

BDOW Nest Box Plan

Dimensions: 18" wide, 19" deep, 24" tall

Nov 2020

Materials: ½" treated plywood, 2x2 lumber or baluster, 1 & 5/8" exterior grade screws, liquid nails or waterproof wood glue, stain, 3/8" vinyl-coated wire, thimbles & clamps

Optional: tar paper or roofing shingles, roofing nails or staples

Walls: 1 front piece – 18" wide by 24" tall, 8" x 8" opening cut before assembly

1 back piece – 18" wide by 19 ¾" tall

2 side pieces, cut with angle – 18" wide, 20" angling up to 24" tall

Floor: 17" x 18" plywood

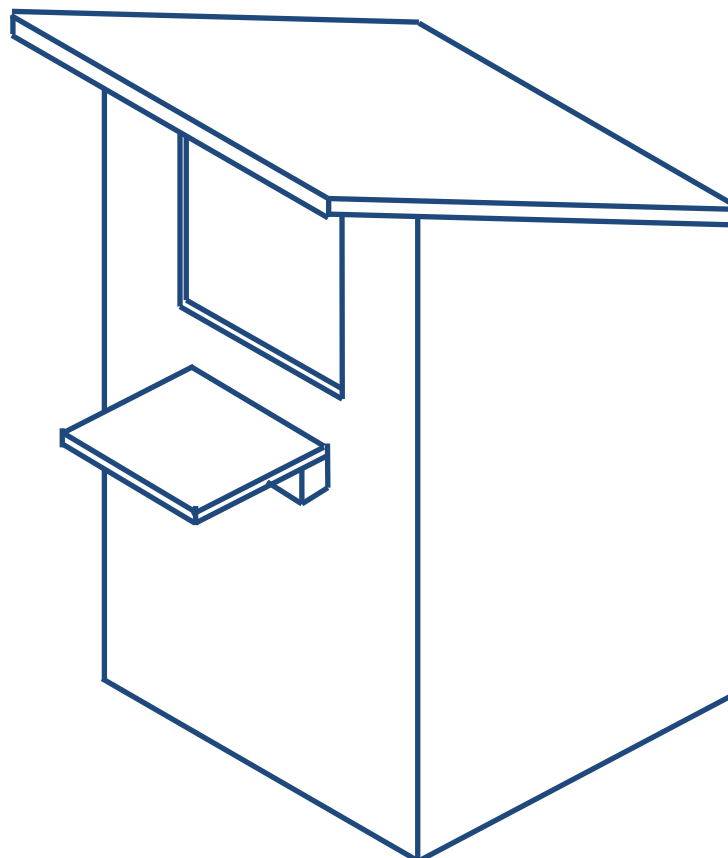
Roof: 18" wide x 24" long

Interior Framing: Vertical - 2x2 or baluster (1 & 3/8" x 1 & 3/8"), ~18 ½" and ~22 ½" – 2 each

Floor perimeter – 2x2 or baluster, 18" and ~ 15 ¼" – 2 each



Dimensions will vary slightly due to variation in lumber



DRAWINGS NOT TO SCALE

Before cutting or drilling:

- Always wear protective glasses and work gloves
- Secure lumber to workbench before cutting

Before assembly:

- It is recommended that all cut edges be lightly sanded to remove splinters
- Dry-fit all pieces before applying glue

During assembly:

- Stagger screws along corners to avoid hitting installed screws with drill bit
- Utilize clamps to align and hold pieces until they are secured with screws

TOOLS:

Saw

Clamps

Drill

Caulk gun

Safety goggles

Paint brush

Work gloves

Hammer

Tape measure

Adjustable wrench

Pencil

Ropes

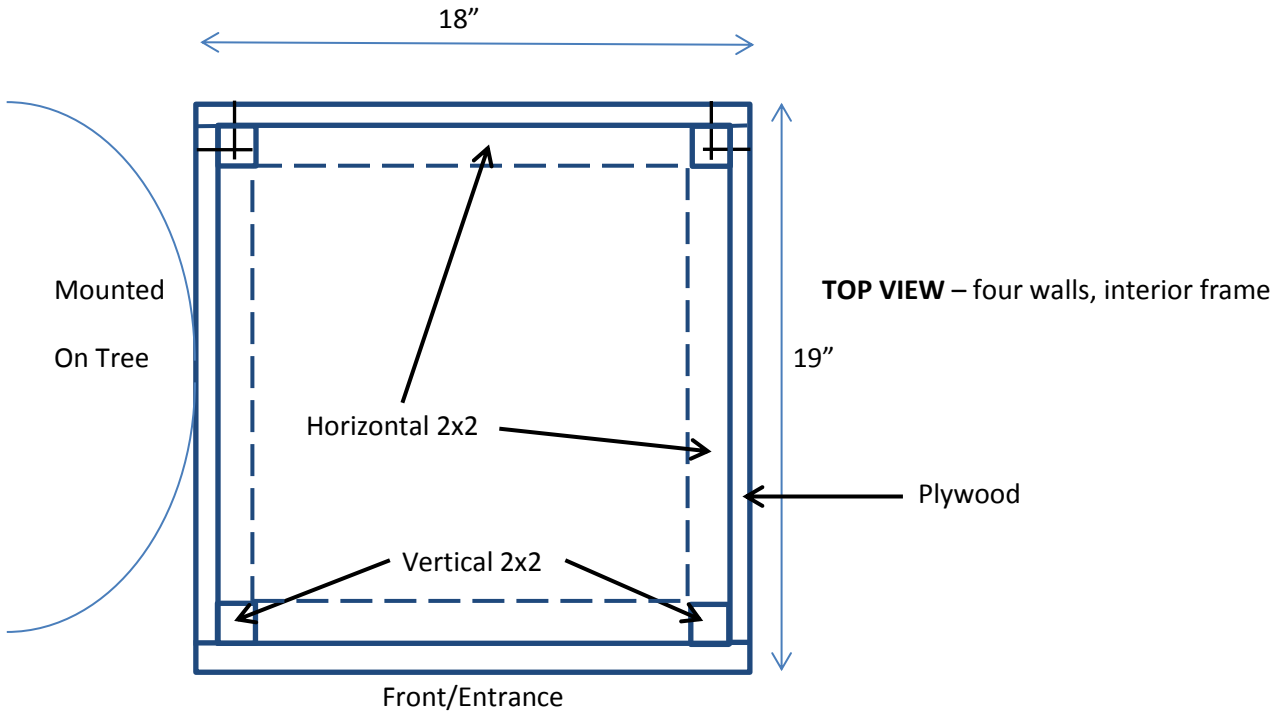
Carpenter's square

Pulley system for hoisting box into place

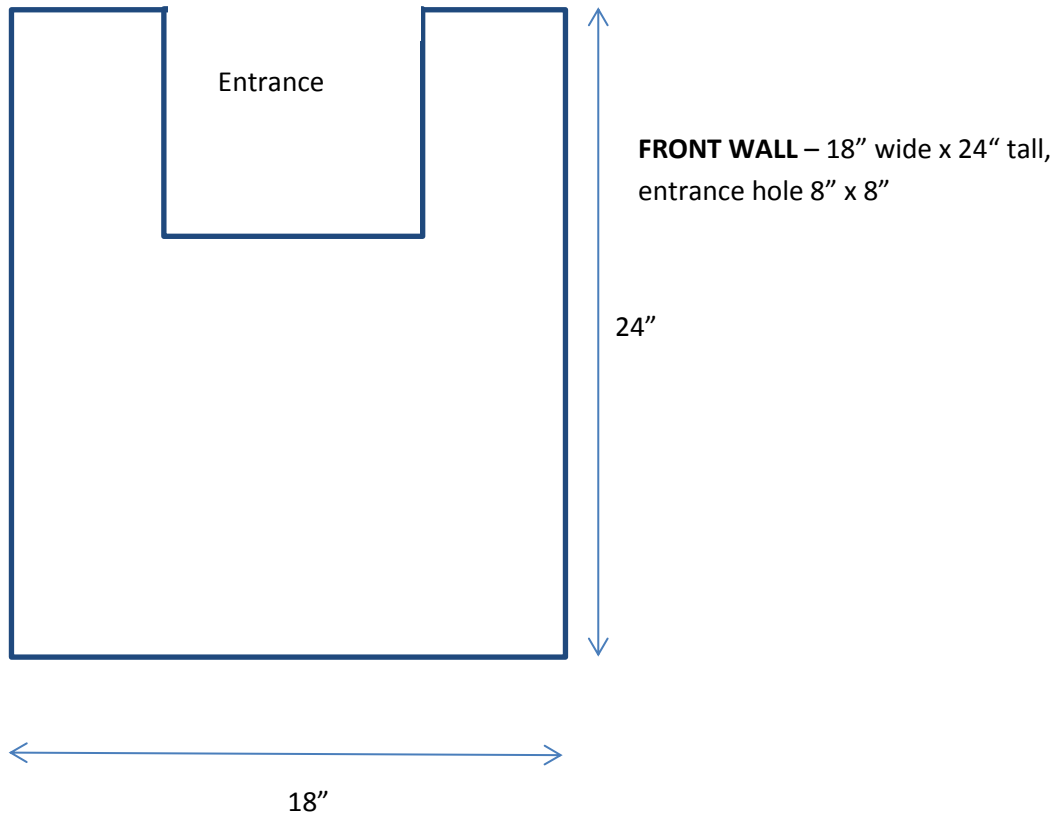
Drill bits

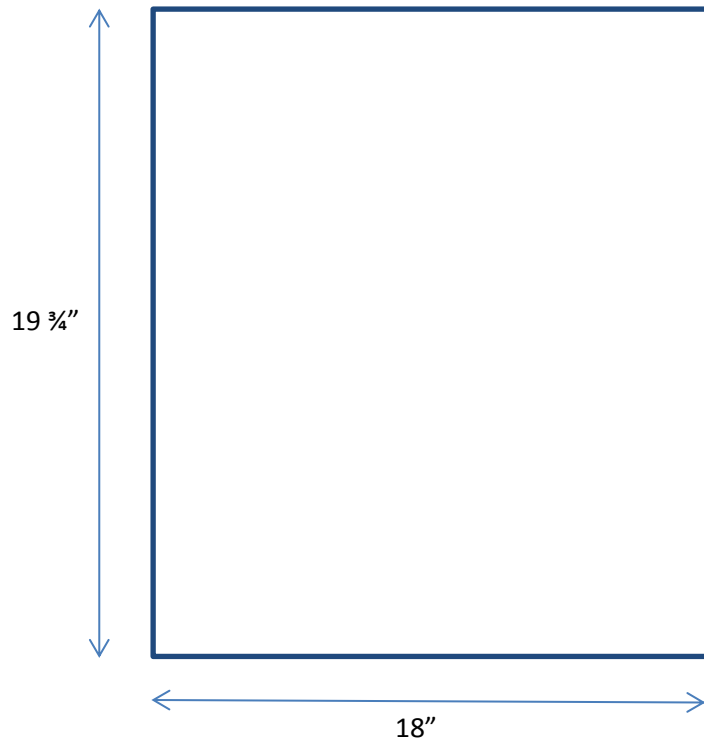
Ladder

Sandpaper

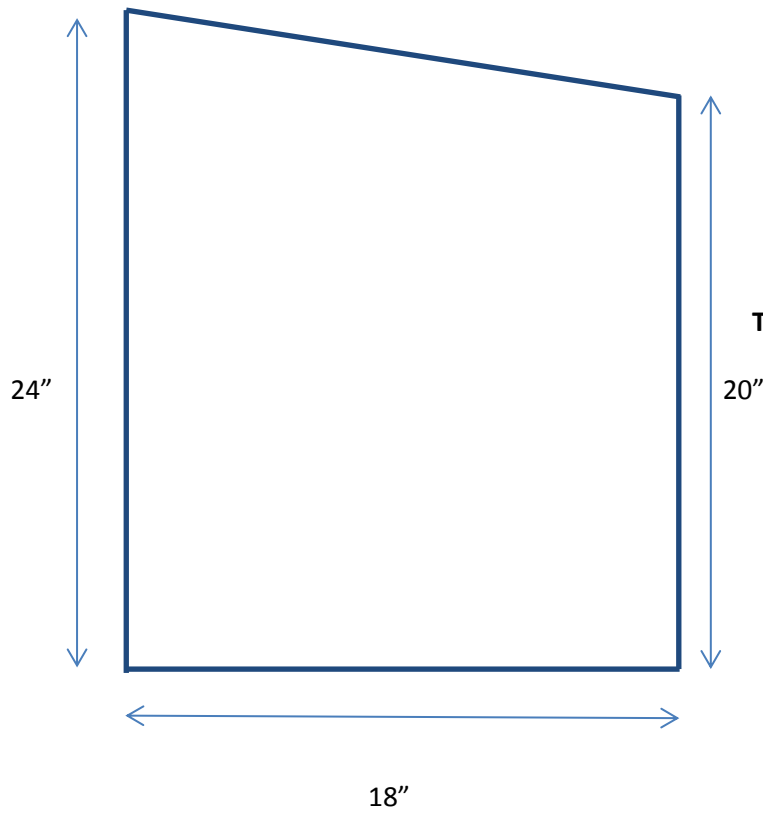


MATERIALS – cutting guide for plywood pieces

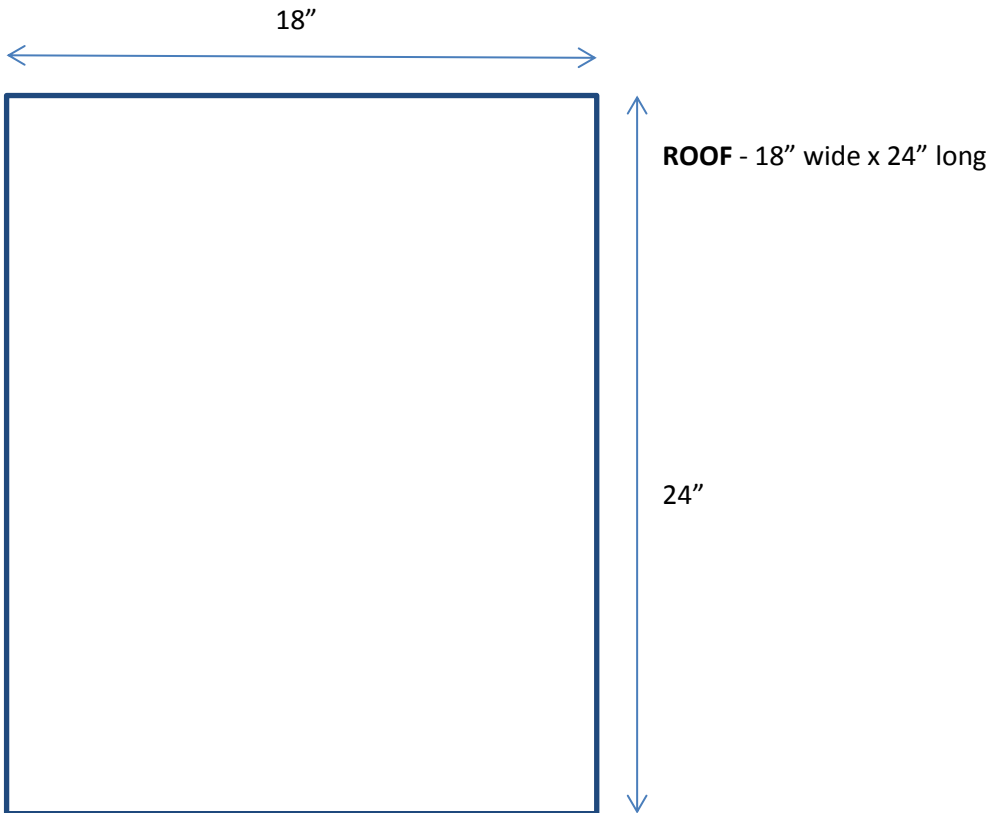
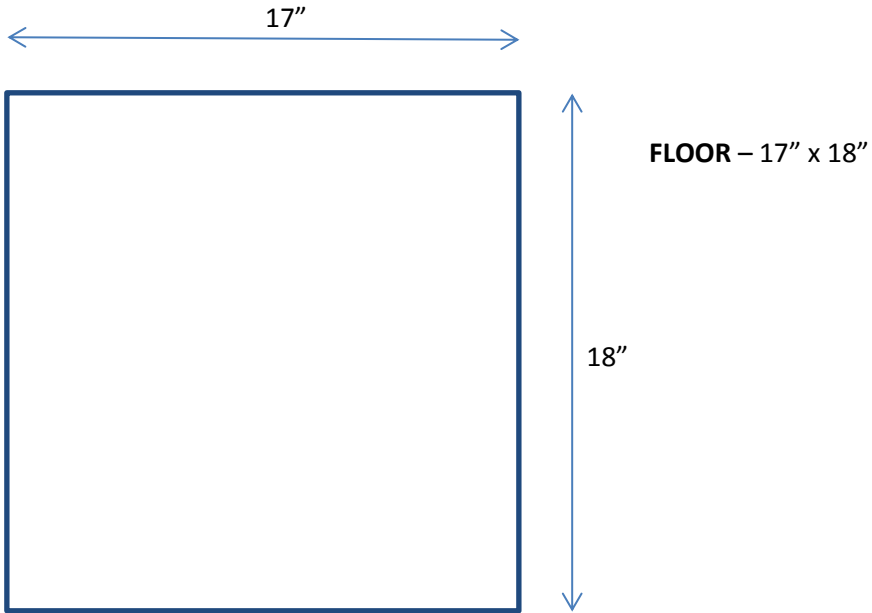




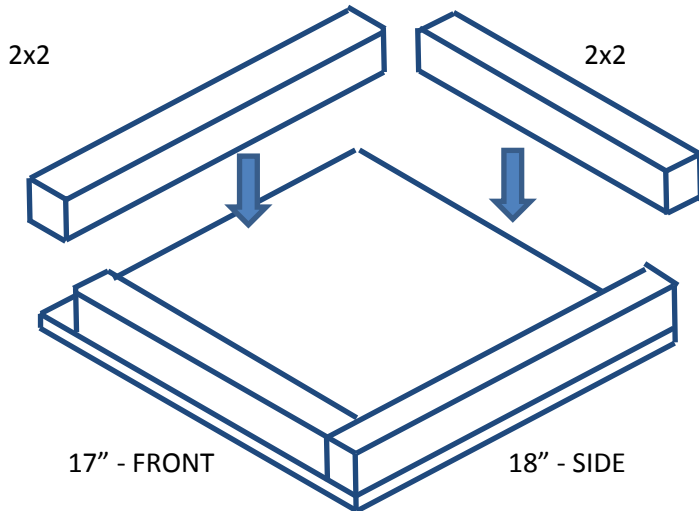
BACK WALL – 18" wide x 19 3/4" tall



TWO SIDE WALLS – angled roof



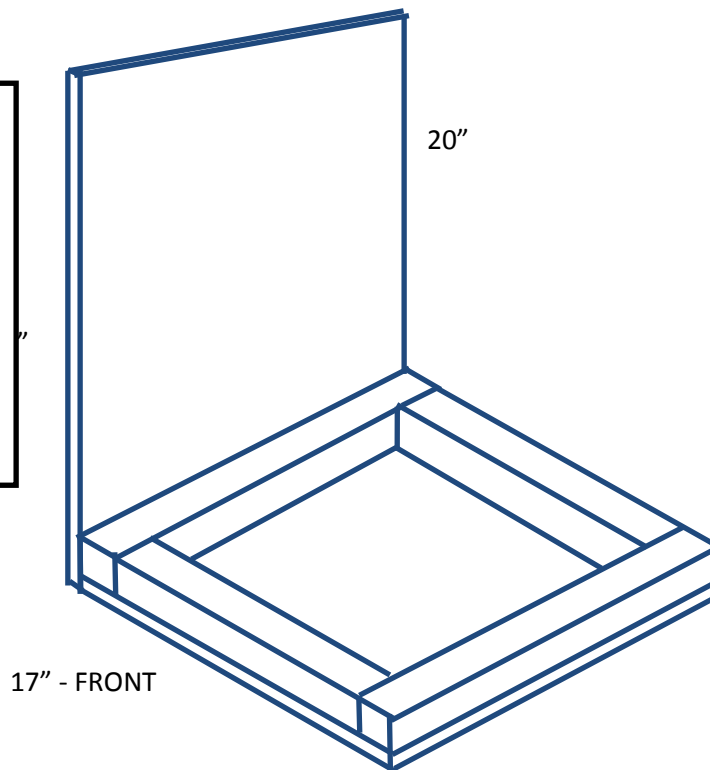
1. Attach four pieces of baluster or 2x2 lumber (18 and ~ 15 & 1/4") around the perimeter of floor plywood piece, flush with outer edges – use 1 & 5/8" exterior grade screws, 3-4 per side, going from plywood into 2x2. Don't countersink too deep to avoid having sharp points exposed inside the box.



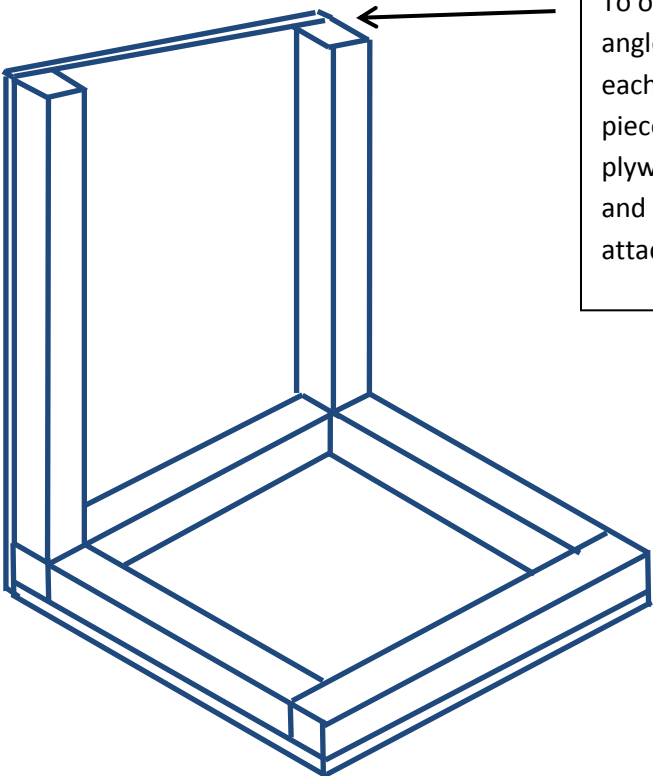
FOR BEST RESULTS, pre-drill all holes and apply "liquid nails" or quality wood glue to all surfaces before attaching with screws.

2. Install plywood side wall using 3-4 screws, 1 & 5/8" long.

Place screws ~ 1" from edge of plywood to ensure that screws enter 2x2 frame, not edge of plywood.

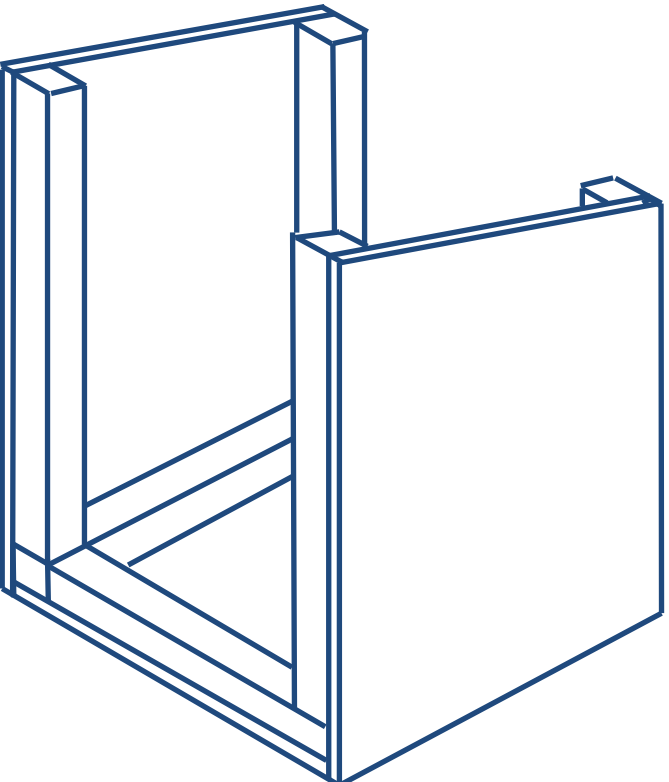


3. Install 2x2 on side wall using 1 & 5/8" screws, 4-5 per side.



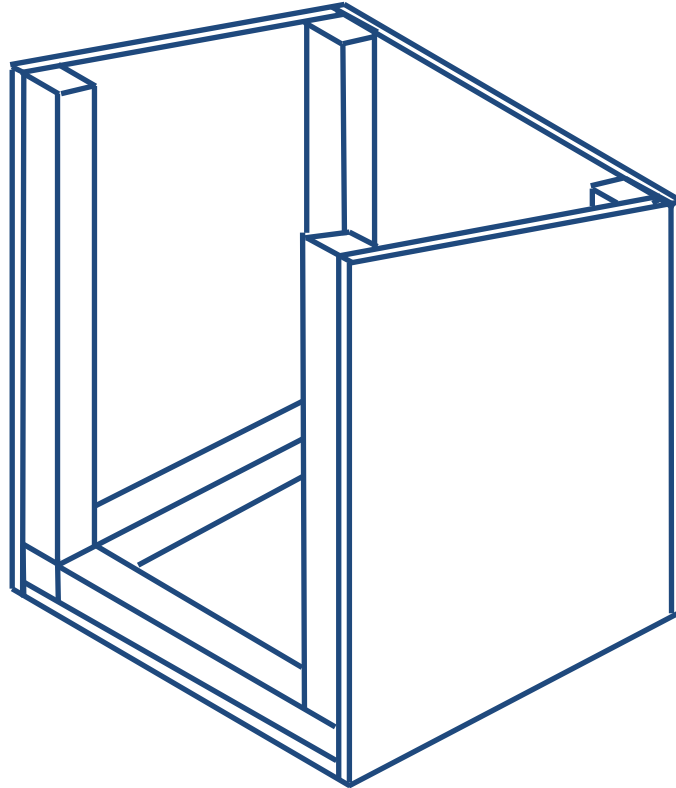
To obtain the correct angle at the top of each 2x2, dry-fit each piece against plywood, mark angle and cut off before attaching

4. Repeat sidewall and 2x2 installation on other side.



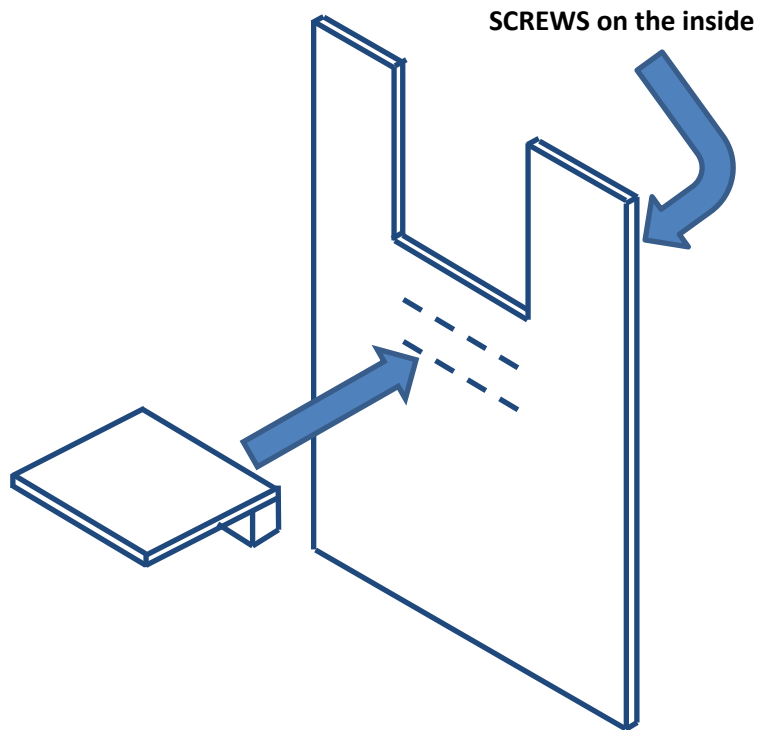
5. Install back wall flush with sidewalls, using 10-15 screws.

Make sure screws go into 2x2, not edge of plywood sidewalls.



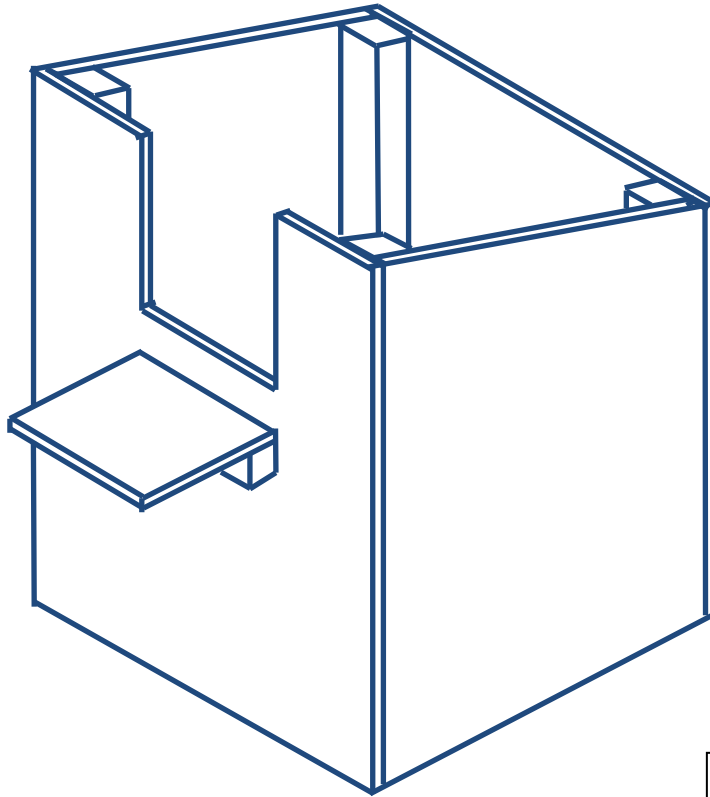
Small gap might be present along the top

6. Attach "front porch" to the front wall piece using the 8" x 8" piece of plywood cut out for entrance and a short section of 2x2; use screws aimed from inside of box; attach porch ~3" below the lip of entrance hole.



7. Install front wall (with attached front porch) to box using 12-15 screws.

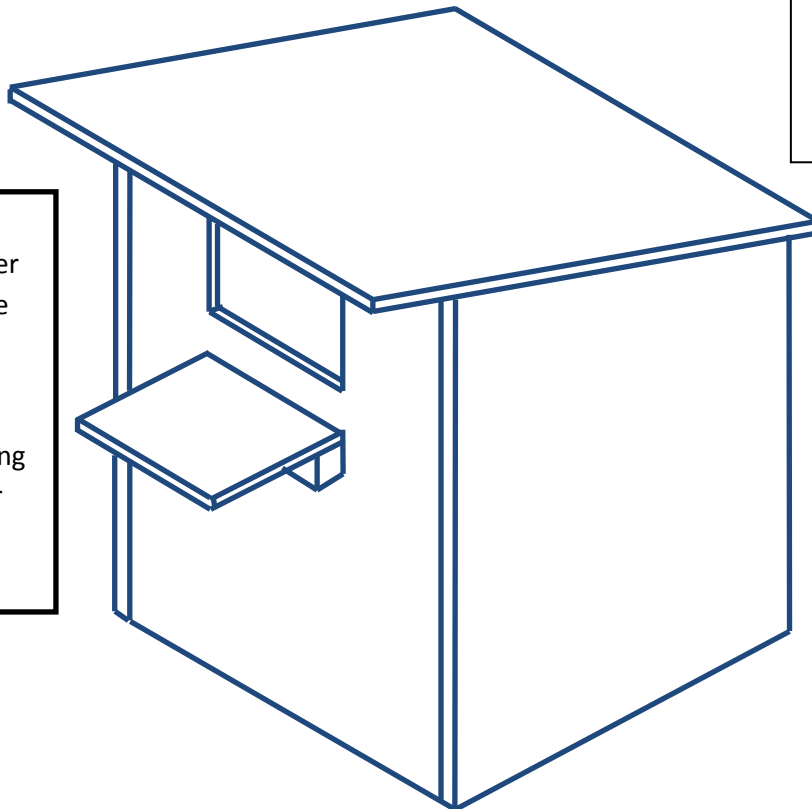
Make sure screws go into 2x2, not edge of plywood sidewalls.



Optional – cover roof with tarpaper or shingles. Use construction adhesive, short roofing nails or short staples to avoid sharp objects inside the box.

8. Install plywood roof 8 screws (2 per corner). Make sure screws enter 2x2 uprights.

Provide 1" overhang on back and larger overhang above front entrance.



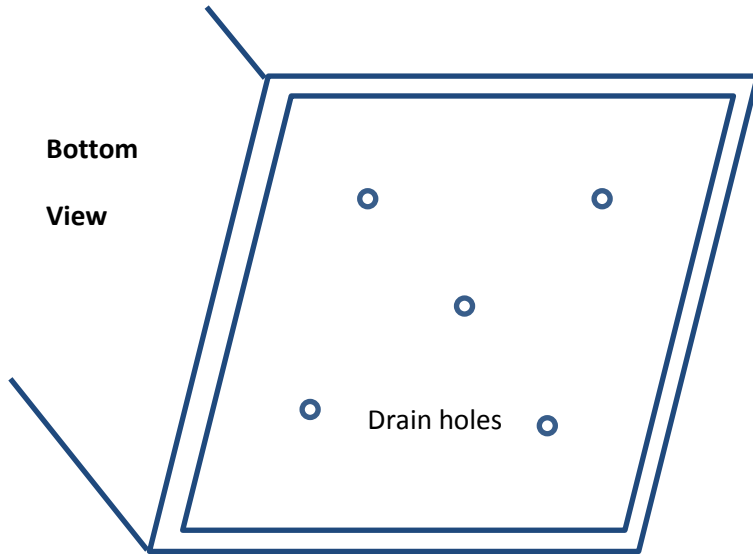
BEFORE BOX INSTALLATION

Check for sharp edges & points inside the box.

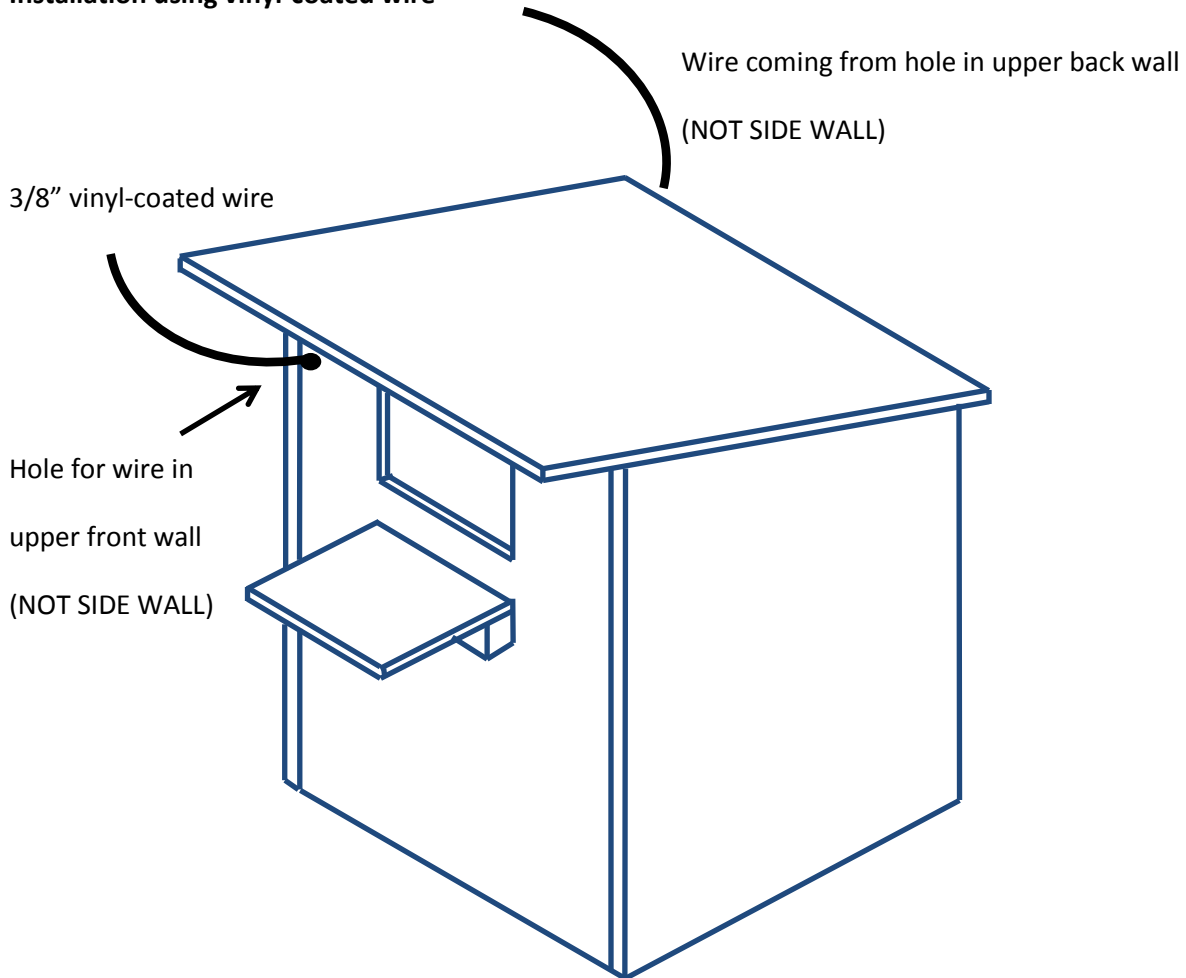
Drill several ½" dia. drainage holes into the floor.

Drill two ½" holes into the front and back wall, near the top, on the side of the face that will be mounted against the tree. Holes can go through 2x2 frame, as well.

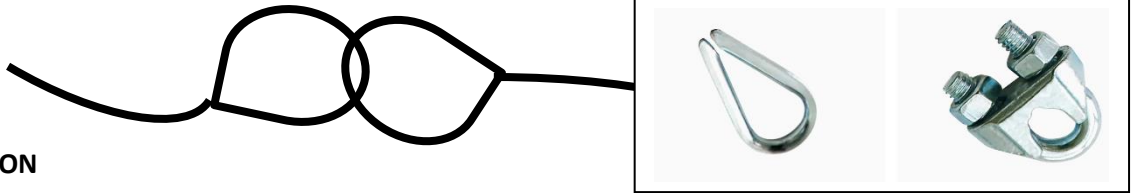
Stain or paint entire box. Make sure exposed plywood edges are covered.



Installation using vinyl-coated wire



Once wire is looped and tightened around tree, connect two ends using 2 thimbles and 2-4 clamps



INSTALLATION

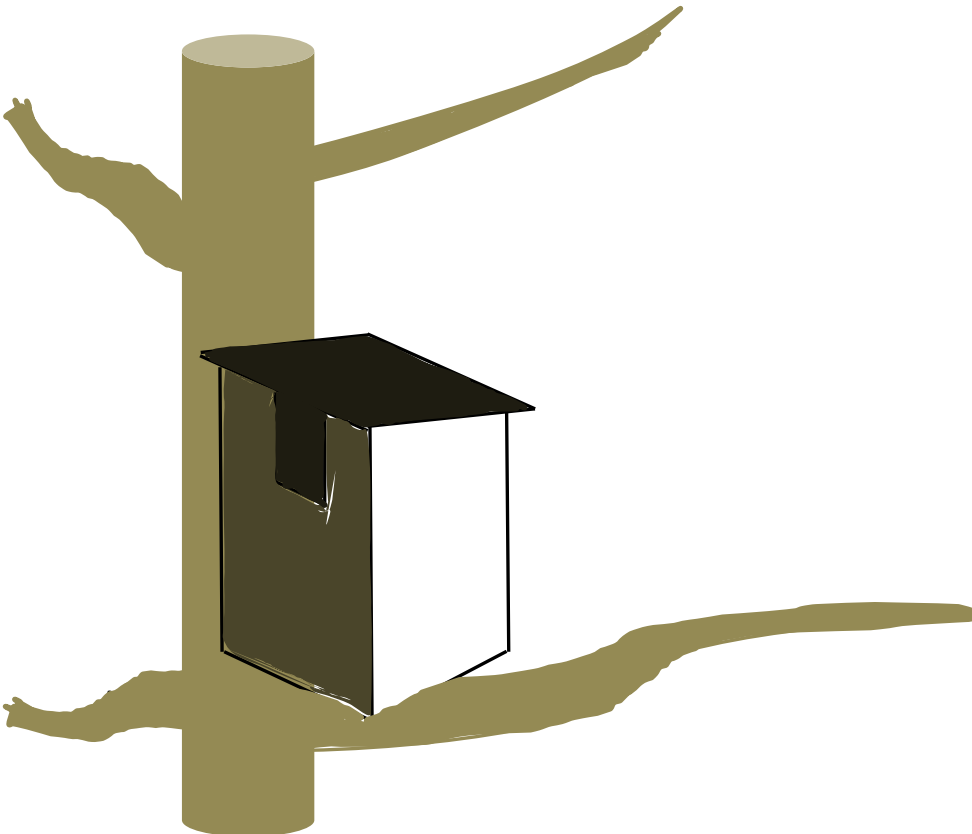
Install the box with the entrance facing to the side. That will make it easier to access the opening for annual cleanout.

Locate a suitable medium-sized to large tree with one or two sturdy fairly horizontal limbs that can act as temporary support for the box until it is fastened to the trunk. These limbs will also serve as landing platforms for clumsy baby owls during their first flights.

A sturdy limb a few feet above the final box location can help with installation as well – pull the box up with rope or pulley system attached to that limb

Feed vinyl-coated wire through the two installation holes in the box and attach thimble with clamps on one end

Once the box is sitting in its final location, loop the free end of the wire around the trunk of the tree. If possible place that loop above a limb on the opposite side of the trunk from the box location. Connect the free wire end to the looped end using thimble and clamps. Make sure box is secure.



Cutting plan for full sheet of plywood (almost 2 nest boxes, some waste, **NO FLOOR PIECES**)

