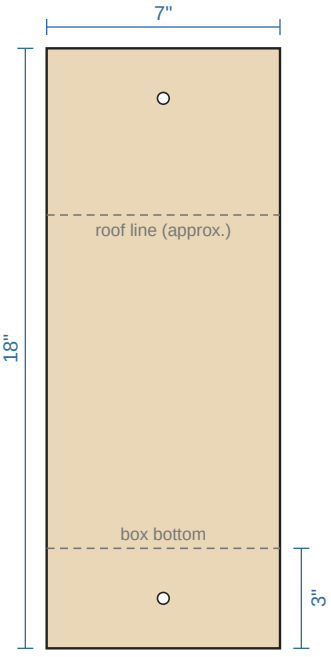
Circular saw or miter saw • Table saw or circular saw with rip guide (for ripping the 1x10) • Drill/driver • 1 1/4" Forstner or spade bit • 3/16" bit for pilot holes • 1/4" bit for mounting holes • Speed square • Tape measure • Pencil • Hammer • Sandpaper

Before you build: Use untreated cedar and leave the inside unfinished. Skip the perch. All dimensions assume actual lumber sizes (a 1x6 measures 3/4" x 5 1/2"). Measure your boards before cutting, since mill sizes can vary slightly.

Cut List

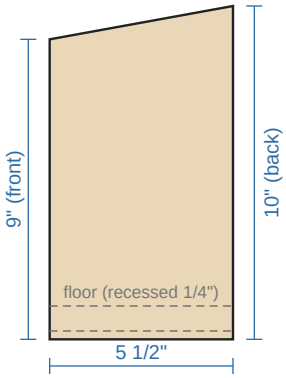
Part	Qty	Size	From	Notes
A Floor	1	5 1/2" x 5 1/2"	1x6	Clip each corner 1/2" for drainage
B Fixed side	1	5 1/2" wide; 9" front edge, 10" back edge	1x6	Top cut at about 10 degrees
C Door side	1	5 1/2" wide; 8 3/4" front edge, 9 3/4" back edge	1x6	1/4" shorter than B for a vent gap
D Front	1	7" x 9"	1x10 ripped	Bevel top edge 10 degrees; 1 1/4" hole
E Back	1	7" x 18"	1x10 ripped	Extends above and below box for mounting
F Roof	1	9 1/4" x 8 1/2"	1x10	Bevel back edge 10 degrees

Part Drawings

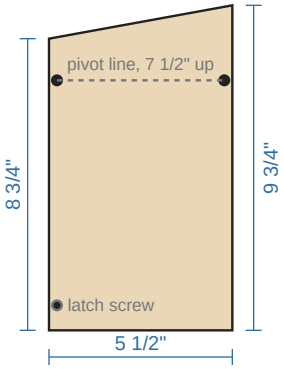


E Back

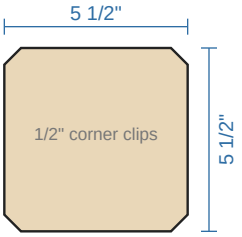
1/4" mounting holes, 1 1/2" from ends



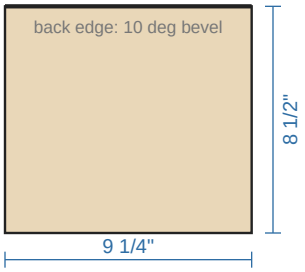
B Fixed Side



C Door Side



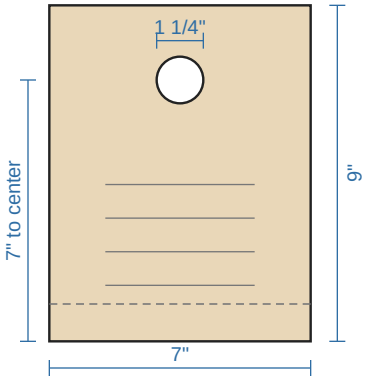
A Floor



F Roof (shown at 80% scale)

Drawings are to scale except where noted. Dashed lines show where other parts meet. Cut the 10-degree slope on both side panels first, then use a side panel to set your saw for the bevels on the front and roof.

Part D: Front Panel and Entrance Hole



D Front: 1 1/4" Round Hole

Hole: Mark the center 7" up from the bottom edge and 3 1/2" in from either side. Bore with a 1 1/4" bit, backing the board with scrap to prevent tear-out.

Fledgling ladder: On the inside face, cut four shallow horizontal saw kerfs (about 1/16" deep) below the hole so fledglings can climb out.

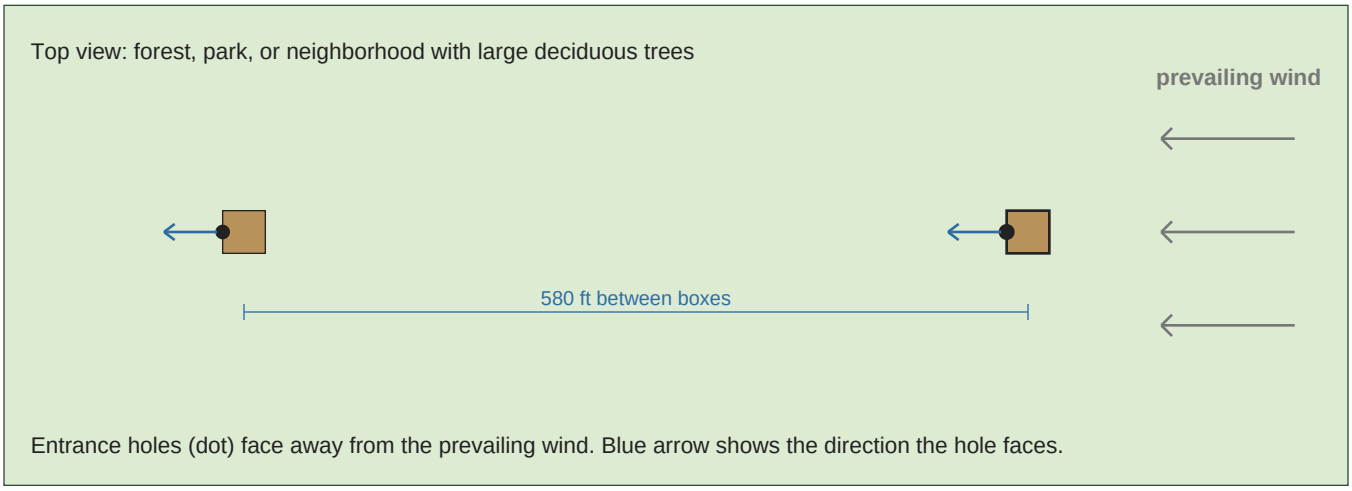
Assembly

1. **Cut all parts** per the cut list. Rip the front and back to 7" wide. Cut the 10-degree slope on the tops of both side panels, bevel the top edge of the front, and bevel the back edge of the roof.
2. **Drill the entrance hole** in the front and cut the fledgling-ladder kerfs on the inside face. Clip the four floor corners 1/2".
3. **Attach the fixed side (B) to the back (E).** Lay the back flat, set the side's tall edge on it with the side's bottom 3" up from the back's bottom end, and flush with one long edge. Drill 3/16" pilot holes and drive 2 screws through the back into the side.
4. **Install the floor (A).** Set it against the fixed side and back, raised 1/4" above the bottom edge of the side. Drive 2 screws through the side and 2 through the back into the floor.
5. **Attach the front (D).** Bottom edge flush with the bottom of the fixed side. Drive 2 screws into the fixed side's front edge and 2 into the floor edge. Do not drive any screws on the open side.
6. **Attach the roof (F).** Butt the beveled edge against the back so the roof overhangs the front about 2" and each side about 1 1/8". Drive 2 screws down into the fixed side, 2 into the front, and 2 through the back into the roof edge.
7. **Hang the door (C).** Slide it into the open side, bottom flush with the box bottom; the 1/4" gap at the top is your ventilation. Sand the edges if it binds. At 7 1/2" up from the bottom, drive one 6d nail through the front and one through the back into the door edges, lined up across from each other. Test the swing.
8. **Add the latch.** Near the bottom, drive one screw through the front into the door edge. Back it out when you want to open the box.
9. **Drill two 1/4" mounting holes** in the back, centered, 1 1/2" from each end.

Where to Put It

Place the box in a forest, park, or neighborhood with large deciduous trees. Point the entrance away from the prevailing wind, mount the box 5 to 15 ft high, and keep boxes 580 ft apart.

Placement	Guideline
Habitat	Forests, parks, and neighborhoods with large deciduous trees
Mounting height	5 to 15 ft
Hole direction	Away from the prevailing wind
Spacing	Keep titmouse boxes 580 ft apart



Mounting Tips

- Mount the box 5 to 15 ft up on a sturdy pole, post, tree, or building. Bolt it through the two holes in the back.
- If you mount the box on a pole, a predator baffle below the box helps keep climbing predators out.
- Mount the box level. The sloped roof sheds rain forward, past the entrance hole.
- Put the box up before nesting season starts, and use the side door to clean out old nest material once the season ends.