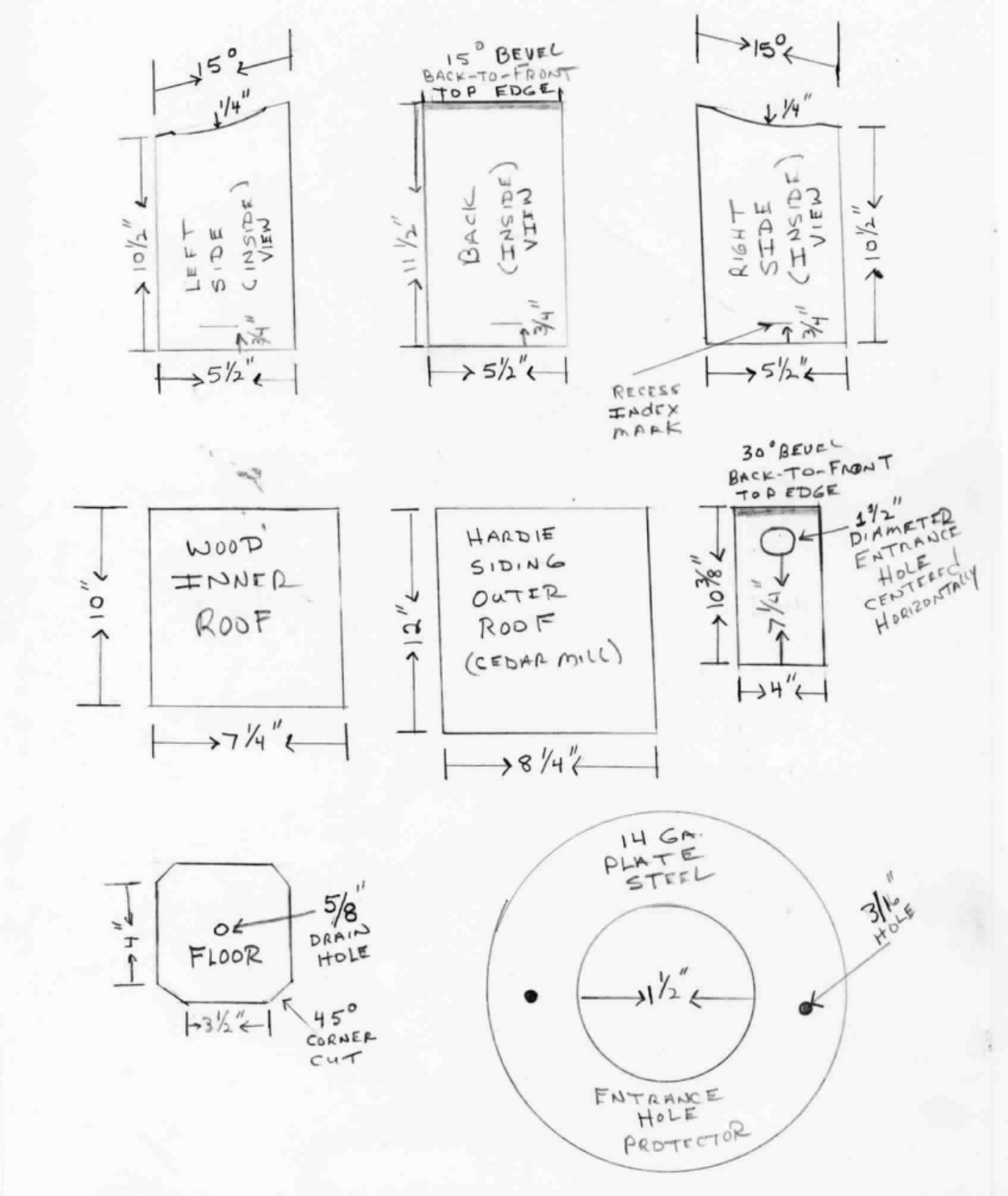
Bluebird Nest Box Plans (wood) - Version 1.0

Materials

Note: #1 do not use **TREATED LUMBER**
#2 white exteriors will reduce nest box internal temperatures by 5-10 degrees Fahrenheit

- 1 X 6 (3/4" thick) board
- 1 X 8 (3/4" thick) board
- 8 1/4" wide primed Hardie Cedar Mill cement fiber siding
- 1 ½" inside diameter X 3" outside diameter 14 ga. plate steel bushing
- #6 5/8" pan head screws
- #7 1 5/8" coated wood screws
- 1 ¼" galvanized joist hanger nails (for door latch)
- exterior wood filler
- weatherproof wood glue
- polyurethane exterior grade construction adhesive
- exterior grade paint or oil-based wood preservative (see Note #2 above)
- exterior grade spray primer paint
- exterior grade spray paint – color to complement the exterior finish to be used

Nest Box Parts Drawing



Parts Preparation

Note: Wear proper safety equipment at all times when engaged in parts preparation and assembly. When cutting cement fiber materials, be sure to wear an approved respirator and follow the manufacturers instructions for working with this material.

1. Cut the sides from a 1 X 6 board per the parts diagram. The top of the each side will have a 15- degree back-to-front slope. Cut a vent in the centers of the tops of each side approximately ¼" deep. A curved vent is more decorative. Mark the inside of each side with an index mark ¾" from the bottoms. These index marks will serve as guides when attaching the floor. The ¾" recess of the floor from the bottom will prevent "drip siphoning" when it rains.

2. Cut the back from a 1 X 6 board per the parts diagram. The top of the back will have a 15-degree back-to-front slope. Mark the inside of the back with an index mark ¾" from the bottom. This index mark will serve as a guide when attaching the floor.

3. Cut the floor from a 1 X 6 board per the parts diagram. Use 45-degree corner cuts and a centered 5/8" hole to provide drainage.

4. Cut the door from a 1 X 6 board per the parts diagram. Drill a 1 ½" diameter entrance hole centered in the door. Make 5-8 shallow parallel horizontal saw cuts on the inside of the door beneath the entrance hole to provide a "ladder" for the nestlings. Cut a 30-degree upward bevel at the top of the door to provide aerodynamic airflow when breezes are present.

5. Cut the wood inner roof from a 1 X 8 board per the parts diagram.

6. Cut the Hardie siding outer roof per the parts diagram. Be sure to follow the manufacturers instructions regarding working with this material.

7. Drill two 3/16" holes in the metal entrance protector per the parts diagram.

Assembly Instructions

1. Attach the sides to the back so that the recess guide marks are on the inside of the nest box. Use a good quality weatherproof glue and #7 1 5/8" coated wood screws to attach the sides to the back.

2. Attach the floor. Align the bottom of the floor with the recess guide marks on the sides and back and attach the floor using a good quality weatherproof glue and #7 1 5/8" coated wood screws.

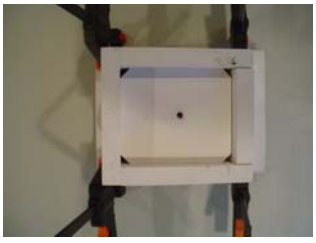
3. Attach the door using one # 7 1 5/8" coated screw on either side at the top to create a front opening door that opens from the bottom. Counter sinking the screws improves the look of the nest box. Be sure to align the screws on either side to ensure the door doesn't skew when opened. The door should fit flush with the nest box sides and not have a noticeable open seam between the door and the sides. Drill a 5/16" hole above the floor through the nest box side on the right into the door to provide a locking pinhole. A 1 ¼" galvanized joist hanger nail will provide the removable locking pin.

   Center the entrance hole protector over the entrance hold and drill shallow 3/32" pilot holes into the door.

4. Attach the wood inner roof to the nest box using a good quality weatherproof glue and # 7 1 5/8" coated wood screws. Leave approximately ½ roof overhang at the rear of the nest box.

5. Lay the nest box roof down on the inside of the Hardie siding outer roof allowing approximately 3/8" siding overhand on each side and approximately ½" overhang at the rear. Using the positioned wood roof as a guide, make an index mark completely around the wood roof onto the Hardie siding. The inner rectangular area created by the index mark will contain the construction adhesive to attach the outer roof to the inner roof.

6. Attach the Hardie siding outer roof to the wood inner roof using a good quality polyurethane construction adhesive and clamp the outer roof securely to the wood inner roof until the adhesive sets per the manufacturer's instructions.



7. Use a good quality metal primer spray paint to prime the screws and hole protector. You can then spray paint the screws and hole protector with a color to complement the exterior finish.

8. Attach the metal whole protector to the door using (2) #6 5/8" pan head screw. Insert a 1 ¼" galvanized joist hanger nail into the locking pin hole to secure the door.

9. Use a good grade exterior wood filler to fill screw holes and any minor seams in the joints.

The exterior of the nest box should be painted or coated with a good quality exterior grade oil-based wood preservative to prolong its useful life. Do not paint or coat the interior of the nest box.

Views of completed nest box


Nest Box - side view


Nest Box - rear view