Winona Grange #271 – Bee House Construction

Overview and Materials

Following are the instructions used to build the bee houses that we give away each year at the Winona Grange #271 Seeds and Bees Spring event (usually the third Saturday in April).

The Bee Houses are designed to be built using standard dimensional 5 ½“ wide fence pickets found in most lumber supply stores. These pickets are usually available in 5’, or 6’ lengths, and usually 5/8” thick.

Each Bee House uses 24” (two lineal feet) of a standard 5 ½“ wide fence picket. Fence pickets can be of any wood species including Cedar, Pine, Fir, Oak, or Ash.

If you are building one or two bee houses, you can purchase one fence board. If you are building many bee houses for an event, using the above dimensions, here is a guide for how much lumber to purchase:

- 10 Bee Houses would require 20 lineal feet of material (four 6’ fence pickets or 5’ fence pickets)
- 20 Bee Houses would require 40 lineal feet of material (eight 5’ fence pickets, or seven 6’ fence pickets)
- 50 Bee Houses would require 100 lineal feet of material (twenty 5’ fence pickets, or seventeen 6’ fence pickets)
- 100 Bee Houses would require 200 lineal feet of material (forty 5’ fence pickets, or thirty-four 6’ fence pickets)

Figure 1 - Fence boards ("pickets")

Buying from a big box store like Home Depot will cost about $4/board (2024 prices).

The tube is made from a carpet tube, cut to 8” then painted .

Cutting the Lumber

1. Top – Cut two sections of 9”
2. Back – Cut one section of 6”
3. Mark the center of the 6” board. Cut this board at 45 degrees, from the center, to make the pointed back of the house.
4. Trim one of the top boards by 5/8”(or whatever the thickness of the material is), lengthwise.

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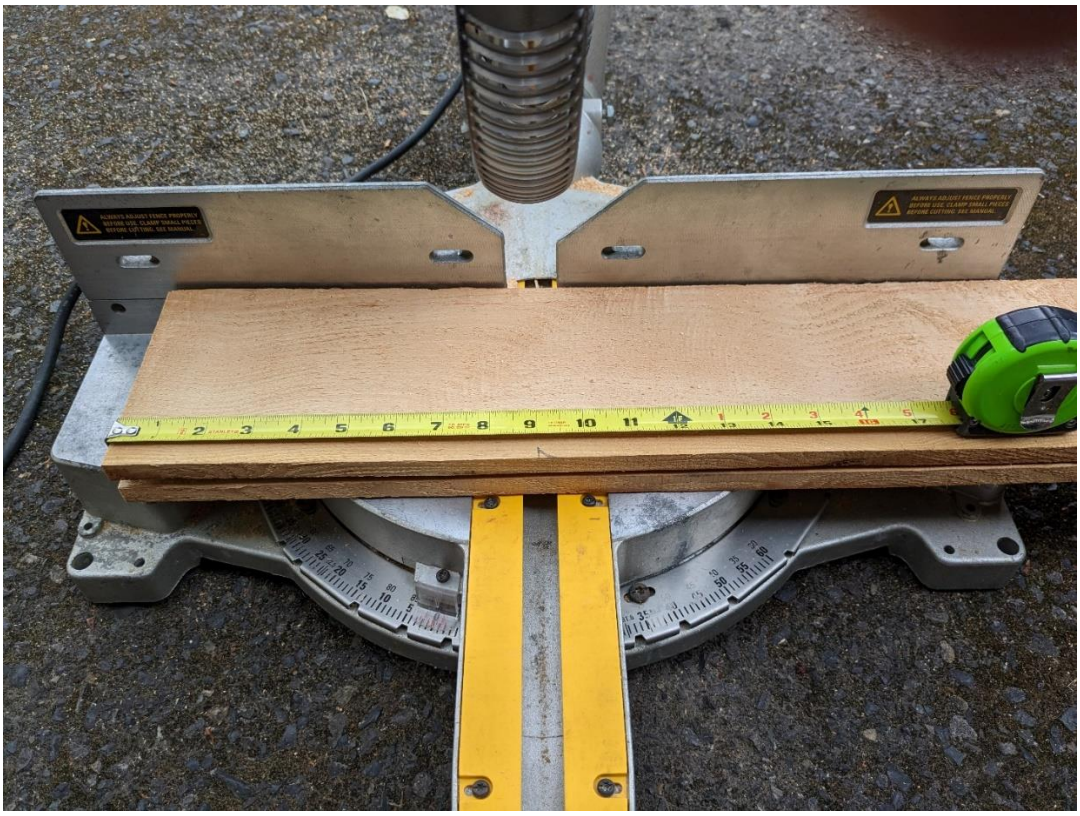

Figure 2 - Cut the top pieces

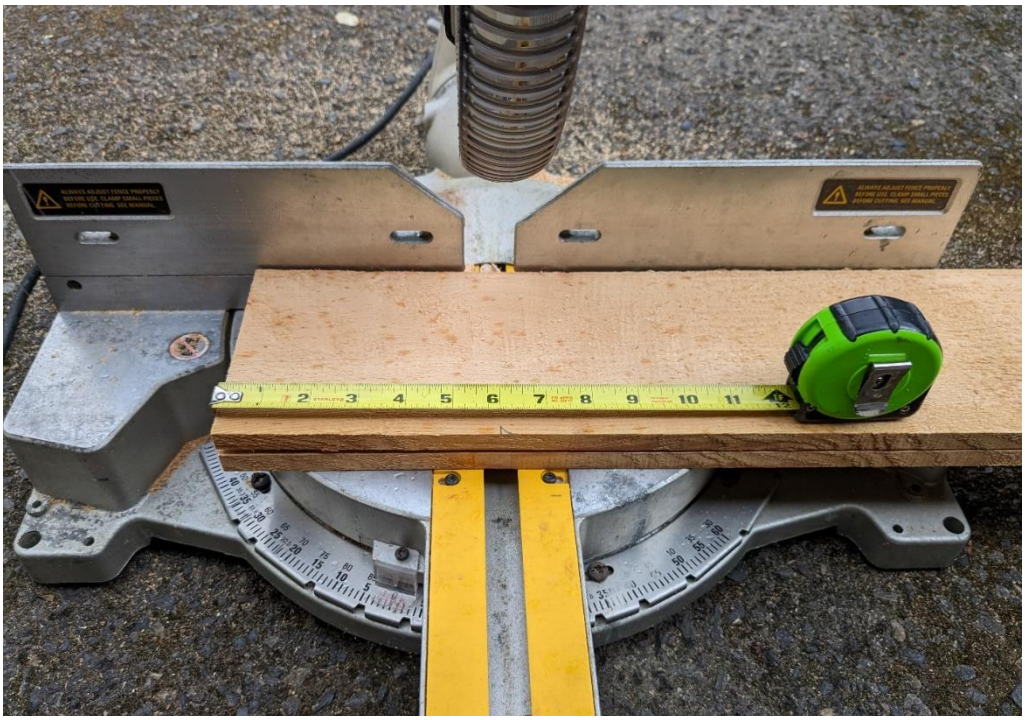

Figure 3 - Cut the back piece for height

Figure 4 - Mark the center of the back board

Figure 5 - Cut the back board at 45 degrees from center

Figure 6 - The two top pieces

Figure 7 - The two top pieces, close up

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Nailing the Pieces Together

1. Overlap the wider piece over the narrower piece and nail, or staple, in at least three places.
2. Do not nail too close the ends of the board, to avoid splitting. Try 1” or more from the ends.
3. Attach the roof to the back, using two nails, or staples, for each roof piece to the back.

Figure 8 - Attaching the two top pieces

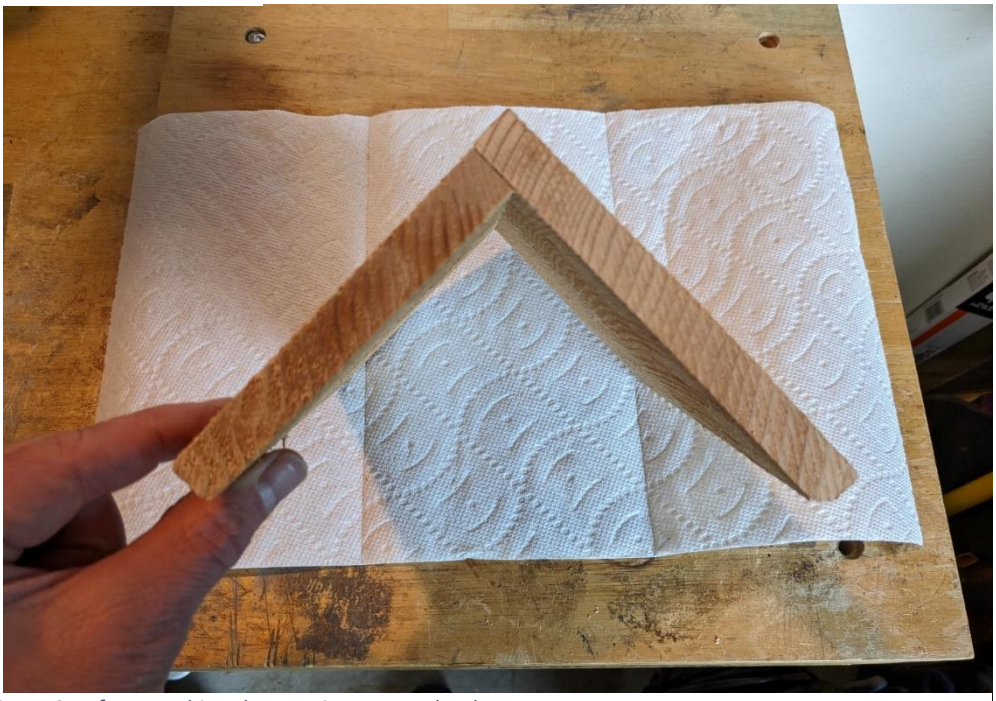

Figure 9 - After attaching the top pieces to each other

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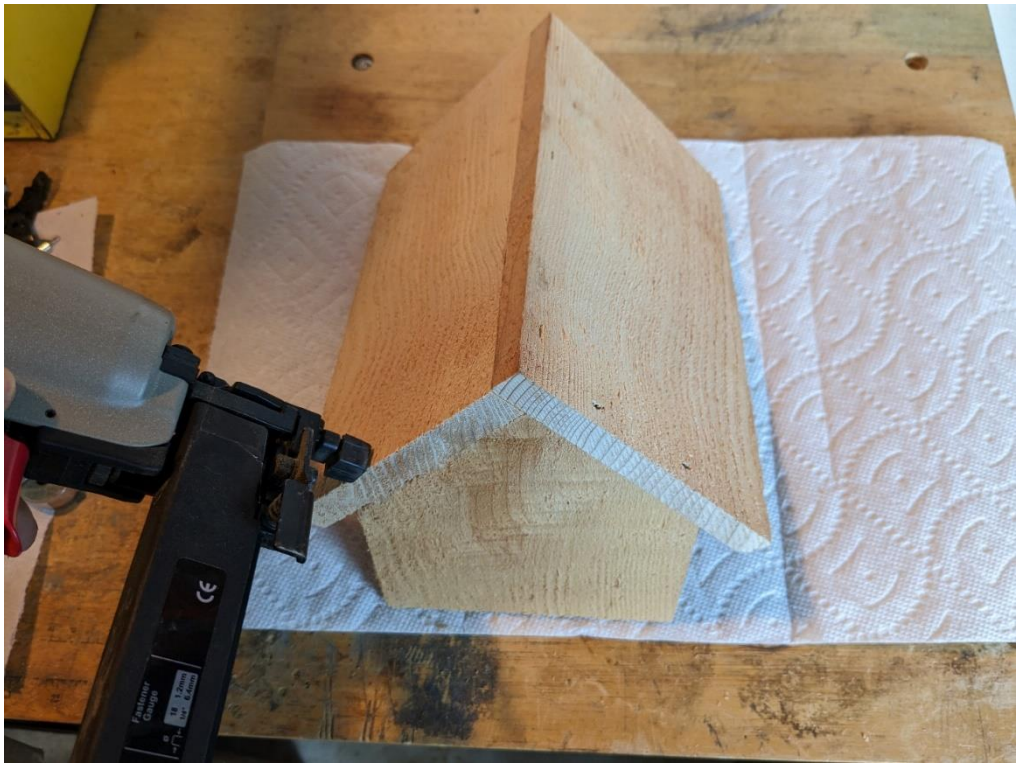

Figure 10 - Attaching the roof to the back

Figure 11 - Back attached to roof

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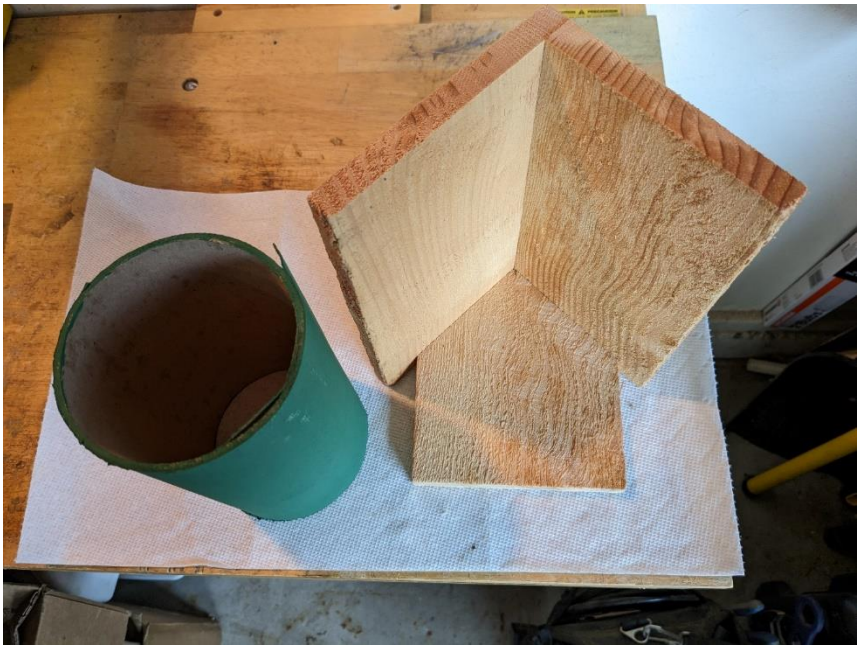

Attaching the Tube

1. Mark the tube where it touches the underside of the roof.
2. Sand the paint from the tube where marked so that the glue has a better purchase to attach the tube to the roof
3. Apply glue to the tube where it will attach to the back.
4. Apply glue to the sanded areas that will attach to the roof

Figure 12 - The painted tube and the wood structure

Figure 13 - Lining up the tube

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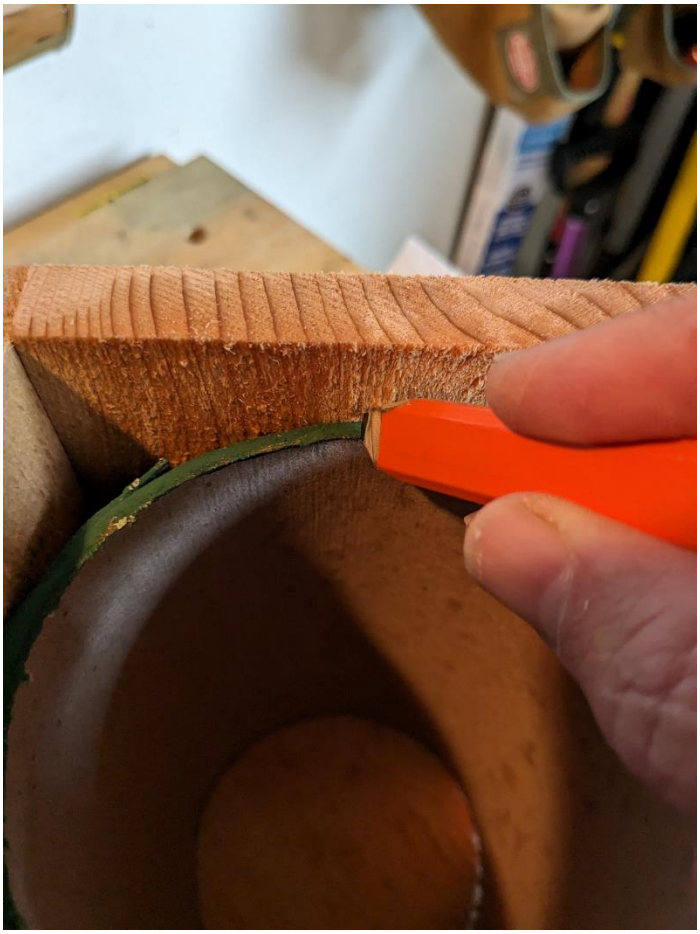

Figure 14 - Marking the tube where it will attach to the roof

Figure 15 - Marked tube, ready for sanding

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Figure 16 - Sanded tube

Figure 17 - Ready for glueing, use a strong waterproof adhesive

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Figure 18 - Apply glue to rim first, then quickly to the side of the tube

Figure 19 - Quickly set the tube in place and clamp the tube to the roof

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Figure 20 - Use a wooden cleat to help clamp the tube to the back

Figure 21 - Set glued house aside to dry overnight

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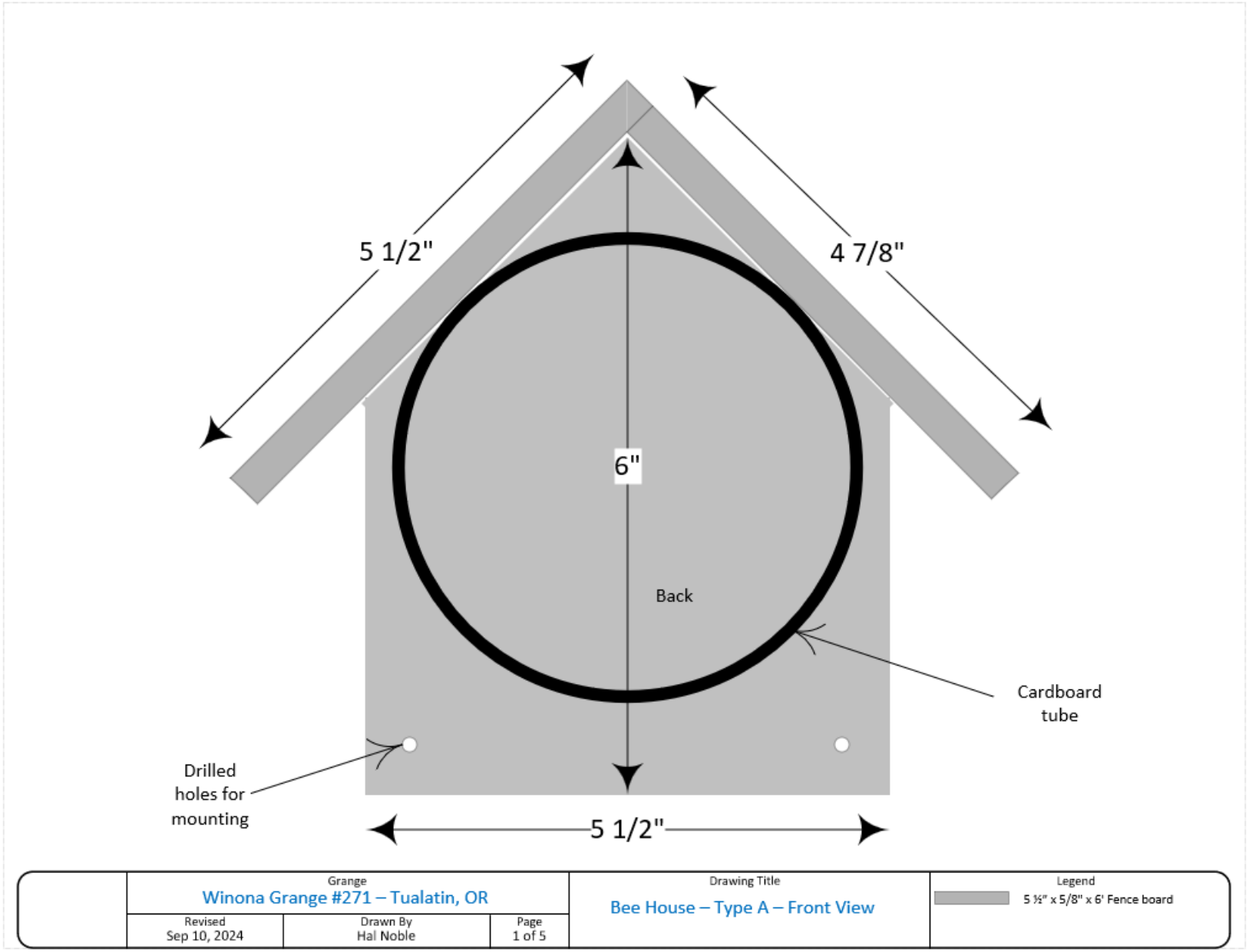

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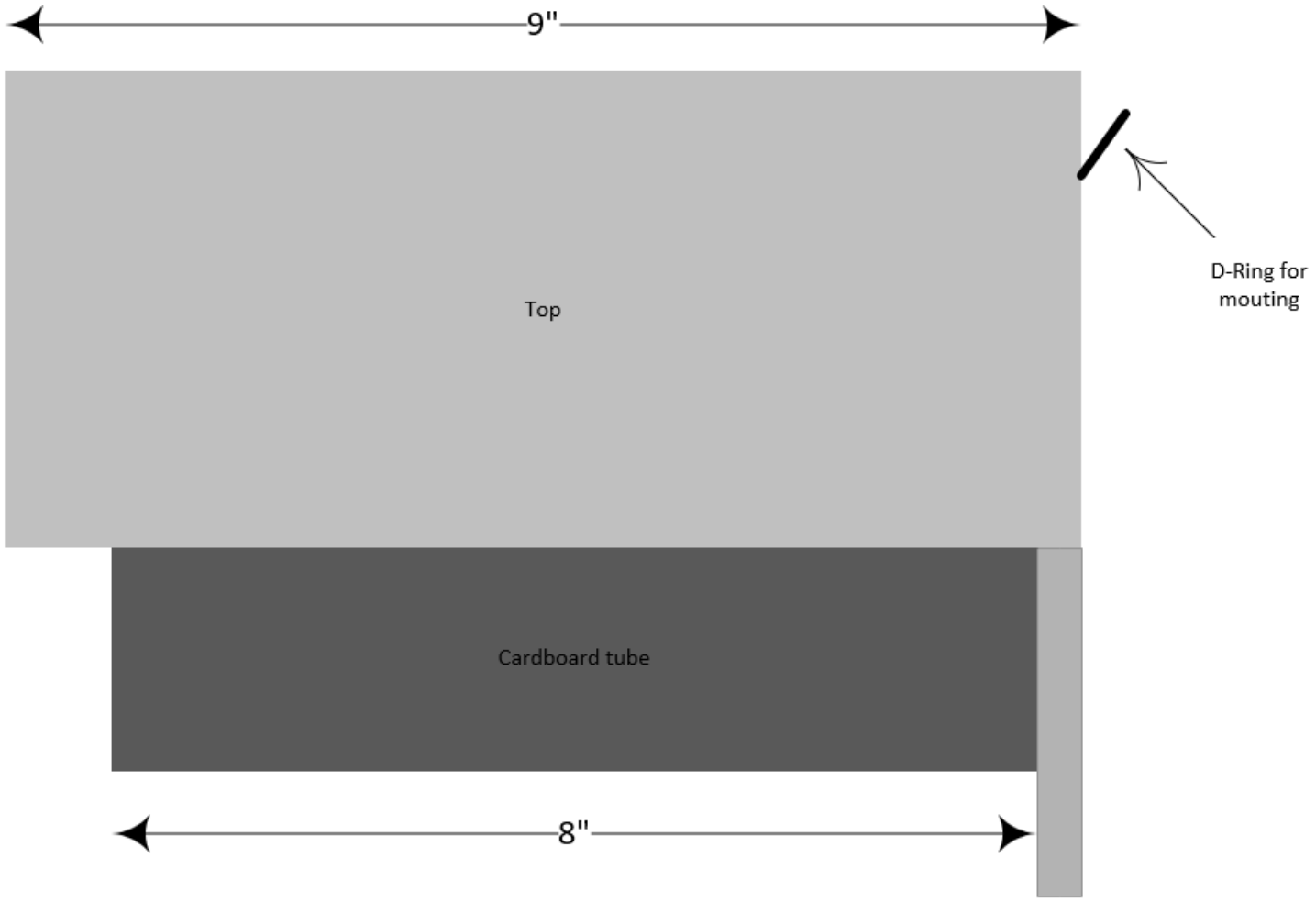

Grange	Drawing Title	Legend
Winona Grange #271 – Tualatin, OR	Bee House – Type A – Right Side View	5 ½" x 5/8" x 6' Fence board
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