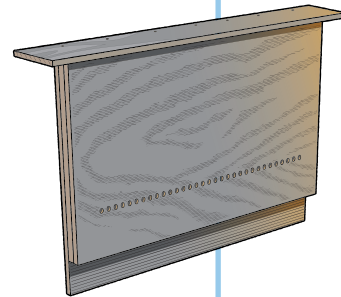


BAT HOUSE

This simple one-chamber house will give those beneficial bug-eaters a much-needed roost.
Here's how to build a simple bat house.

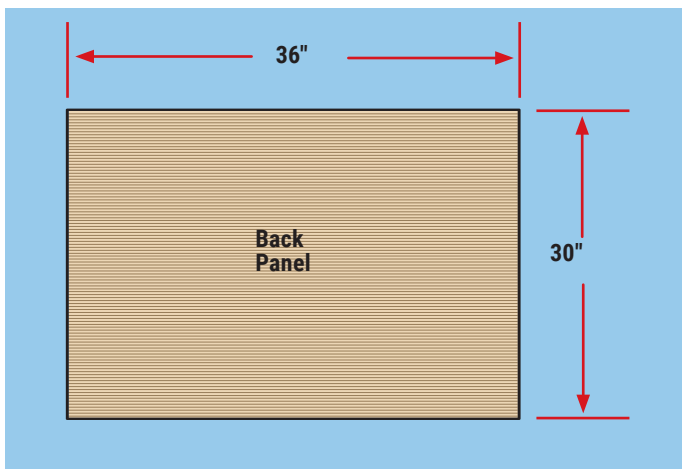
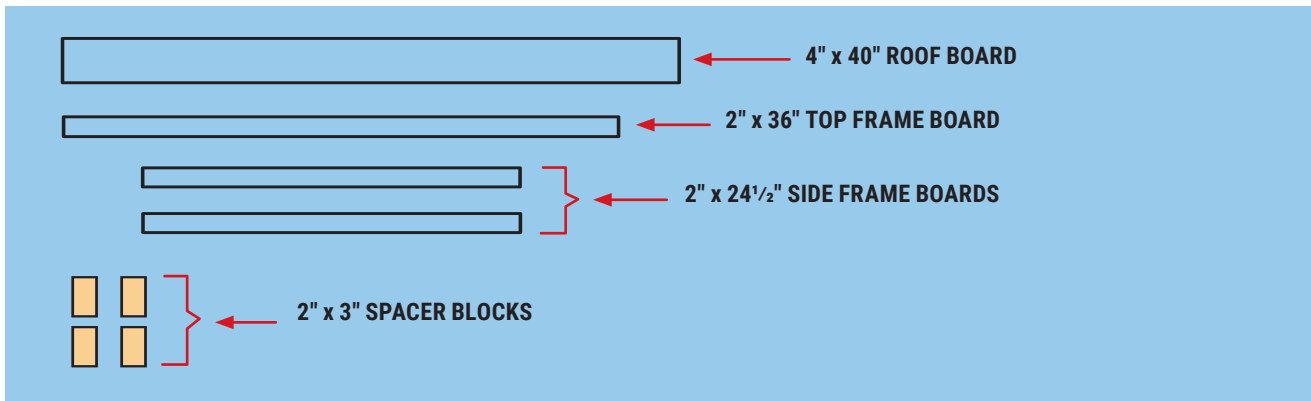
Materials and Tools

- ▶ ½-by-30-by-36-inch sheet of exterior plywood (Don't use pressure-treated plywood; it's toxic to bats.)
- ▶ ½-by-26-by-36-inch sheet of exterior plywood
- ▶ 1-by-4-by-40-inch board for the roof
- ▶ Two 1-by-2-by-24½-inch boards for interior frame
- ▶ 1-by-2-by-36-inch board for interior frame
- ▶ Four 1-by-2-by-3-inch wood spacer blocks
- ▶ One quart of dark exterior water-based stain
- ▶ 53 1-inch exterior wood screws
- ▶ Seven 1 ⅝-inch exterior wood screws for the roof
- ▶ Crosscut saw
- ▶ Pocketknife (**To use a pocketknife you must first earn the Whittling Adventure.**)
- ▶ Paintbrushes
- ▶ Drill (**Only adults may use a power drill.**)
- ▶ ½-inch drill bit for vent holes
- ▶ ⅜-inch drill bit for screw pilot holes
- ▶ Countersink bit so screws are flush
- ▶ Phillips screwdriving bit
- ▶ Two squeeze tubes of exterior, paintable caulking
- ▶ One quart of exterior water-based primer
- ▶ Two quarts of exterior black or gray water-based paint



Instructions

1. Cut out all the bat house boards.
2. Use your pocketknife to scribe shallow grooves (less than $\frac{1}{16}$ inch deep) across the inside

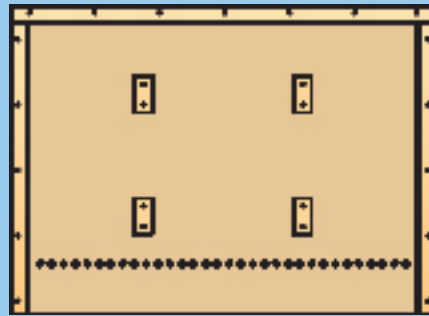


of the back sheet of plywood, about $\frac{1}{4}$ - to $\frac{1}{2}$ -inch apart. The grooves help bats grip the plywood.

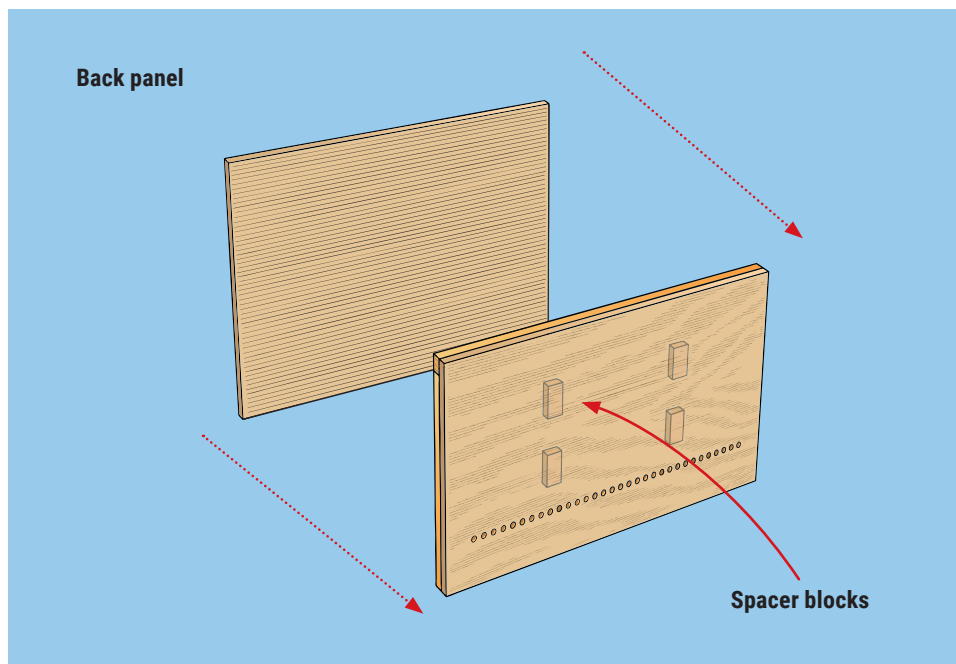
3. Run a bead of caulk onto the contact surfaces of the interior frame and spacer blocks, and then screw them in place on the back of the front panel. All surfaces that are in contact with each other should be caulked before screwing them together. Caulking acts as a gasket, sealing out water.



4. Have an adult drill $\frac{1}{2}$ -inch vent holes in the front panel. In cold climates, you need only three or four vent holes.
5. Stain the interior of the bat house, including the plywood, frame, and spacer blocks. Allow the stain to dry.
6. Caulk and screw the back panel to the frame and spacer blocks. Be sure to have an adult drill pilot holes to avoid splitting.



**Back view of front panel, showing vent holes.
Frame and spacers are caulked and screwed in place.**



7. Caulk and screw on the roof. A drop of caulking in each screw pilot hole will help waterproof the bat house and keep the inside dry.

8. Paint the exterior with primer, then apply two coats of paint. Use black paint for colder climates and gray paint for warmer climates. Attach the bat house to a building or other structure. Face it south or east, about 10 to 12 feet off the ground.

