

Construct a Bee Hotel

Materials:

Hammer	Sandpaper	Wood glue
Nails	Miter saw	Bar clamp
1/2-in x 1/2-in x 8-ft pine quarter round molding		
3/8-in x 6-in x 3-ft square edge pine board		
3/4-in x 7.25-in x 8-ft square edge pine board		
Drill press (optional)		



Step 2: Construct the roof

Glue the two 45-degree angle sides together and clamp. Once dry, attach the quarter round molding to the inside of the roof using wood glue and nails.

Step 3: Attach the sides to the bottom

Start by gluing the sides to the bottom and clamping it while it dries. Be sure the angled edges face up with the inner side being taller than the outer side. Reinforce by nailing along the long bottom edge of each side.

Step 4a: Predrill the roof (optional)

Use the provided template to predrill the holes in the roof for nails. Cut out the template along the solid lines and fold along the center dotted line. Lay your template on your roof. Use a pencil to mark each of the six holes on the roof. Before drilling, place your roof on your sides- the nails should go straight through the roof and into each side piece. If your roof holes do not line up with your sides, remark appropriately.

Use a drill press to create holes ~1/4-inch deep. Do not drill all the way through- these holes are simply to help you nail straight down.

Step 4b: Attach the roof to the sides

Position the roof so the back is flush with the walls. Glue the roof to the sides. Then, hammer nails straight down so they pass through both the roof and the sides. Use three nails on each side.

Step 1: Cut out the wood pieces and sand

Use the templates provided. You will need:

- Roof (2), sides (2), and bottom (1) from 3/4-in x 7.25-in x 8-ft board
- Back (1) from 3/8-in x 6-in x 3-ft board
- 6-in long piece of quarter round molding (1)

After cutting out your side and roof pieces from the pine board, a 45° cut needs to be made along one long edge of the piece.

The pine boards will provide enough wood to make four bee hotels.



Step 5: Attach the back

The side you have chosen to be the back should be completely flat, with the roof sitting flush with the sides. This will keep your bee hotel better insulated against rain and cold. Use wood glue to attach the back, then reinforce using nails.



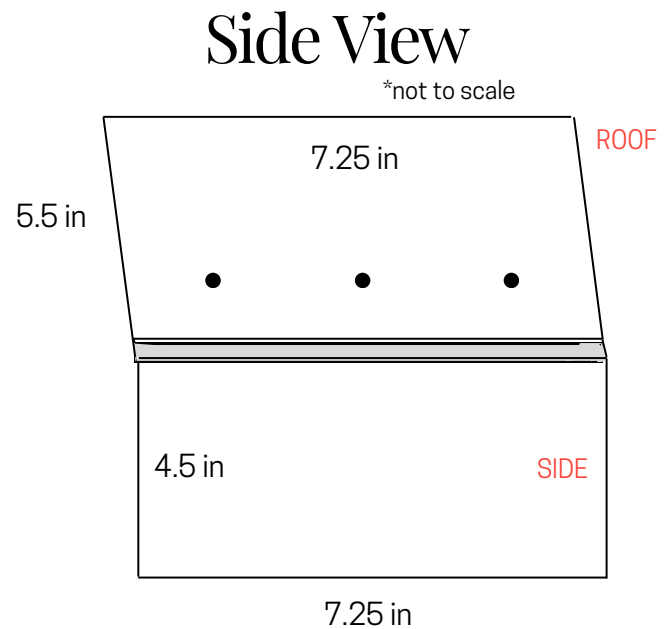
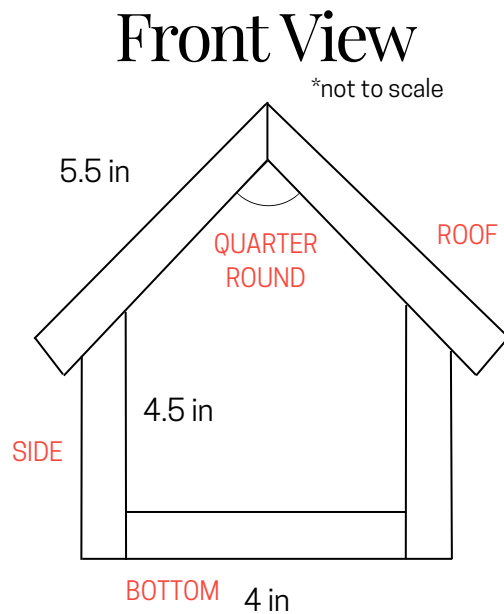
Step 6: Fill with nesting material

After glue has completely dried, place hollow stems or drilled wood blocks in your bee hotel. Nesting material should be at least 6-in long. We suggest packing your nesting material tightly so stems and wood pieces do not shift. Use cavities with varying diameters to cater to a greater number of bee species. See our handout titled "Managing Your Bee Hotel" for information on bee hotel maintenance.

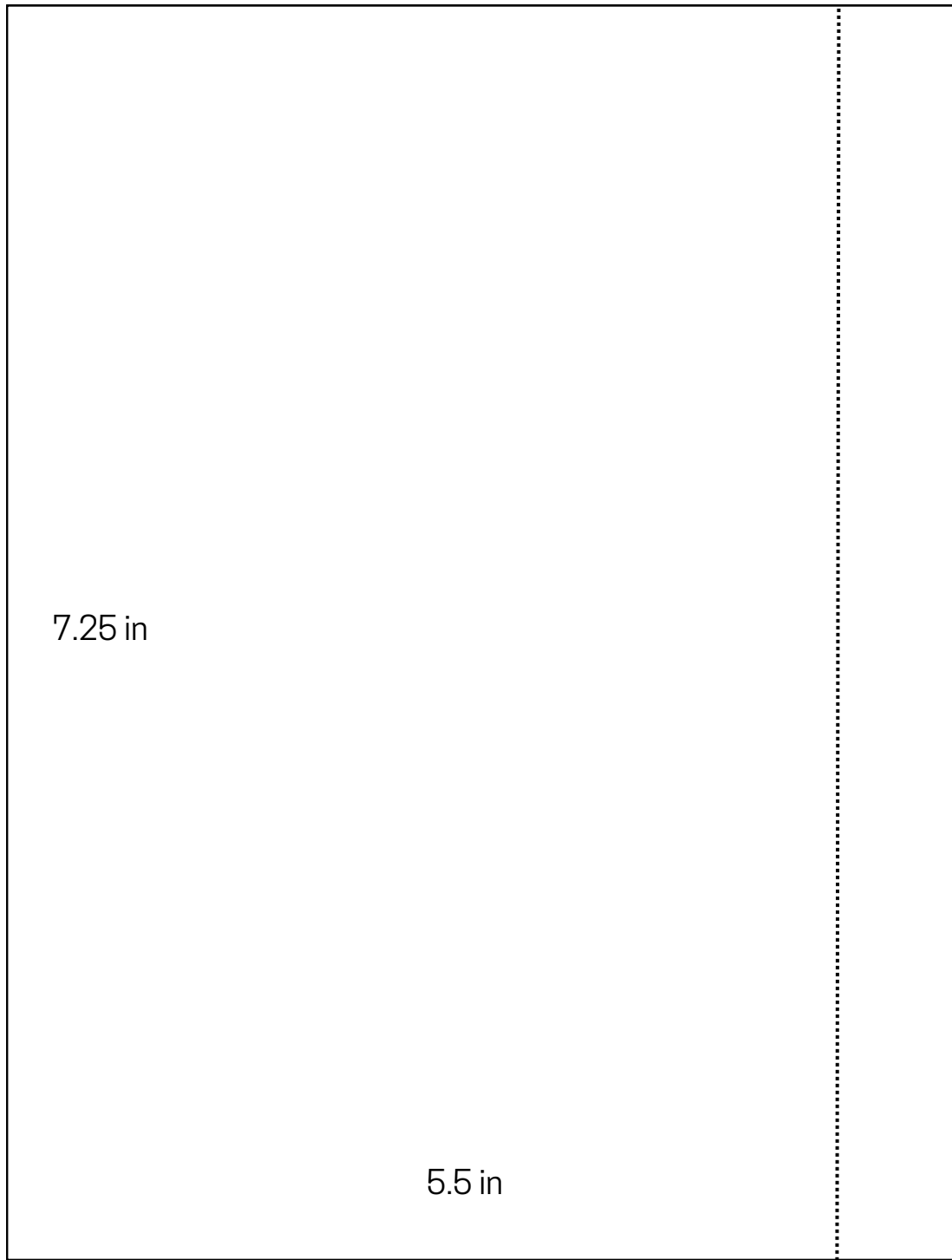
Step 7: Stay in touch!

We want to know how your bee hotel is doing! Share updates of your bee hotel and the bees that nest in it on social media and tag us @PSUPollinators on Instagram, Facebook, and Twitter.

For questions, email Heather Frantz at hud192@psu.edu.

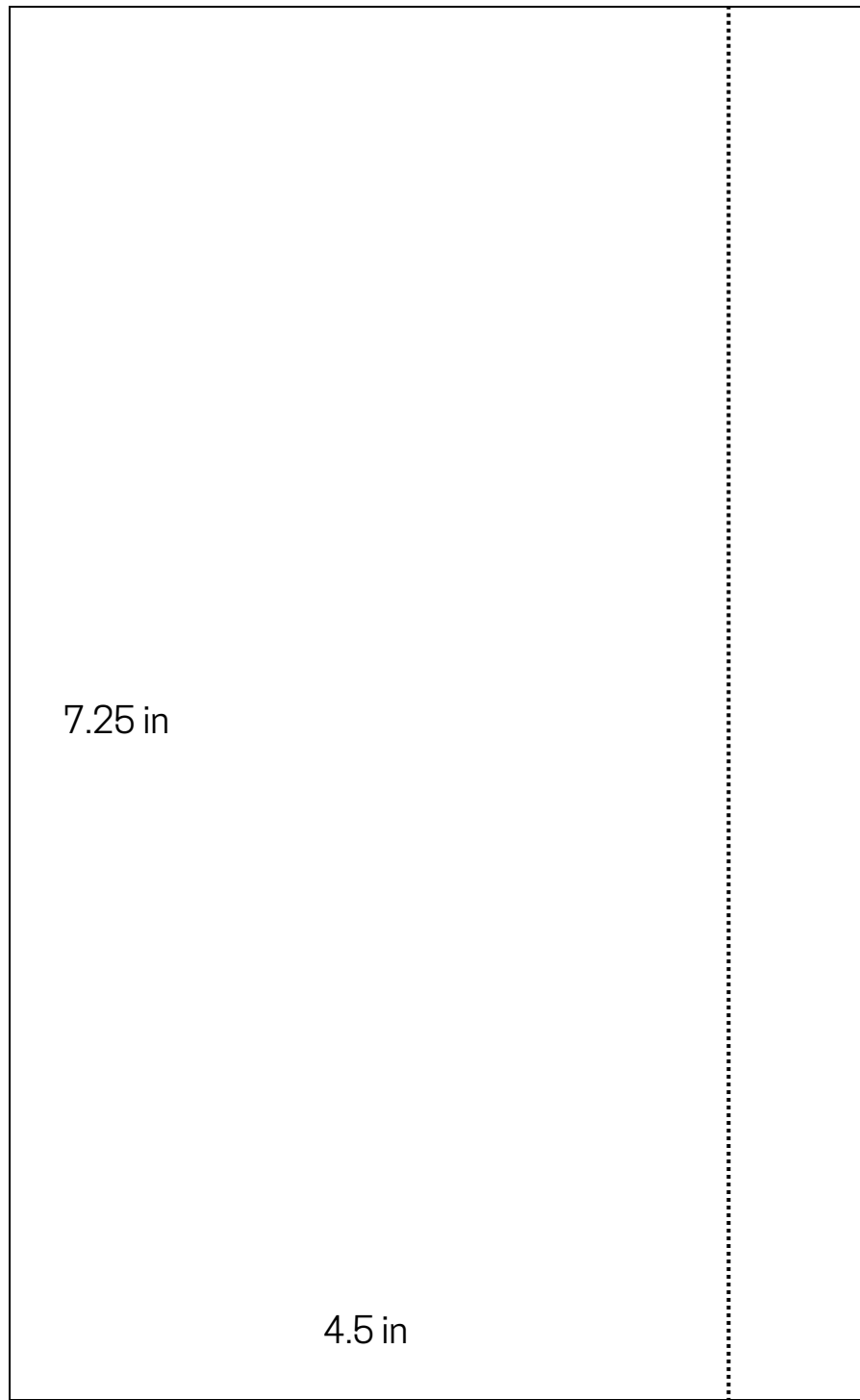


Roof Template



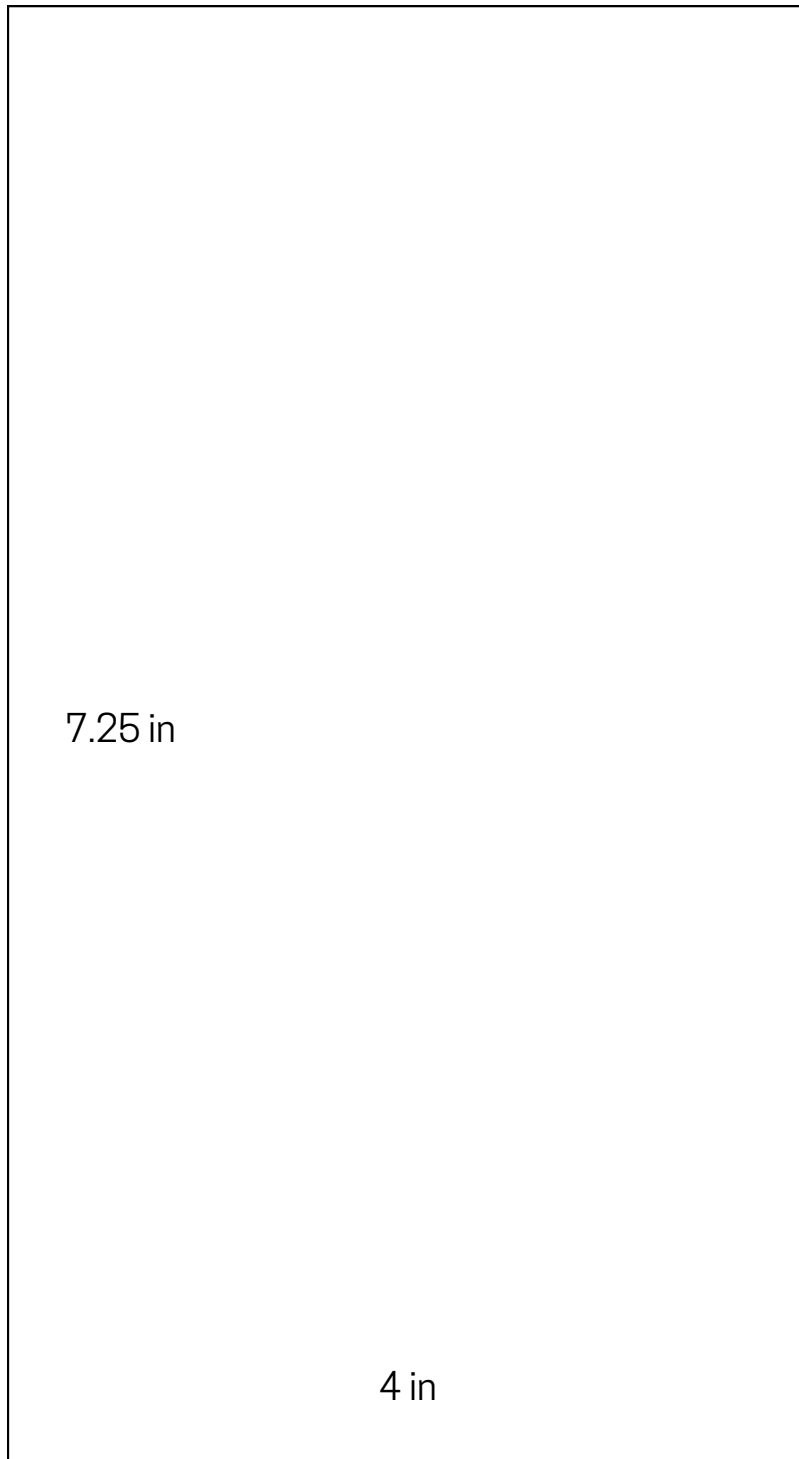
*45° angle

Side Template

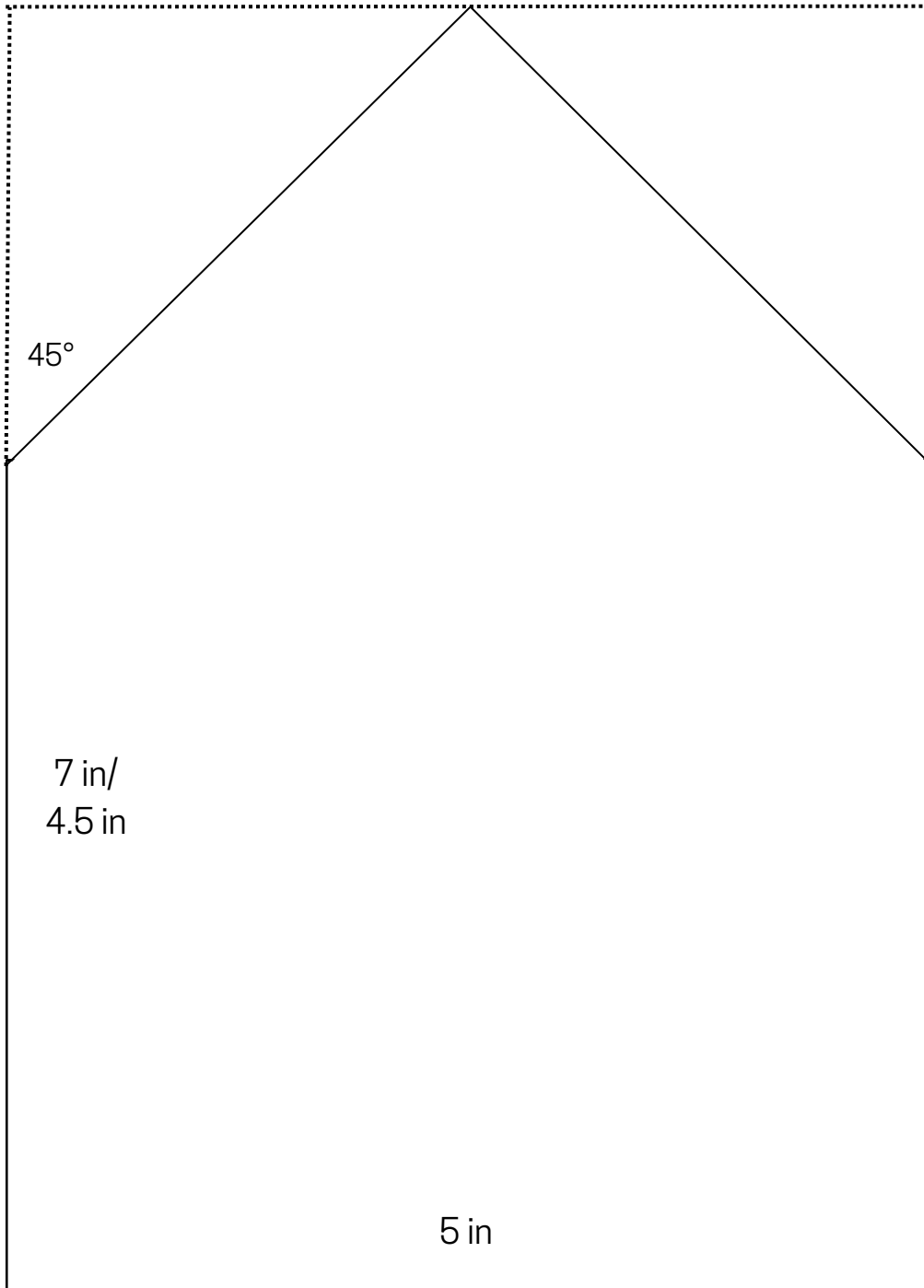


*45° angle

Bottom Template



Back Template



Template for Roof Nails

Cut out this template on the solid lines and fold in half along the middle dotted line. Place on finished roof and mark holes.

Optional: predrill to make nailing easier

