

# Build a Bee House

By Eagle Scout Bryan Morrissey

- Instructions -



1. Prepare/cut all wood to dimensions on the cut list.
2. Build roof, side, top, bottom and back panels by attaching the boards with pocket screws
3. Build the main structure box by assembling the side, top, bottom and back panels using pocket screws
4. Attach the roof to the main structure box using nails.
5. Install the rear triangle panel using nails.
6. Fill the lower section with logs
7. Secure the wire mesh with staples
8. Fill the “attic” with bamboo

# Bee Hotel Cut List

## Roof

- (2) 9" x 5"
- (2) 9 <sup>3</sup>/<sub>4</sub>" x 5 <sup>1</sup>/<sub>2</sub>"

## Sides

- (2) 12" x 5 <sup>1</sup>/<sub>2</sub>"
- (2) 12" x 2 <sup>3</sup>/<sub>4</sub>"

## Mesh

- (1) 9" x 13"

## Back (lower)

- (1) 5" x 12"
- (1) 2 <sup>3</sup>/<sub>4</sub>" x 12"

## Bottom/Top

- (2) 9" x 2 <sup>3</sup>/<sub>4</sub>"
- (2) 9" x 5 <sup>1</sup>/<sub>2</sub>"

## Fill Logs

- 3" diameter
- 6" length

## Back (upper)

- (1) 8" x 6" x 9"
- (Cut to fit)

## Bamboo

- <sup>3</sup>/<sub>4</sub>" – <sup>1</sup>/<sub>4</sub>" diameter
- 6" length

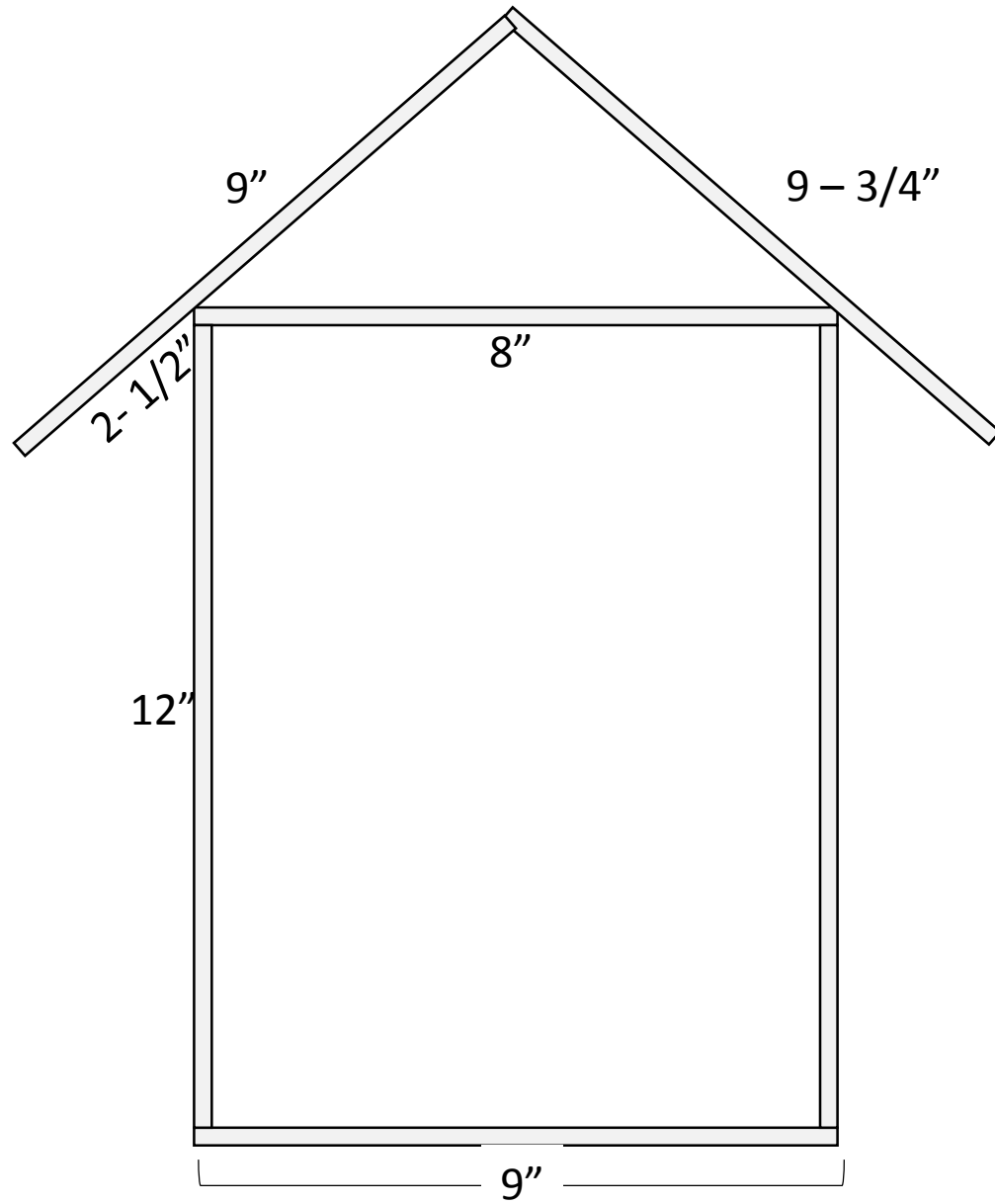
## Tools

Safety glasses  
Gloves  
Hearing protection  
Miter/chop saw  
Table saw  
Power Screw Driver/Drill  
Drill/screw bits  
Hatchet  
PVC Log holder  
Hammer  
Kreg/pocket screw jig  
Tables/saw horses

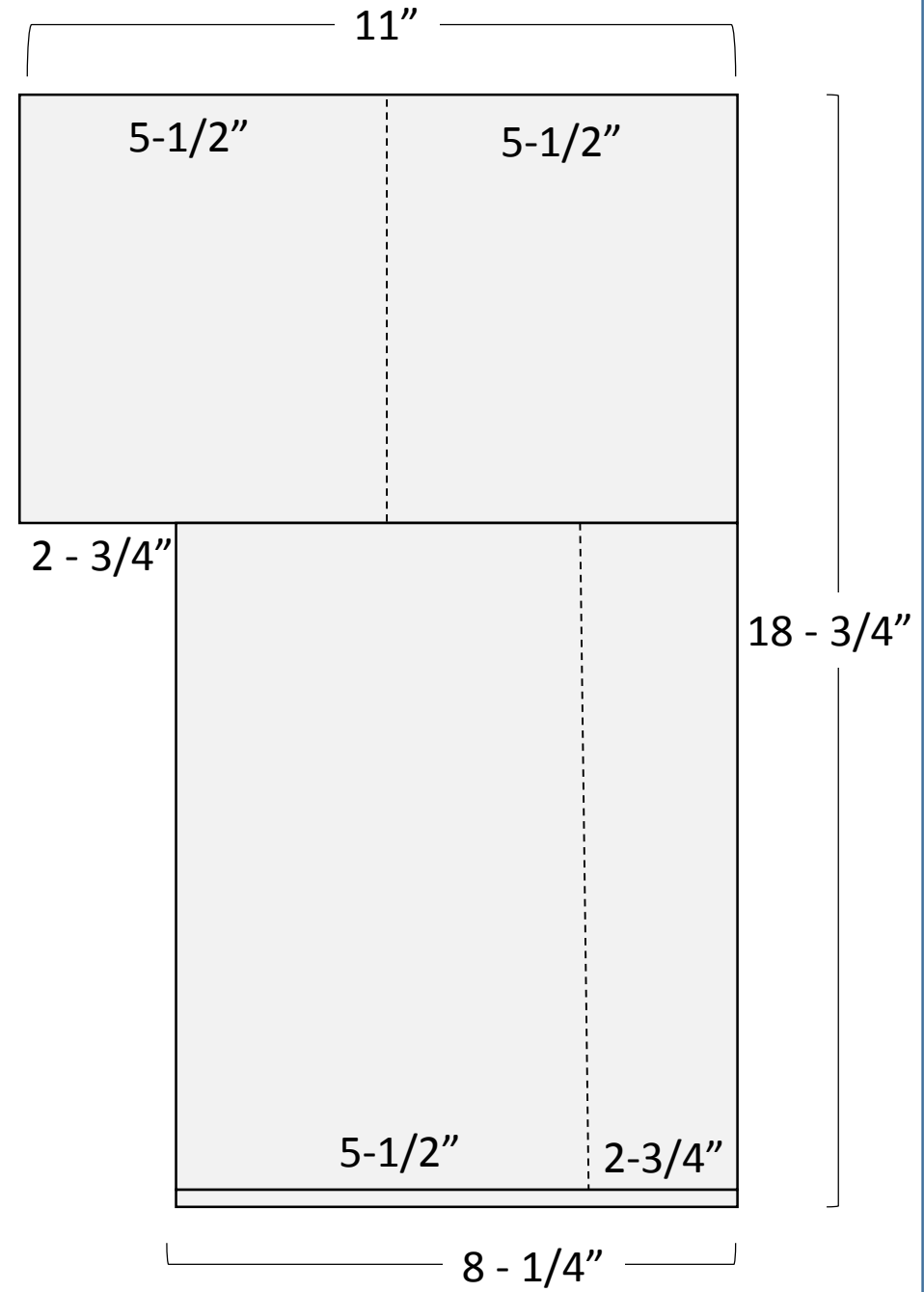
## Materials

(3) Cedar fence boards  
5/8" x 5 1/2 x 6'  
1' Exterior nails  
8 x 1 5/8 exterior screws  
Approx. 3" diameter logs  
(w/ bark removed)  
Narrow bamboo  
Masking tape  
Staples  
Wire mesh (1/2")

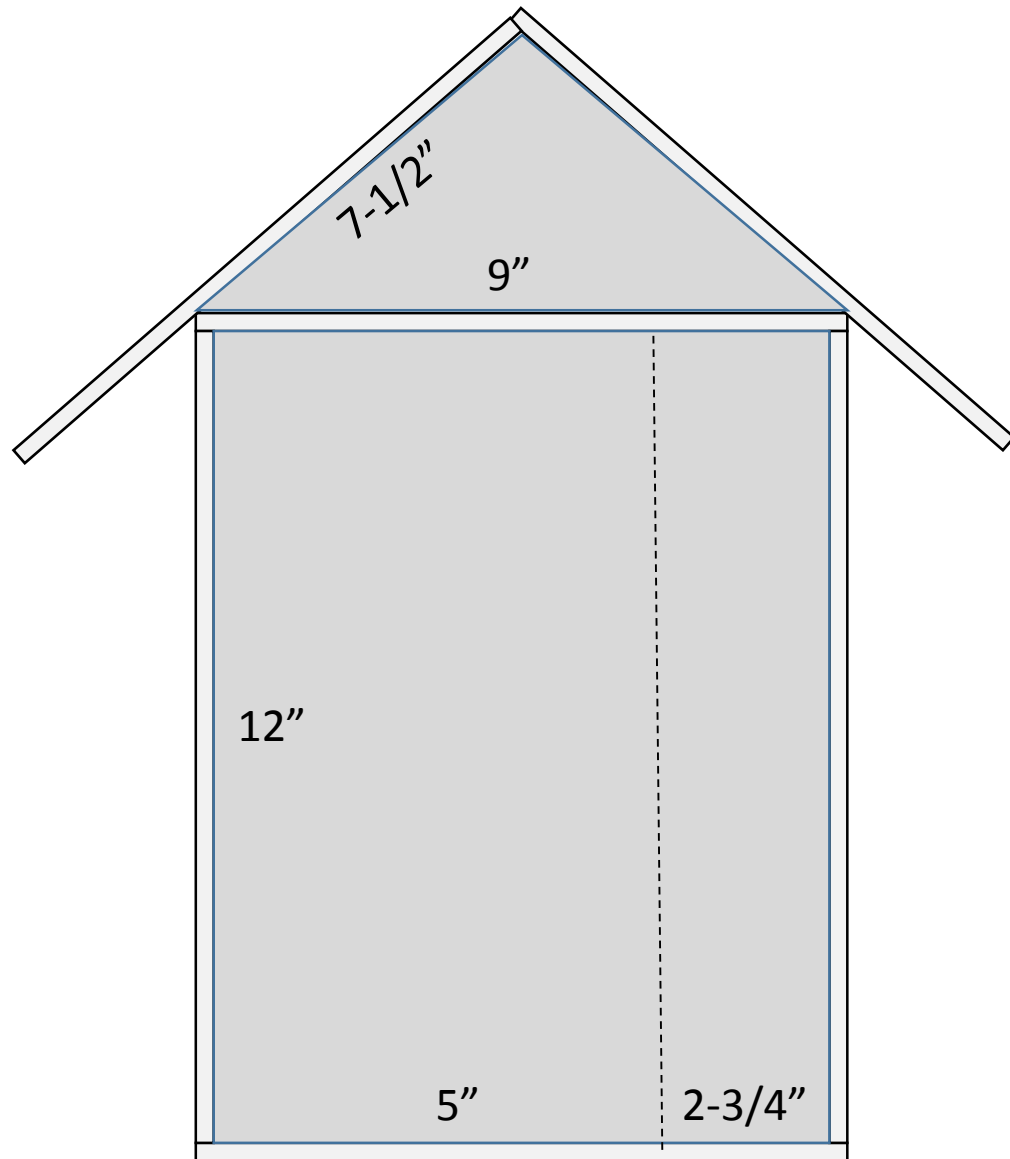
FRONT



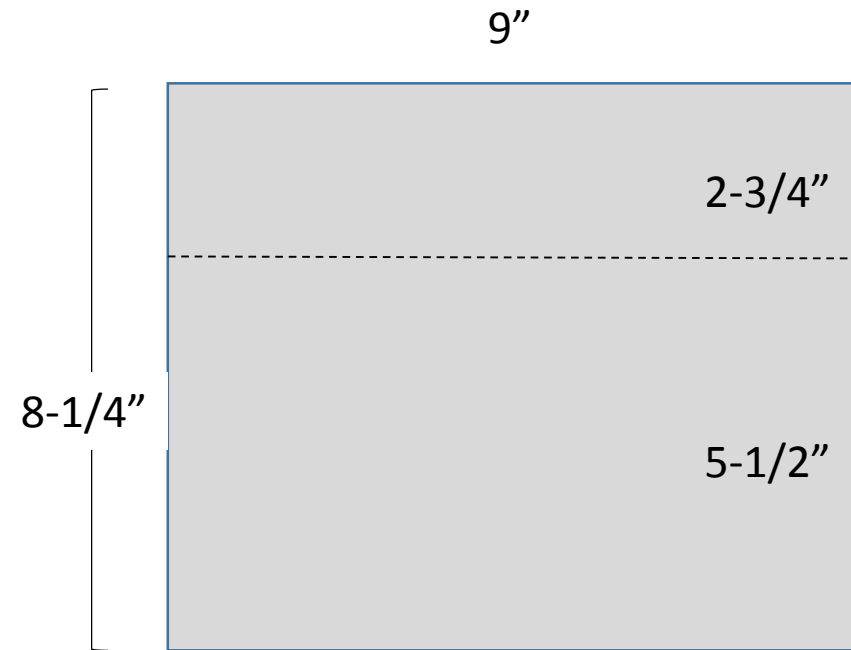
SIDE



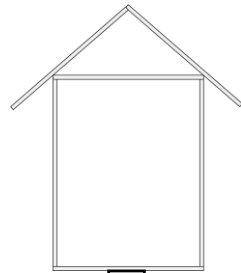
BACK



BOTTOM



# INSTALLATION

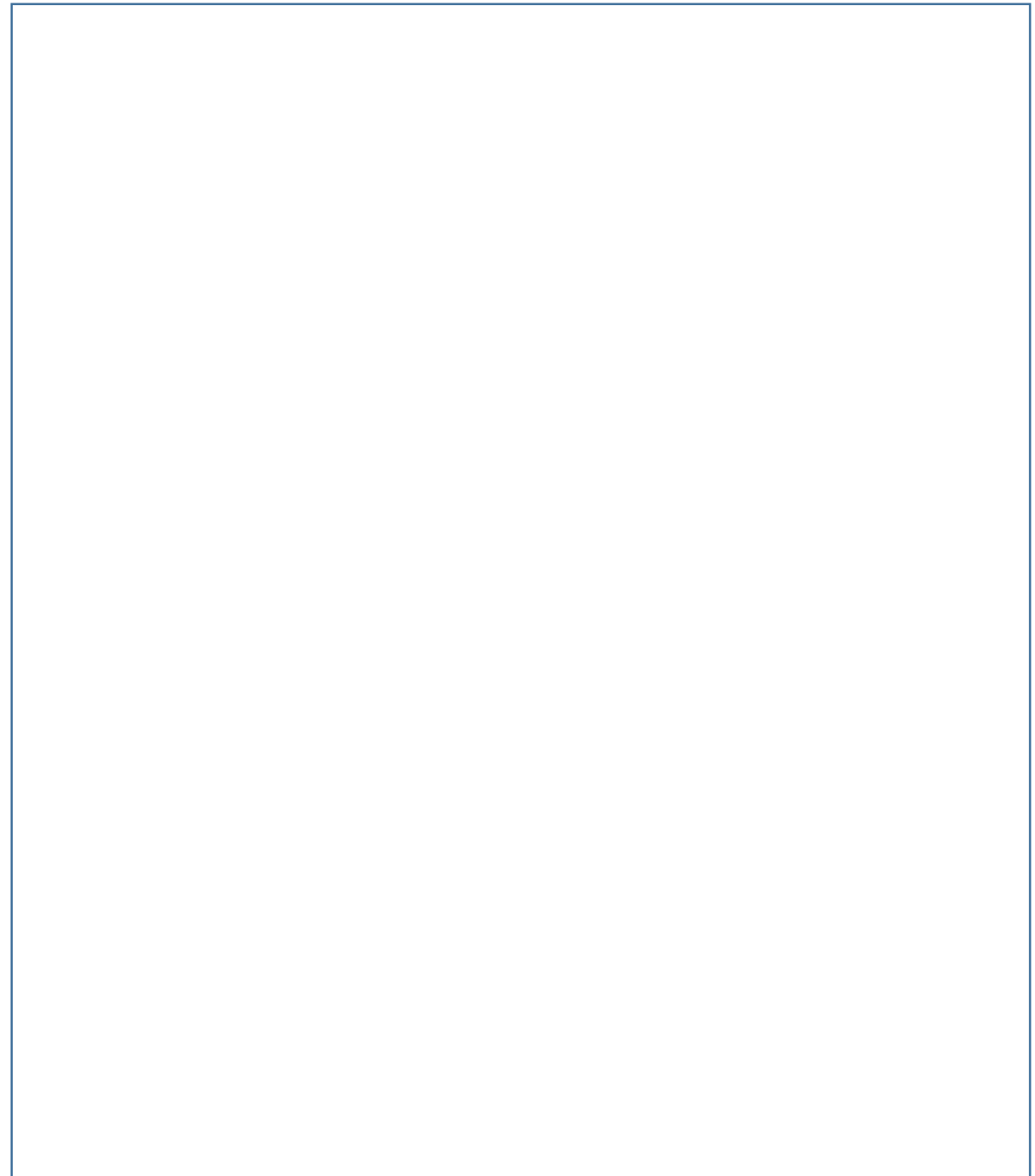


4x4  
Post

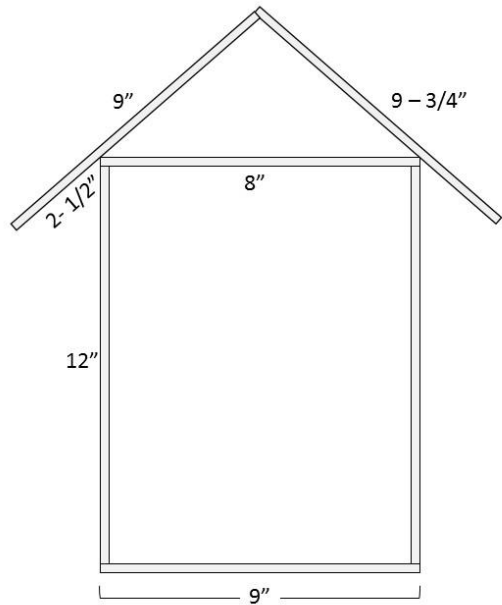
4'

3' - 4"

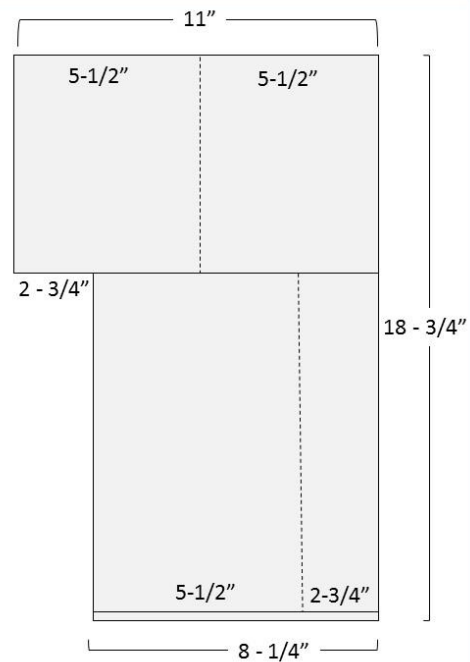
Quikrete



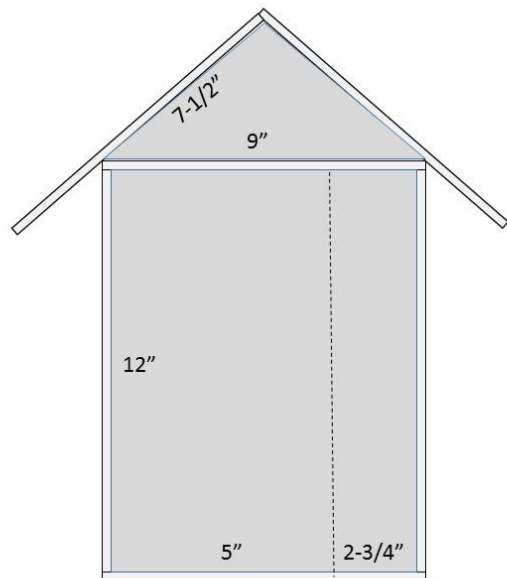
FRONT



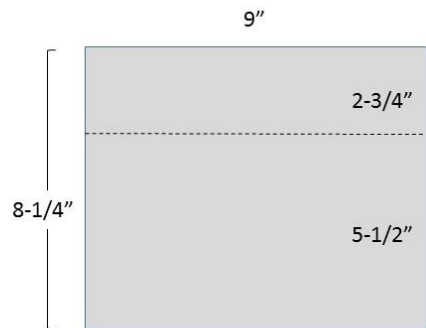
SIDE



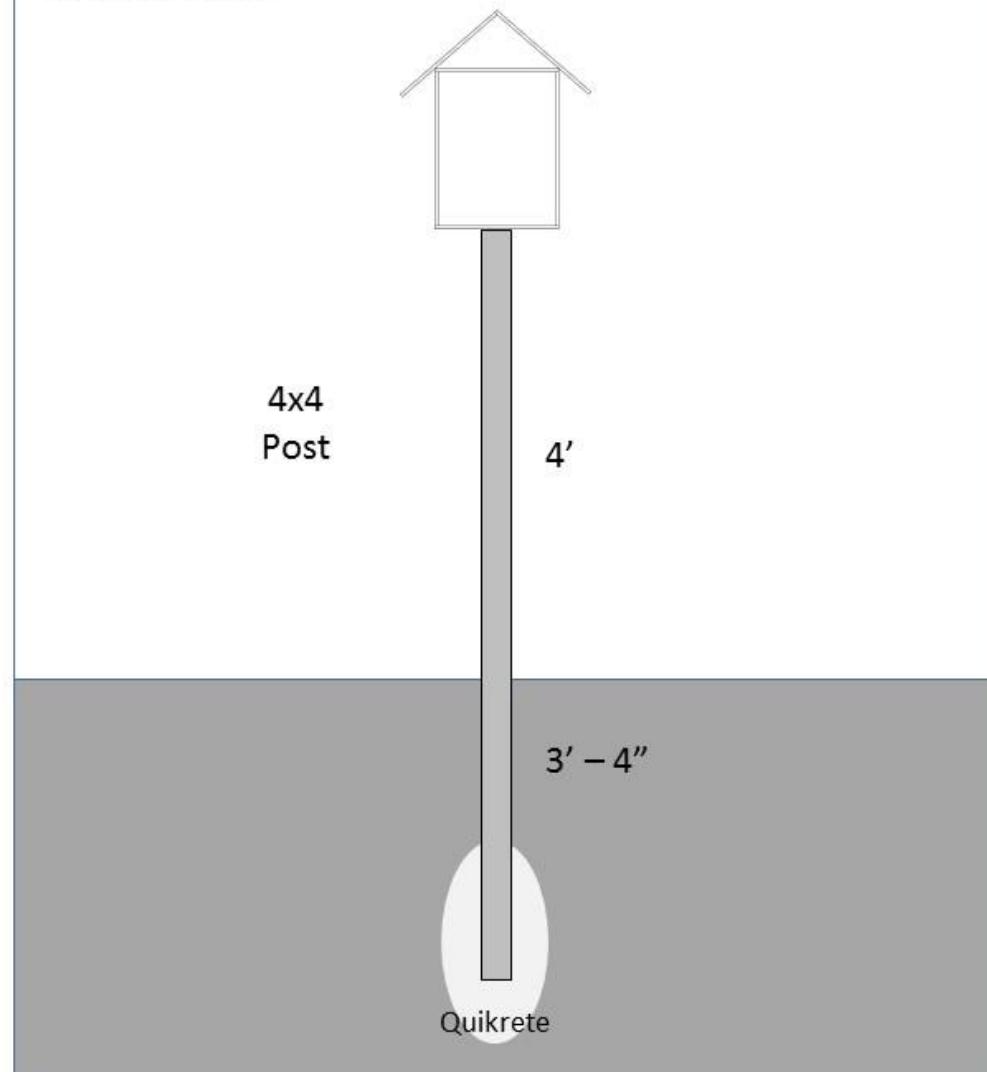
BACK



BOTTOM



### INSTALLATION





# Fill Material

## **Logs:**

In order to reduce the risk of disease and pest that could harm the bees and eggs, the bark should be removed from the nesting logs. This can be done safely with a hatchet and the following precautions:

- Only a person with the proper training and experience should handle a hatchet.
- Wear eye protection and heavy gloves
- Always cut away from your body
- Use a log PVC log holder to stabilize the log and keep your hand away from the hatchet blade.
- Keep the blade sharp so it cuts the bark with minimal
- Force.

Drill holes in the end of the logs at varying depths and diameters. The holes should be between 3/32 and 3/8 inches in diameter and 3 to 6 inches deep. As the hole diameter increases, the length of the tunnel should also increase.

A more powerful hand drill and sharp bits makes this process much easier.

## **Bamboo:**

Bamboo will splinter when cut using a power saw. To avoid this, wrap masking tape around the spot being cut

The bamboo shaft need to be completely hollow for bees to use to lay their eggs. The shafts and be easily cleared with a power drill.

Diameter of the bamboo should be ¾ inches or smaller.

## **Placing and Caring for Your Bee Hotel**

Your bee hotel should be installed in the spring (late March to Mid-April in Michigan).

It should be placed 4-5 feet off the ground, facing Southeast (so it gets morning sunlight).

Once a bee places an egg in a tube, it will seal the entrance. The holes/tubes should be cleaned out after each season, and replaced with new materials at least every two years.