

# Betterbee®

Beekeepers Serving Beekeepers

## BeeMax® Nuc Assembly Instructions

### Tools:

- 1 ¼" (32mm) deep hole saw
- 1 ⅜" (35mm) deep hole saw
- Self-ejecting hole saw arbor (not required, but highly recommended)
- Stapler (we use pneumatic upholstery 22 gauge 10mm crown x 16mm [⅜" x ⅝"] staples)
- Cordless drill
- Hot glue gun
- 17/64" (7mm?) drill bit
- Entrance pipe tool (provided)
- Spacer block for hand holds (provided)
- Air nozzle (or brush)

### Materials:

- Naked nuc box
- Entrance shim
- Entrance pipe
- #8 hardware cloth squares (2)
- Hot glue sticks
- Staples to fit your stapler
- Entrance portal
- Portal hardware
  - 2 ½" carriage bolt
  - Fender washer
  - Wing nut
- 1 ⅜" (35mm) red plug

### Assembly Sequence:

1. Remove lids and place nuc boxes on work surface, standing on end with bottom towards you. (We put paper down on the floor and place the nucs in rows on it for the first several steps.)
2. Assemble the 1 ⅜" (35mm) hole saw, arbor, and drill. Using a plywood entrance shim and the hand hold spacer block held above the shim as a location guide, drill the upper (vent) hole at a slight upward angle to prevent water infiltration.
3. Flip nuc over so that opposite end is up. Repeat step 2.
4. Assemble 1 ¼" hole saw, arbor, and drill. Place an entrance shim on each nuc. Using the individual shim on each nuc as your guide, as well as the hand hold spacer block, then drill the entrance. Make certain that the entrance is angled upward relative to the nuc.



5. Set shims to one side of the nuc and use an air nozzle to blow drilling debris of from nuc ends.

6. Heat glue gun. Distribute an entrance pipe to each nuc. Using entrance pipe tool, apply glue to circumference of pipe. Align angle of pipe to the corresponding angle of the drilled hole and insert the pipe into entrance hole, making sure not to push the pipe through past the inside rim of the hole. Allow a moment for glue to begin to set before removing tool. Apply more glue underneath the footprint of the plywood entrance shim and immediately place shim into place and press into glue.



7. Assemble 17/64" drill bit and drill. Using plywood shim provided with predrilled hardware hole as a guide, drill hardware hole in affixed entrance shims.



8. Move nucs to an elevated work station, work bench or table, again placed on end, but with top towards you, entrance end down. Blow out insides of nucs to remove drilling debris.

9. Place 1 square of #8 hardware cloth inside each nuc. Staple hardware cloth in place over the vent hole. One staple in each corner is usually adequate. Apply hot glue to perimeter of screen.



10. Making sure glue is set, flip nucs over. Blow out inside, repeat step 9.

11. While nucs are still on the table, distribute entrance portal and corresponding hardware. Apply portals by inserting 2 1/2" bolt from the inside, placing the portal on, followed by the washer, and then the wing nut.



12. Place a red vent plug in each nuc and return the lid as completed nucs are place on a pallet.