

Name _____

Lab # 5 -- Woodworking
Barn Owl House

Description: The Barn Owl is a beneficial animal for rodent control on the farm. By building and installing houses you can encourage the Barn Owl population. This project combines layout and wood construction skills.

Materials:

1/3 sheet of 1/2" AC or CC Plywood
2 - 1x3/4x12 scrap pine
30 - 3d Box Nails
4 - 1 1/4" x 6 flathead wood screws
Waterproof wood glue

Table saw
Band saw
Saber saw
Band saw
Framing or combination square
Hammer
Portable drill/screwdriver
Drill Press

Tools:

Directions:

See attached layout. **STUDY THE LAYOUT BEFORE PROCEEDING.** Label each piece on the bad side as you cut them. **GOOD** sides must face out.

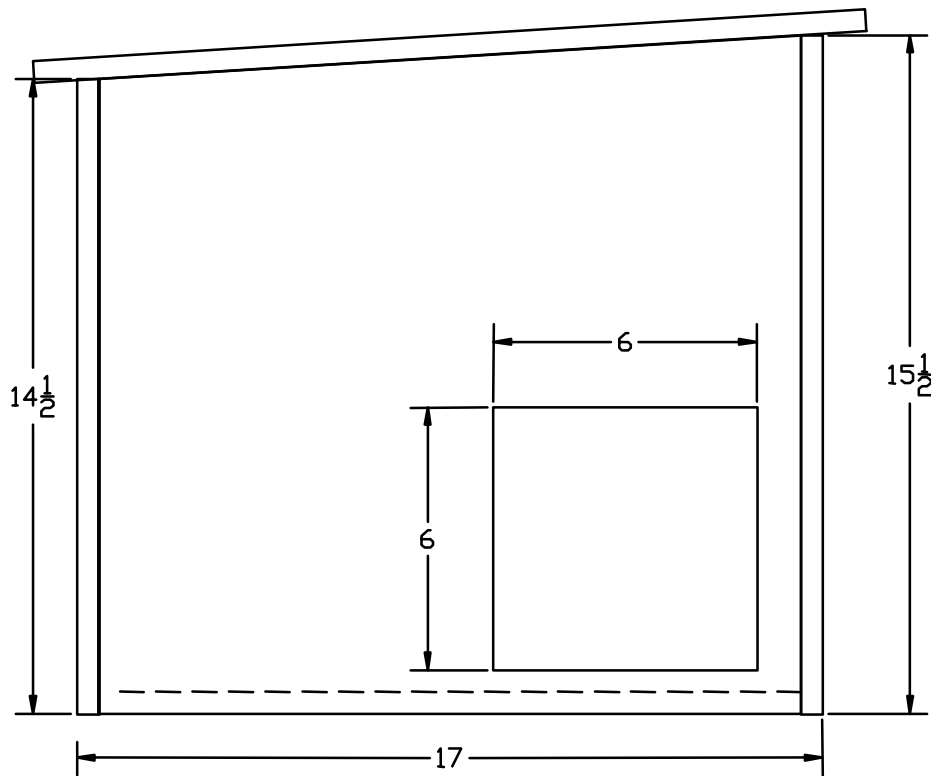
1. Rip 4'x8' sheet in to three 15 1/2" x 96" sheets. Use one piece per project..
2. Create a cutting list.
3. Cut from the 15 1/2" a piece 48 3/4" using the Radial Arm Saw.
4. Using the Table Saw, rip 3 - 16" pieces from the 48 3/4" piece (sides and bottom)
5. Using the Table Saw, rip 2 - 13" pieces from the remaining large piece.
6. ****SIDES:** Layout the angle on the two sides. **IMPORTANT:** Plan on leaving the **GOOD** side out on **BOTH** sides. Cut on the Band Saw.
7. ****DOOR:** Layout the door (6" x 6") on the indicated side. Using a 1/2" drill, make a hole near one corner of the door (on the piece to be removed). Use the Saber Saw to cut out the door.
8. ****Layout the vent holes on the Front End of the house. Drill with the 1/2" drill.**

9. **Cut the top on the table saw. 19"x15". Cut the 1x3/4 scrap pine to length. Use pine pieces to help secure the top to the rest of the house. Pieces are installed so they fit inside the house along the sides. Layout and mark the position of the pine pieces on the Top. Glue the pine to the Top and nail. (NAIL at an angle to avoid going all the way through the lumber.) Layout and drill the holes
10. ** Drill 4- 3/16" holes in the lower back end piece (6" x 13"). Drill holes 1/4" from edge.
11. **Cut the bottom to width on the Table Saw. Cut the corners off of the bottom as shown (45° angle) using the band saw.
12. Assemble the sides and the ends using glue and nails. Caution: nail carefully about 1/4" from edge. Nail about every 4", starting about 1" from the end of for panel. Wipe off excess glue with a damp cloth.
13. Install the bottom using glue and nails.
14. Install the top using glue and nails. Hint: Mark the top so that your nails will hit the sides and ends (1 1/4" in).
15. Use a sanding block to smooth the edges.
16. Write your name on the bottom of the house.

** Can be done out of order if tools are not available.

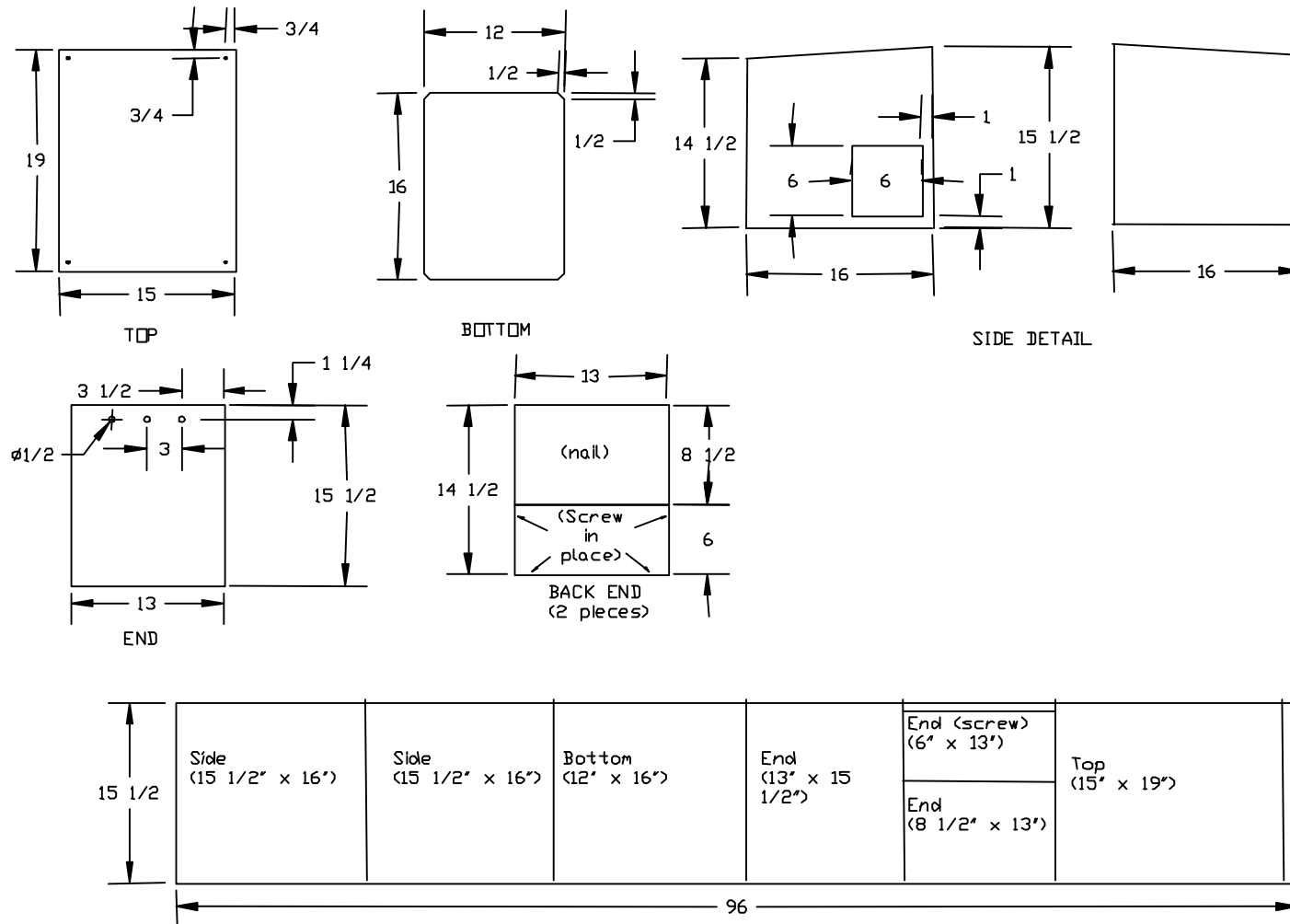
Grading:

Criteria	Possible	Score
Tolerance 1/8"		
Length (17")	2	
Width (13")	2	
Height (14 1/2" and 15 1/2"), Angle cut.	4	
Vent hole location	2	
Door size and location	2	
Nailing	4	
Workmanship (edges sanded, glue, fit of pieces)	4	
TOTAL	20	



Barn Owl House
(side view)
Material: $\frac{1}{2}$ " AC Plywood

Drawn by: M Spiess
Date: 09/12/98



Barn Owl Box Layout and Detail
 Drawn by: M. Spiess
 Date: 09/12/98