

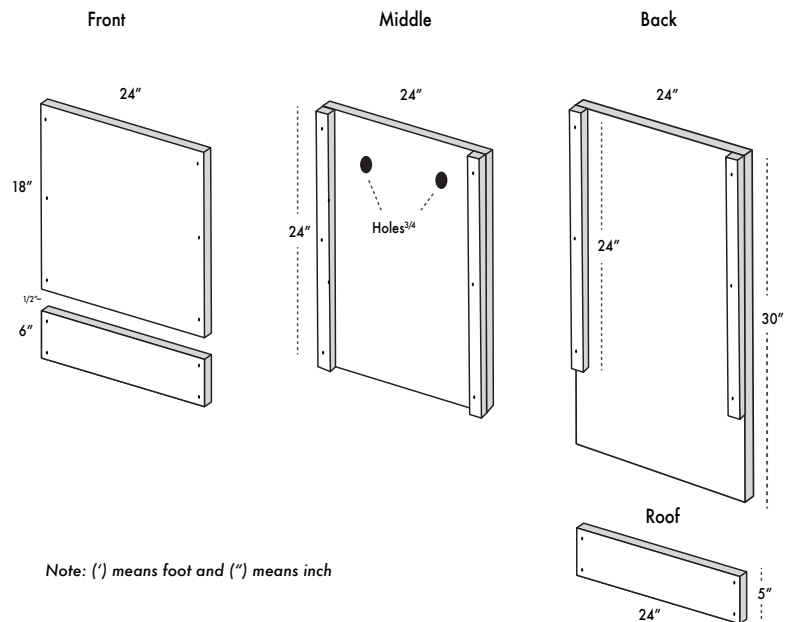
# How To Build A Bat House

#HelpTheBats



## Materials:

- Plywood: one 4' x 4' sheet of 1/2" thick, untreated, outdoor grade (could also use 5/8" or 3/4" thick)
- One piece of 1" x 2" board (strip furring is cheapest), 8' long
- 30-40 exterior grade screws, 1 3/4" long
- Roughly one liter of dark (black or dark brown) exterior-grade water based stain
- One tube of paintable latex caulk (either for a caulking gun or squeezable tube)
- One piece of black asphalt shingle or metal for roofing (optional)
- 10 Roofing nails if using shingles



## Tools:

- Power Drill (optional but ideal) or screw driver
- Drill bits (if using power drill – screw head drill bit; 1/2" diameter drilling bit (optional); 3/4" drilling bit)
- Hand saw or chop saw
- Paint brush or paint roller
- Tape measure
- Table saw (unless having wood cut at the hardware store)
- Hammer (optional)
- Caulking gun (optional)

## Investment:

- Rough pricing: total < \$45
- Plywood: \$20
- 1x2: \$3
- Paint: \$15
- Screws: \$5

## Time:

- Assembly time if plywood already cut at hardware store: 45 to 90 minutes
- If plywood is not cut: 1 to 1.5 hours

Note: Must be water-based exterior grade stain and to keep it simple just use this for all parts. Stain not paint.

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## Assembly:

1. Head to your local hardware store and purchase the items from the materials list.
2. The hardware store can likely cut the plywood to the required dimensions in steps 3 to 5.
3. Cut the plywood in half, down the middle.
4. With one half, cut the back panel and roof:
  - a. Back: 24" x 30"
  - b. Roof: 24" x 5"
5. With the other, half cut the front (consisting of two panels) and middle panel (chamber partition).
  - a. Front panels: 24" x 18" and 24" x 6"
  - b. Middle panel: 24" x 24"
6. Cut the 1x2" into 24" pieces, this will give 4 pieces.
7. Drill four holes through the wide edge of two of the 1x2" (optional). This provides extra air flow.
8. Roughen one side of the back and both sides of the middle panel using a sharp tool (such as a paint scraper, chisel, or shop knife) to create grooves. Or using a circular saw cut grooves at a depth 1/32" to 1/16" each spaced at 1/2" apart. This will provide texture that the bats will use to hang on.
9. Drill two 3/4" wide holes towards the top of the middle panel (optional but ideal), this will provide passages holes for the bats to move between chambers.
10. Apply two to three coats of water-based stain to all surfaces, allow stain to dry between coats.
11. Apply a bead of caulking to both sides of the wide edge of two of the pieces from step 6 (these should be the two that have the 1/2" holes if step 7 was done) and place on the left and right margins of the back panel (grooved side facing up).
12. Lay the middle panel (grooved side facing up) on top of the two 1x2" from the previous step and attach with screws. Be sure to pre-drill the screw holes to avoid splitting the wood.
13. Apply a bead of caulking to both sides of the wide edge of the two remaining pieces from step 6 and place on along the left and right margins of the middle panel.
14. Lay the top front piece on top of the 1x2"s from previous step and attach with screws. Be sure to pre-drill the screw holes to avoid splitting the wood.
15. Leaving a 1/2" gap from the top piece from the previous step, place the lower front piece on the 1x2"s and attach with screws. Be sure to pre-drill the screw holes to avoid splitting the wood.
16. Stand the bat house upright and apply caulking to the top, then attach the roof with screws.
17. Cover roof with shingles using roofing nails (optional).

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## Bat House Tips

- Bigger (and more chambers) is better
- Bat house is made with bat-friendly materials
- Bat house is dark in colour
- Bat house is facing South (or East/West depending on your region)
- Ideally installed on a house or other structures
- Avoid installing on a tree, predators are bothersome
- Bat house receives a minimum of 8 hours of sun per day
- Bat house is installed 3-6 metres above the ground
- Bat house is within 300 metres of a water source
- Uncluttered location, no under- or overhanging branches, bats need room to swoop in
- No light pollution, bats may hunt near a light source but they will not roost near one

