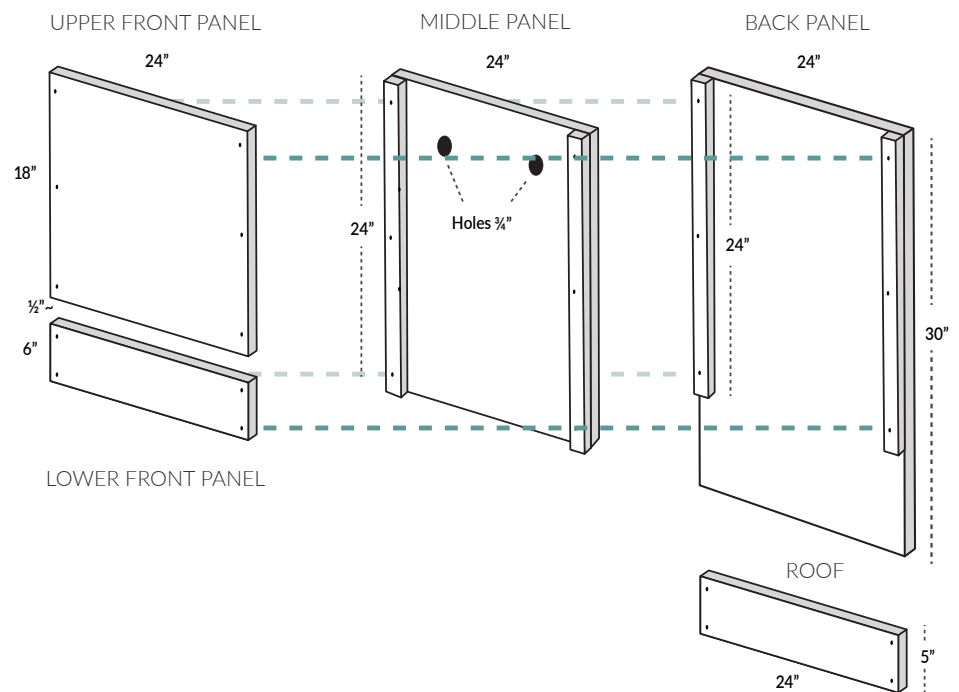


HOW TO BUILD A BAT HOUSE



Materials

- One 4' x 4' sheet of 1/2" thick, untreated, outdoor grade plywood (could also be 5/8" or 3/4" thick)
- One piece of 3/4" x 1 1/2" board (which is what hardware stores call a 1" x 2" board), 8' long
- 30-40 exterior grade screws, 1 3/4" long
- Roughly one litre 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)
- Roofing nails (if using shingles)
- Two hooks or brackets to install the bat house

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 miter 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

For additional information on bats: HelpTheBats.ca | info@cwf-fcf.org

HOW TO BUILD A BAT HOUSE



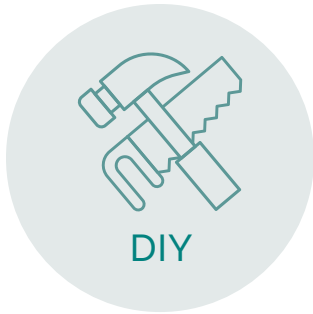
Assembly

- 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:
 - » Back panel: 24" x 30"
 - » Roof: 24" x 5"

*Note: For added durability use a 1" x 6" board for the roof, 24" long.
- 5 | With the other half, cut the front (consisting of two panels) and middle panel (chamber partition).
 - » Front panels: 24" x 18" and 24" x 6"
 - » Middle panel: 24" x 24"
- 6 | Cut the 1" x 2" into four 24" pieces.
- 7 | Roughen one side of the back panel and both sides of the middle panel by 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 $\frac{1}{32}$ " to $\frac{1}{16}$ ", each spaced $\frac{1}{2}$ " apart. This will provide texture that the bats will use to hang on.
- 8 | Drill two $\frac{3}{4}$ " wide holes towards the top of the middle panel (optional but ideal). This will provide passage holes for the bats to move between chambers.
- 9 | Apply a bead of caulking to both sides of the wide edge of two of the pieces from step 6 and place on the left and right margins of the back panel (grooved side facing up).
- 10 | Lay the middle panel on top of the two 1" x 2" pieces from the previous step and attach with screws. Be sure to pre-drill the screw holes to avoid splitting the wood.
- 11 | Apply a bead of caulking to both sides of the wide edge of the two remaining pieces from step 6 and place along the left and right margins of the middle panel.
- 12 | Lay the upper front panel on top of the 1" x 2" pieces from the previous step and attach with screws. Be sure to pre-drill the screw holes to avoid splitting the wood.
- 13 | Leaving a $\frac{1}{2}$ " gap from the upper panel from the previous step, place the lower front panel on the 1" x 2" pieces and attach with screws. Be sure to pre-drill the screw holes to avoid splitting the wood.
- 14 | Stand the bat house upright and apply caulking to the top, and then attach the roof with screws.
- 15 | Apply two to three coats of water-based stain to all exterior surfaces. Allow stain to dry between coats.
- 16 | Cover roof with shingles using roofing nails (optional).
- 17 | Drill four holes in the sides of the back chamber to allow for extra air flow (optional).
- 18 | You'll need to put two hooks or brackets on the bat house to install it. To ensure it is solid, attach the hooks or brackets on the back near each edge, screwing through the plywood into the 1" x 2".

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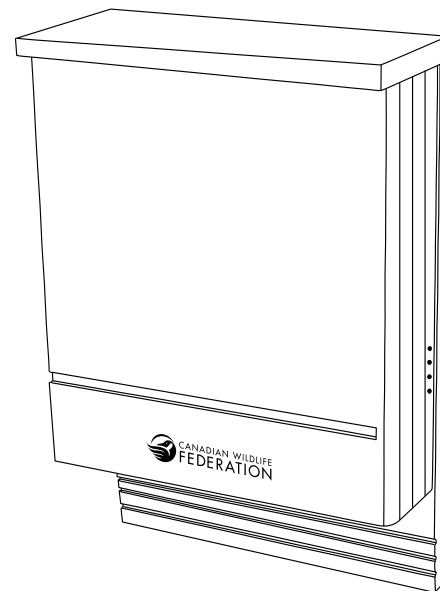
HOW TO BUILD A BAT HOUSE



Bat House Tips

A good bat house should be:

- » Big with multiple chambers.
- » Made with untreated wood and painted with non-toxic (low to no VOC) paint/stain.
- » Dark in colour.
- » Ideally installed on a house or other structure. Avoid installing on a tree – predators are bothersome.
- » Receiving a minimum of eight hours of sun per day, which means generally facing south, and not shaded.
- » Installed three to six metres (10 to 20 feet) above the ground.
- » Ideally within 300 metres of a water source.
- » In an uncluttered location, with no under- or overhanging branches as bats need room to swoop in.
- » In a dark location free from light pollution. Bats may hunt near a light source, but they will not roost near one.



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