

Horizontal Insect Hotel Design



You will need:

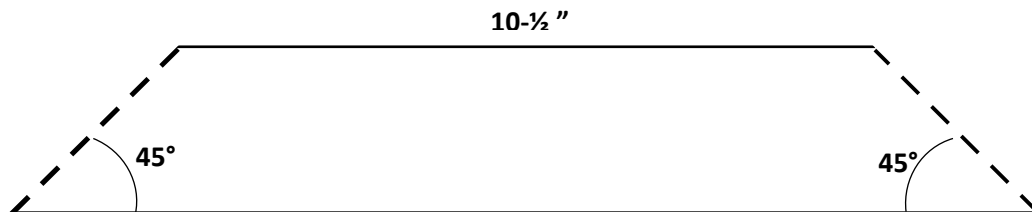
- 1 in. x 6 in. x 6 ft. board
- 1 in. x 8 in. x 6 ft. board
- 4 in. x 4 in. x 4 ft. board (only if placing in a garden)
- $\frac{3}{4}$ in. thick piece of plywood
- Galvanized screws/nails (1- $\frac{1}{4}$ ")
- Filler material cut to 5- $\frac{1}{2}$ in. lengths (bamboo, hollow stems, sawn logs, sticks, etc.)
- Drill bits (if drilling holes in wood blocks or logs) – $\frac{3}{32}$ ", $\frac{3}{8}$ ", $\frac{5}{16}$ "
- Miter saw
- Wood glue (recommended)
- Nail gun (recommended)
- Insect friendly paint/stain (optional)

Instructions

Frame:

Step 1. Cut a 45° angle on the 1 in. x 6 in. x 6 ft. board.

Step 2. Measure and mark 10-½" (267mm) from the top of the angle (the shorter side). Cut another 45° angle. **This should be opposite of the first (see below).**

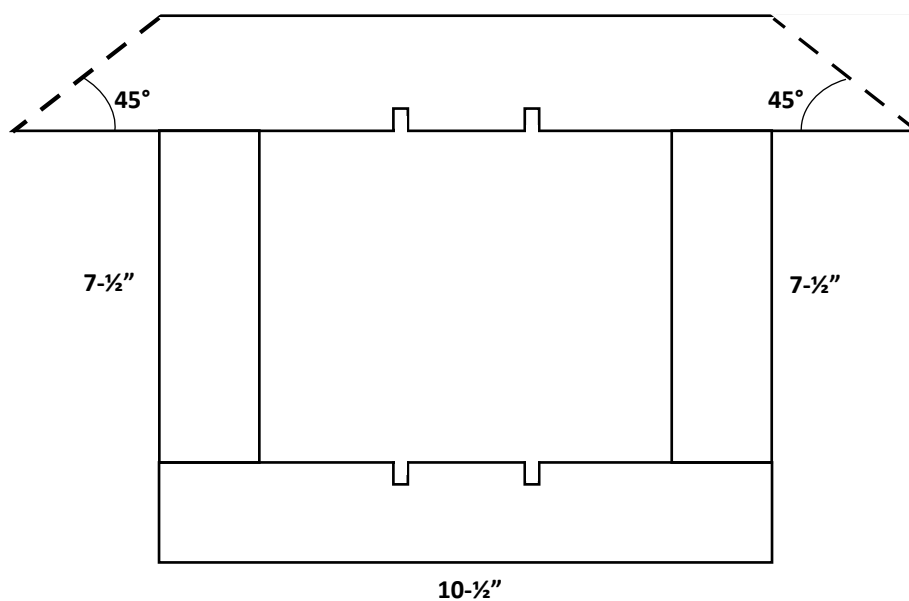


Step 3. Cut the following flat-edged pieces from the 1 in. x 6 in. x 6 ft. board:

- One 10-½" piece
- Two 7-½" pieces

Step 4 (optional). Groove both 10-½" pieces for ply-wood inserts. **Follow the diagram below to make sure grooves are on the correct side.** Grooves can be spaced as desired, though keep in mind the size of material used for the interior.

Step 5. We recommend wood or gorilla glue to secure the pieces before nailing/screwing together. Line the edges so that the two 7-½" pieces are flush against the edge of the 10-½" piece as shown below. **If you grooved the pieces, make sure the grooves face inward.** Nail or screw into place.



Roof:

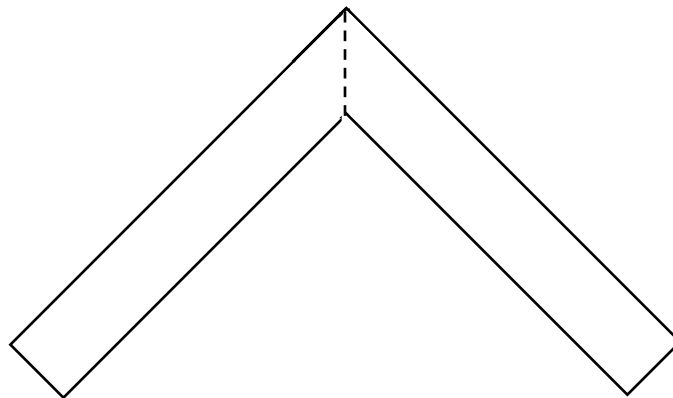
Step 1. Cut a 45° angle on the 1 in. x 8 in. x 6 ft. board.

Step 2. Measure approximately 10" from the long edge and cut a straight edge.



Step 3. Repeat steps 1 & 2.

Step 4. Fix together both boards at their 45° angles to create a roof for the insect hotel. It is recommended to use a thin line of wood glue or gorilla glue to add security to the pieces before screwing/nailing them together. Make sure the edges are flush with one another.



Plywood Backing:

Step 1. Place the assembled insect hotel onto the plywood board and trace its outline. We recommend leaving a sizeable buffer around the vertical sides in order to have extra space to nail/screw through the plywood to a post or wall. Cut out the outline.

Step 2. We recommend using wood or gorilla glue to add stability before nailing/screwing on the plywood cutout to the back of the insect hotel. H

Placement:

We recommend mounting to the side of a shed or garage or atop a post near a garden. If mounting on a post, use a 4 in. x 4 in. x 4ft. post. Nail or screw a 10-½” plank (you can use the leftover wood from earlier) on to the top and attach the insect hotel to this post. **It is best to place the insect hotel before filling it with nesting material.**

Filler Material:

Different types of material will attract different species. Some examples are given in the table below. If drilling into wood, place the holes about 1 in. apart from one another and approximately 6 in. deep. Feel free to fill in the roof compartment as well!

Building Item	Possible visitor(s)
sawn logs or wooden blocks with pre-drilled holes	solitary bees, such as mason bees and leaf-cutter bees
bamboo or reed stems	solitary bees, such as mason bees and leaf-cutter bees; wasps, such as thread-waist wasps
dry leaves	centipedes, beetles, harvestmen
sticks	ladybird beetles
strips of bark	beetles, woodlice, centipedes, millipedes, spiders



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