

# Betterbee®

Beekeepers Serving Beekeepers

## Beginner Kit and Increase Kit Assembly Instructions

### COMPONENTS:

- 1 Outer Cover
- 1 Wooden Inner Cover
- 1 Plastic Queen Excluder
- 2 Hive Bodies with 20 Frames
- 2 Medium Supers with 20 Frames
- 1 Nail Kit
- 1 Reversible Bottom Board with Entrance Reducer
- 1 BeeMax Hive Top Feeder with drown guard (not included with increase kit)
- 1 Varroa Screen with Monitoring Tray and Entrance Closure (not included with increase kit)
- 1 Hard Plastic Helmet (not included with increase kit)
- 1 Round Tie-down Veil (not included with increase kit)
- 1 Ventilated Leather Gloves (Specify Size)- (not included with increase kit)
- 1 Stainless Steel Smoker with Heat Shield (not included with increase kit)
- 1 Hive Tool (10 inches)- (not included with increase kit)
- 1 Beginning Beekeeping Book (not included with increase kit)

(Note: You will also need a hammer and wood glue, which are **not** included in your beginner/ increase kit. Optionally, you may want a pipe clamp)

Assembling bee hives is not difficult but it does require attention to detail. It is important to have hives assembled and a location to put the hives selected before the bees arrive. Bees are not included in the kit.

**Step One:** Lay out hive pieces and do a trial assembly before nailing.

- Each super consists of two long sides and 2 short ends.
- Make certain that all the handles are on the outside and facing the same direction.
- We suggest using a waterproof glue such as Titebond II or Gorilla glue in addition to nailing the boxes.

**Step Two:** There are two long sides and two short ends for each super and hive body. Make sure that all of your handles are facing up and out.

**Step Three:** Dry fit all the pieces together to make a box. Be sure they fit together tightly and the handles are on the outside of the box. (In case you have not figured out, the first lesson we learned when we got our advanced degree from the School of Hard Knocks is that it is difficult to lift a box when the hand holes are on the inside of the boxes!)

**Step Four:** Apply glue to joint surfaces as you assemble. Press corners tightly together and use a square to be sure corners are square before nailing.

**Step Five (optional):** Apply one clamp on each side of the hive box toward the top. This will hold the box in place for nailing.

- The clamps allow you to nail the box together more easily by holding the pieces in place as you nail them. Without the clamp, the force you put on the nail when you drive it into the frame may cause the other unsecured joints to fall apart.

**Step Six:** Once the corner joints are glued and assembled use one 7D nail in each hole and nail one side at a time. Keep checking to be sure that corners are square as you nail.

- Use a small 1-1/4 inch nail to nail the thin top portion of each end to the side. Wipe excess glue from the corners. You could also use a pneumatic stapler here.
- You can also use 6D nails. Pneumatic nailers can be used if you are careful.

**Step Seven:** Paint hives with two coats of exterior latex paint. Feel free to be creative with some patterns, they help the bees identify their hive when several are placed in the same area.

- We suggest dark colors for bee hives in the north and light colors in the south. It is also recommended that you only paint the outside parts of the hive, that is those exposed to the weather.
- Be sure to let hives air for at least a week prior to installing bees.

**Assembling Frames:** Plastic Pierco frames require no assembly. Wooden frames need to be assembled. For best results we recommend both gluing and nailing frames. Wedge top frames are used with crimp wired foundation with hooks. Grooved top frames are used with Pierco plastic foundation and with Duragilt foundation as well as crimp-wired foundation without hooks. SEE ATTACHED WOODEN FRAME INSTRUCTIONS.

**Feeding instructions: (feeder not included with increase kit)**

**BeeMax Hive Top Feeder:** Be sure that the clear L-shaped plastic divider is inserted into the slot of the hive top feeder. Then place the feeder on top of the hive and fill it with sugar syrup. Cover the feeder with the inner and outer covers. Make sure that bees cannot enter through any notches in the inner cover. If they can access the feed through the inner cover, remove it and store it away from the hive until you are done feeding.

- Never feed while a honey flow is on unless you want a syrup harvest instead of a honey harvest.
- We also suggest painting the outside of this feeder with two coats of exterior latex paint.
- We have heard of ants damaging the feeders if they are not painted.
- Leave the feeder on all winter to increase top insulation.

**Sugar Syrup:** For fall feeding, add enough water to 24 lbs. of sugar to make 3 gallons. For spring feeding, add enough water to 18lbs. of sugar to make 3 gallons.

- Mixture should be 67% solids by weight for fall feeding and 75% by weight for spring feeding.
- Alternative way of thinking of the mixture: Feed 1:1 sugar syrup in spring. This is weight of sugar to weight of water. A pint is a pound, so for 4 pound bag of sugar, add 4 pints or 2 quarts. If feeding in fall, use 2 parts sugar to 1 part water so the bees have thick syrup ready for winter.
- For a 4 pound bag of sugar, you add 2 pints (one quart of water). This will require you to heat the syrup to make the sugar dissolve.