

Northern Flicker House

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

Our specs call for 1 1/2"-thick boards and a box packed full of white pine chips. This tall box has a 2 1/2" entrance on a 7 1/4" square floor with 24" of depth, plus 1/4"-deep kerfs every 1/2" inside the front so chicks can climb. One side panel swings open on two pivot nails, so you can clean the box and refill the chips.

Design Specs

Spec	Measurement
Board thickness	1 1/2" (2x lumber)
Entrance hole	2 1/2" round, top of hole about 2" below the roof
Floor (inside)	7 1/4" x 7 1/4"
Depth (inside)	24" (floor to underside of roof, measured at the front)
Mounting height	6 to 12 ft
Hole direction	Facing south or east
Spacing between boxes	330 ft
Fill	Packed full of white pine chips
Climbing kerfs	1/4" deep, every 1/2", inside the front

Materials

Item	Qty	Notes
2x8 board, untreated (actual 1 1/2" x 7 1/4")	1 @ 6 ft	Floor and both side panels
2x12 board, untreated (actual 1 1/2" x 11 1/4")	1 @ 8 ft	Front, back, and roof (front and back ripped to 10 1/4")
3" exterior screws (coated or stainless)	About 24	Main assembly, plus 1 for the door latch
16d galvanized nails (3 1/2")	2	Door pivots
White pine chips	About 2/3 cu ft	Enough to pack the box to the bottom of the hole

Tools

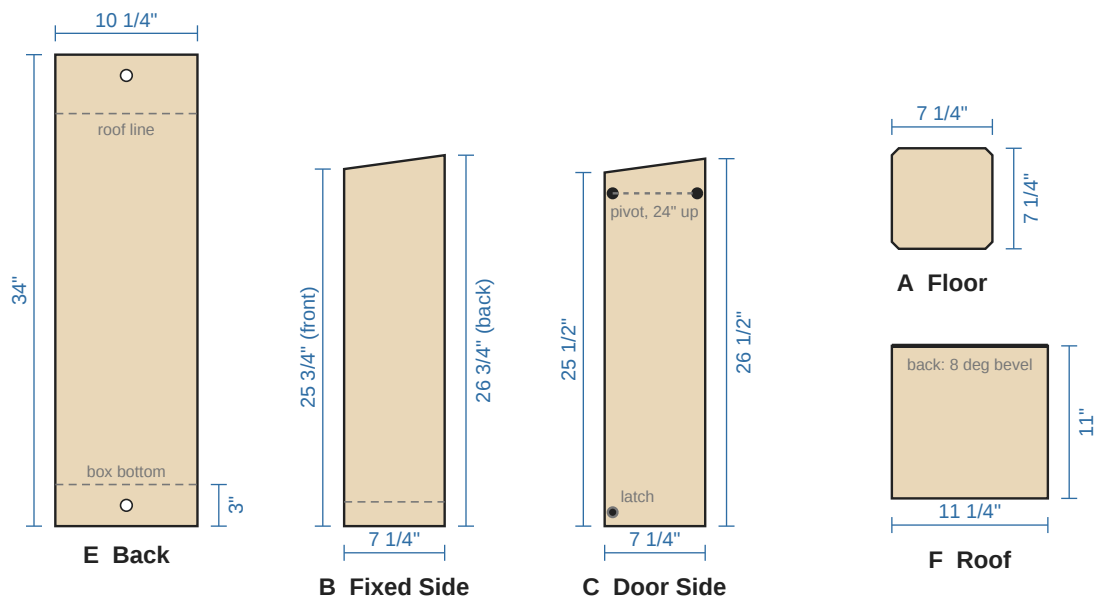
Circular saw or miter saw • Table saw (for ripping the 2x12 and cutting the kerfs; a circular saw with a rip guide and depth set to 1/4" also works) • Drill/driver • 2 1/2" hole saw or Forstner bit • 3/16" bit for pilot holes • 1/4" bit for mounting holes • Speed square • Tape measure • Pencil • Hammer • Clamps

Before you build: Use cedar 2x lumber if you can find it; untreated pine works too. Never use pressure-treated wood. Leave the inside unfinished and skip the perch. 2x boards vary, so measure yours before cutting.

Cut List

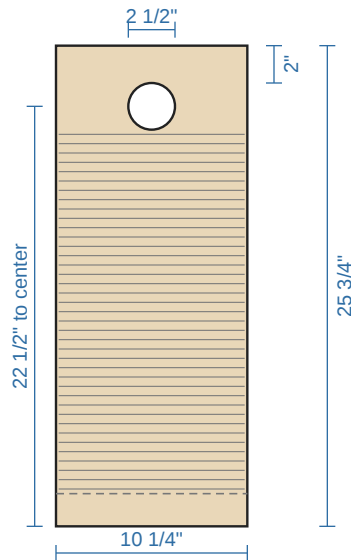
Part	Qty	Size	From	Notes
A Floor	1	7 1/4" x 7 1/4"	2x8	Clip each corner 1/2" for drainage
B Fixed side	1	7 1/4" wide; 25 3/4" front edge, 26 3/4" back edge	2x8	Top cut at about 8 degrees
C Door side	1	7 1/4" wide; 25 1/2" front edge, 26 1/2" back edge	2x8	1/4" shorter than B for a vent gap
D Front	1	10 1/4" x 25 3/4"	2x12 ripped	Bevel top 8 degrees; 2 1/2" hole; kerfs inside
E Back	1	10 1/4" x 34"	2x12 ripped	Extends above and below box for mounting
F Roof	1	11 1/4" x 11"	2x12	Bevel back edge 8 degrees

Part Drawings



Drawings are to scale. Dashed lines show where other parts meet. The back has two 1/4" mounting holes, 1 1/2" from each end. The door-side pivot nails go through the front and back into the door edges.

Part D: Front Panel, Entrance and Climbing Kerfs



D Front (inside face)

Hole: Mark the center 22 1/2" up from the bottom edge and 5 1/8" in from either side. That puts the top of the hole 2" below the top edge, where the roof sits. Cut it with a 2 1/2" hole saw or Forstner bit. With a hole saw, drill until the pilot bit pokes through, then finish from the other side.

Climbing kerfs: On the inside face, cut kerfs 1/4" deep every 1/2", running across the full width of the board. Start 2" up from the bottom edge (just above the floor) and stop just below the hole, at about 21". On a table saw, set the blade 1/4" high and move the fence 1/2" between passes. That is roughly 39 kerfs.

Cut the kerfs before you drill the hole, and before assembly.

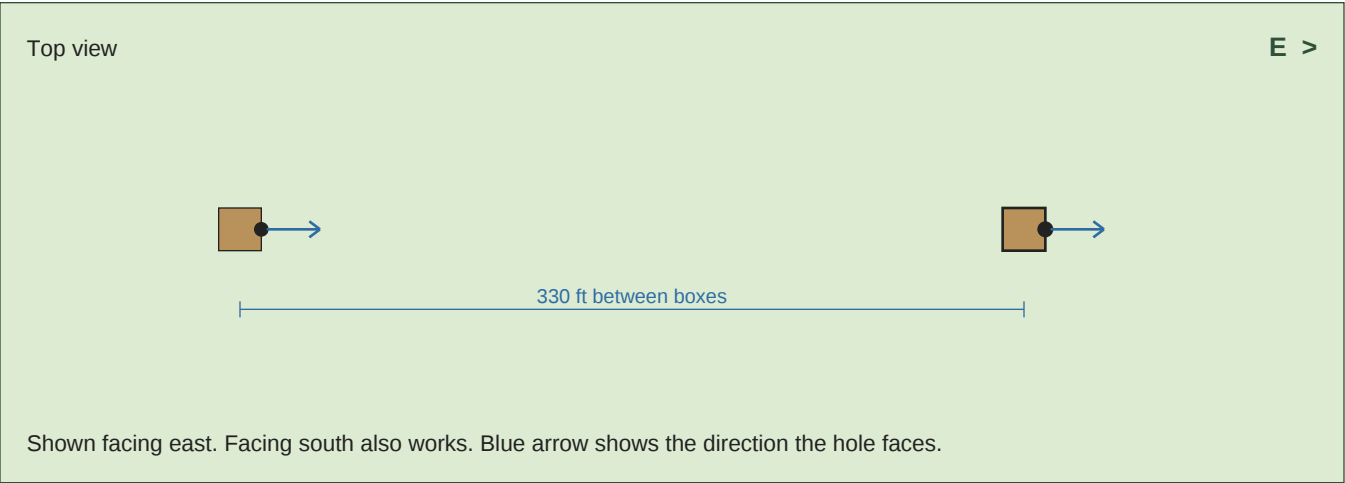
Assembly

- 1 **Cut all parts** per the cut list. Rip the front and back to 10 1/4" wide. Cut the 8-degree slope on both side tops, bevel the top edge of the front, and bevel the back edge of the roof. Clip the four floor corners 1/2".
- 2 **Cut the climbing kerfs, then the hole** in the front, as described above.
- 3 **Attach the fixed side (B) to the back (E).** Set the side's bottom 3" up from the back's bottom end, flush with one long edge. Drill 3/16" pilot holes and drive 3 screws through the back into the side.
- 4 **Install the floor (A)** against the fixed side and back, raised 1/4" above the bottom edge. Drive 2 screws through the side and 2 through the back.
- 5 **Attach the front (D),** kerfs facing in, bottom flush with the fixed side. Drive 3 screws into the side's front edge and 2 into the floor edge. Leave the open side free.
- 6 **Attach the roof (F).** Butt the beveled edge against the back. It overhangs the front about 2" and each side about 1/2". Drive 2 screws into the fixed side, 2 into the front, and 2 through the back into the roof.
- 7 **Hang the door (C).** Bottom flush with the box bottom; the 1/4" gap at the top is ventilation. At 24" up, drive one 16d nail through the front and one through the back into the door edges, lined up across from each other. Near the bottom, drive one 3" screw through the front into the door edge as the latch.
- 8 **Drill two 1/4" mounting holes** in the back, centered, 1 1/2" from each end.
- 9 **Pack in the chips.** Open the door and fill the box with white pine chips, packing them firmly, up to the bottom of the hole.

Where to Put It

Face the entrance south or east, mount the box 6 to 12 ft high, and keep boxes 330 ft apart.

Placement	Guideline
Mounting height	6 to 12 ft
Hole direction	Facing south or east
Spacing	Keep flicker boxes 330 ft apart



Mounting Tips

- Bolt the box 6 to 12 ft up on a sturdy pole, post, or tree through the two holes in the back.
- This box is heavy once it is packed with chips. Use a sturdy ladder and a helper to lift and mount it.
- Mount the box level. The sloped roof sheds rain forward, past the entrance hole.
- After the nesting season, open the side door, clean out the old material, and pack in fresh white pine chips.