

## *Vertical Insect Hotel Design*



### You will need:

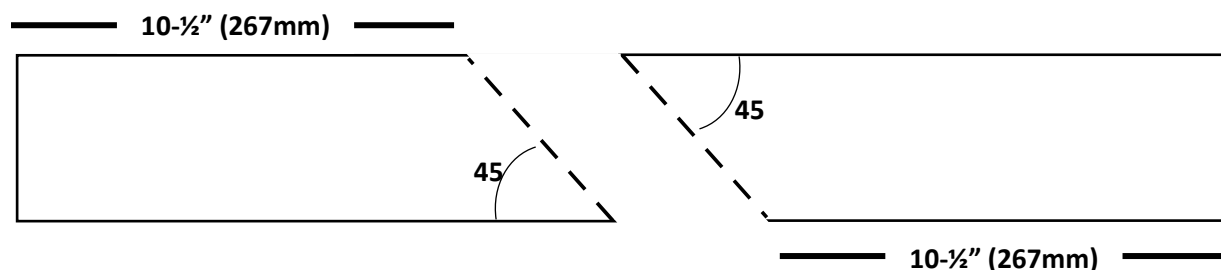
- 1 in. x 6 in. x 6 ft. board (x1)
- 1 in. x 8 in. x 6 ft. board (x1)
- 4 in. x 4 in. x 4 ft. post (only if placing in a garden)
- $\frac{3}{4}$  in. piece of plywood
- Galvanized 1" screws
- Screw driver or drill
- Ruler, protractor, and pencil
- Filler material cut to 5- $\frac{3}{4}$  in. lengths (bamboo, sawn logs, sticks, etc.)
- Drill bits (for drilling holes in wood blocks or logs) –  $\frac{3}{32}$ ",  $\frac{3}{8}$ ",  $\frac{5}{16}$ "
- Wood glue (recommended)
- Insect friendly paint/stain (optional)

## Instructions

### Frame:

**Step 1.** Measure and mark 10-½" (267mm) from the edge of the 1 in. x 6 in. x 6 ft. board. From the mark, cut a 45° angle.

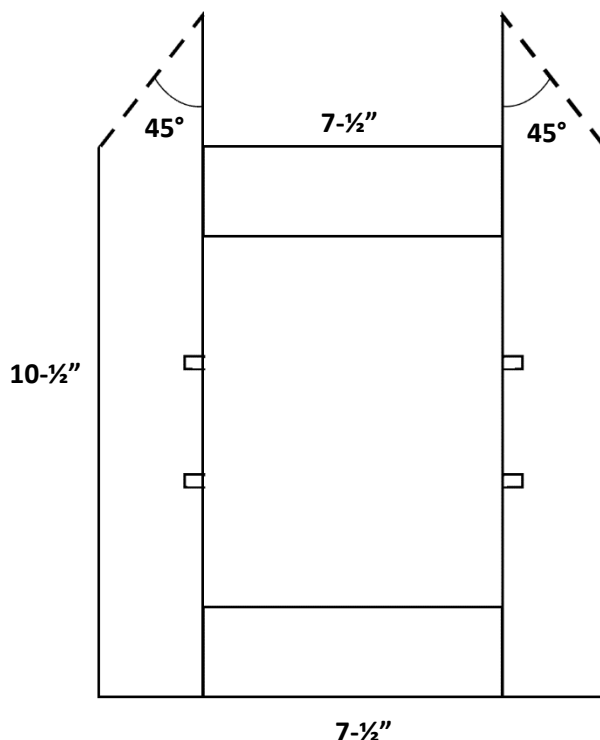
**Step 2.** Flip the remaining piece of the 1 in. x 6 in. x 6 ft. board and measure another 10-½" (267mm) **from the top of the angle** (the shorter side). Cut a straight 90° angle.



**Step 3.** Cut two 7-½" flat-edged pieces from the remaining 1 in. x 6 in. x 6 ft. board:

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



**Roof:**

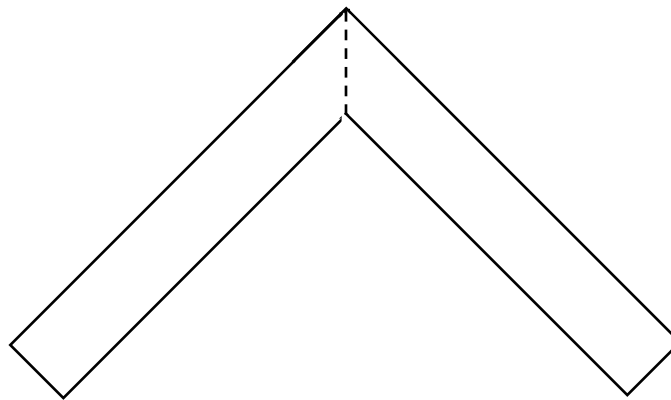
**Step 1.** Cut a 45° angle on the 1 in. x 8 in. x 6 ft. board.

**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.

### *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 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

