

BUILD A FOUR-CHAMBER BAT HOUSE

Materials (makes two houses)

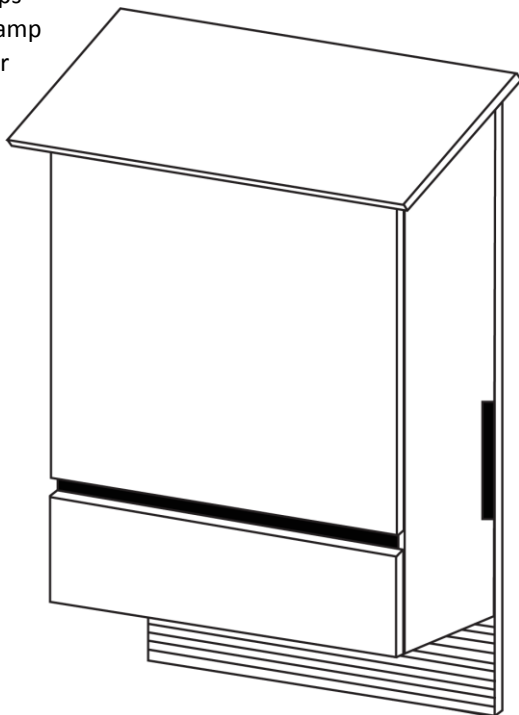
- ½ sheet (4' x 4') ½" AC, BC, or T1-11 (outdoor grade) plywood*
- ½ sheet (4' x 4') ¾" AC or BC (outdoor grade) plywood
- 2 pieces 1" x 6" (¾" x 5½" finished) x 8' pine or cedar
- 1 lb. coated deck or exterior-grade screws, 1½"
- 20-25 coated deck or exterior-grade screws, 1¼"
- 20-25 exterior-grade screws, 1"
- 1 qt. dark, water-based stain, exterior grade
- 1 qt. water-baser primer, exterior grade
- 2 qt. flat water-based paint or stain, exterior grade
- 1 tube paintable latex caulk
- Black asphalt shingles or galvanized metal
- 12-20 roofing nails, ¾"

Recommended tools

- Table saw or circular saw
- Variable-speed reversing drill
- Screwdriver bit for drill
- Tape measure or yardstick
- Caulking gun
- 1½" hold saw or spade bit
- Paintbrushes

Optional tools

- Hammer
- Tinsnips
- Bar clamp
- Sander



*Do not use pressure-treated wood, as this can harm bats and other wildlife.

Construction

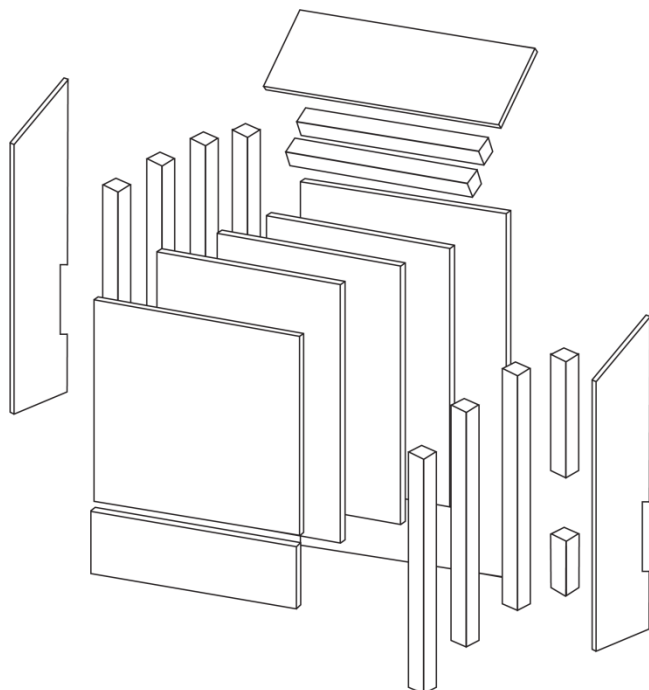
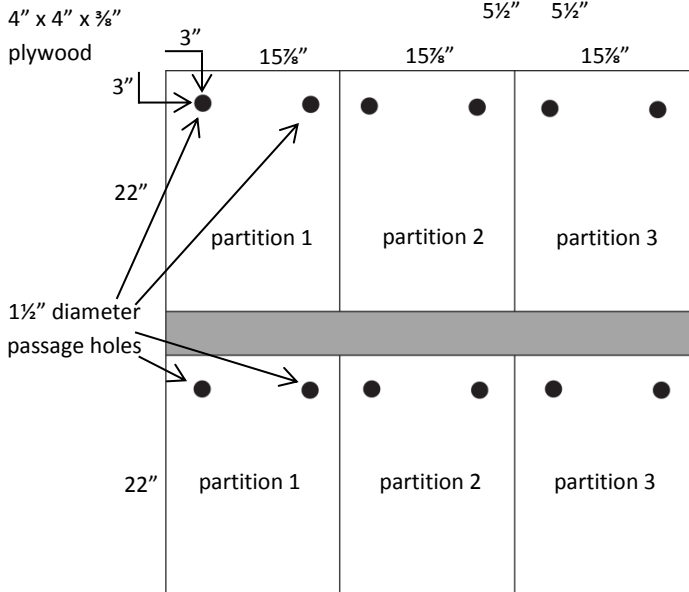
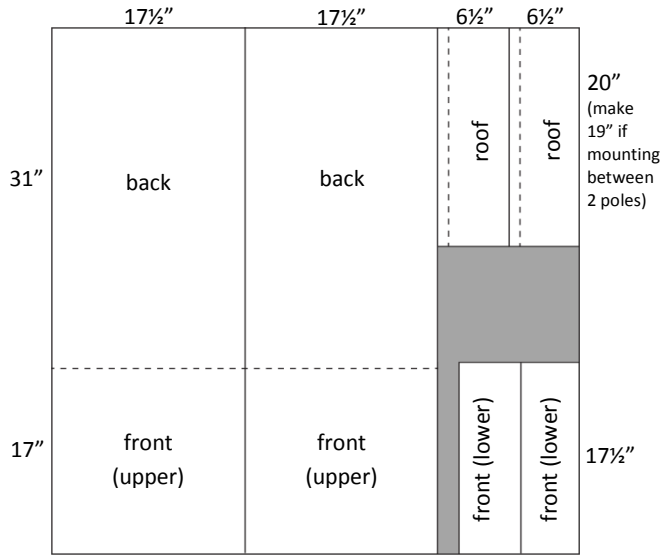
1. Measure, mark, and cut all wood pieces, including passage holes, according to the diagrams on the next page. Passage holes should be 3" in from the top and sides.
2. Roughen interior and landing surfaces by cutting horizontal grooves with a sharp object or saw. Space the grooves roughly ½" to 1" apart and about ¼" deep.
3. Apply 2 coats of dark, water-based stain to the interior surfaces.
4. Attach side pieces to the back, caulking first. Make sure the top angles match. Use the 1½" screws to secure.
5. Attach the 5" and 10" spacers to the inside corners using the 1" screws. This will create roost chamber spacing of about ¾". Do not block the side vents.
6. Place the first roosting partition on the spacers even with the bottom edge of the roof using the 1½" screws.
7. Place the 20" spacers on the partition and screw into the first spacers through the partition using the 1½" screws.
8. Repeat the last 2 steps for the remaining spacers and partitions.
9. Attach the front to the sides, top piece first, by caulking the seams. Sand the top angles so they match, if necessary. Leave ½" vent space between the top and bottom front pieces. A bar clamp may help to keep the pieces in place as they set.
10. Attach roof supports to the top inside of front and back pieces with the 1" screws. Be careful to not let the screws protrude into the roosting chambers; this could injure bats that use the house.
11. Caulk all of the top surfaces using latex caulk, sanding first if necessary to make sure all of the sides are level.
12. Attach the roof to the sides and roof support with the 1¼" screws. Caulk around the roof and side joints to further guard against leaks and drafts. Don't let the screws protrude into the roosting chambers; this could injure bats that use the house.
13. Apply 3 coats of dark (i.e. black) exterior grade, water-based paint or stain to the exterior surfaces.
14. Cover the roof with roof shingles or galvanized metal for added protection.

For tips on installing a bat house, attracting bats, and a list of bat house FAQs, please see Mass.gov/bathouses.

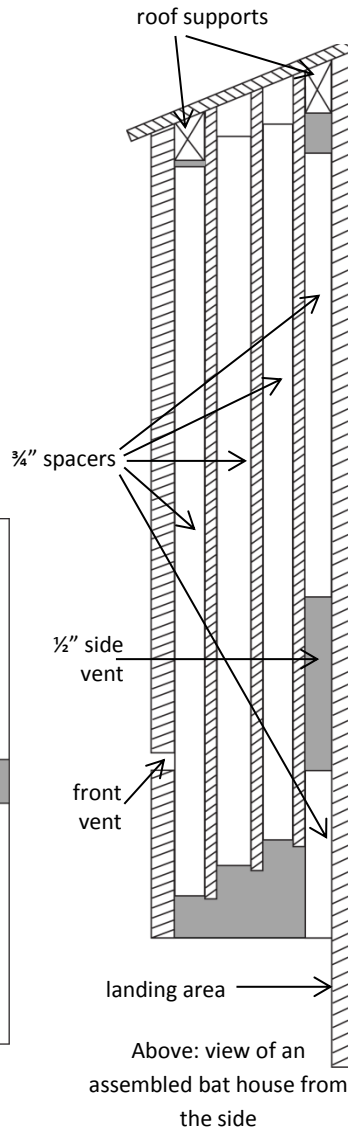


This page shows the dimensions to cut the materials to for each piece of the bat house. Note that the gray portions are extra materials and the dotted lines indicate 25° bevel.

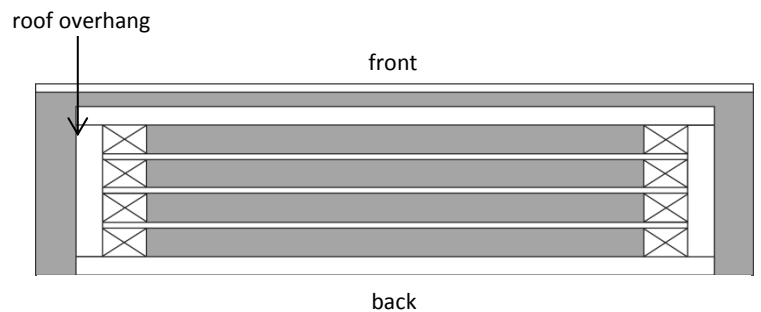
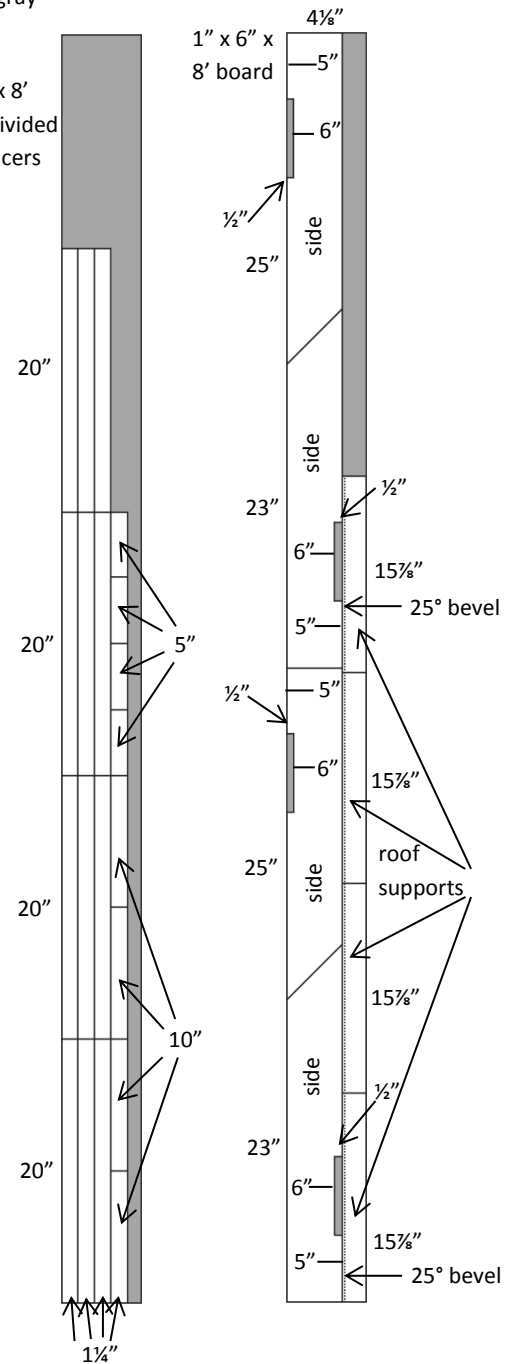
4" x 4" x 1/2" plywood



1" x 6" x 8' board divided into spacers



Above: view of an assembled bat house from the side



Left: assembly diagram of a four-chamber bat house

Above: view of an assembled bat house from the bottom