

Woodworking Project: Nail Box

HAND TOOLS:

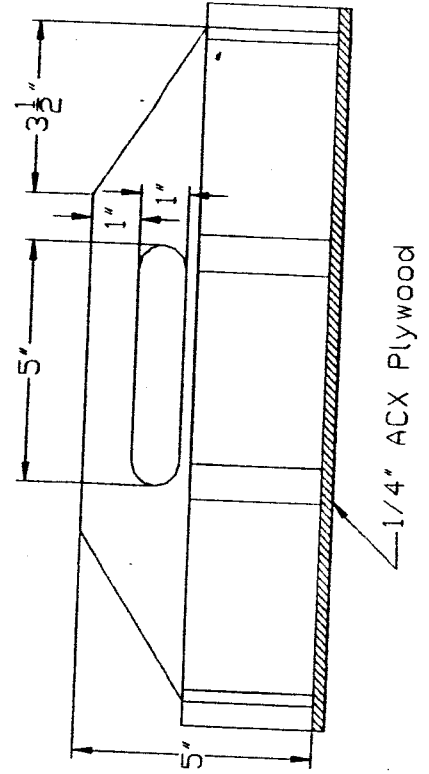
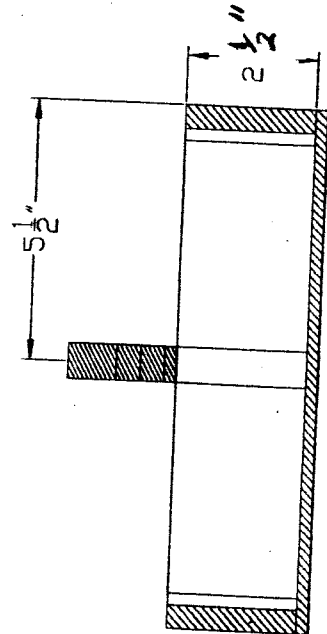
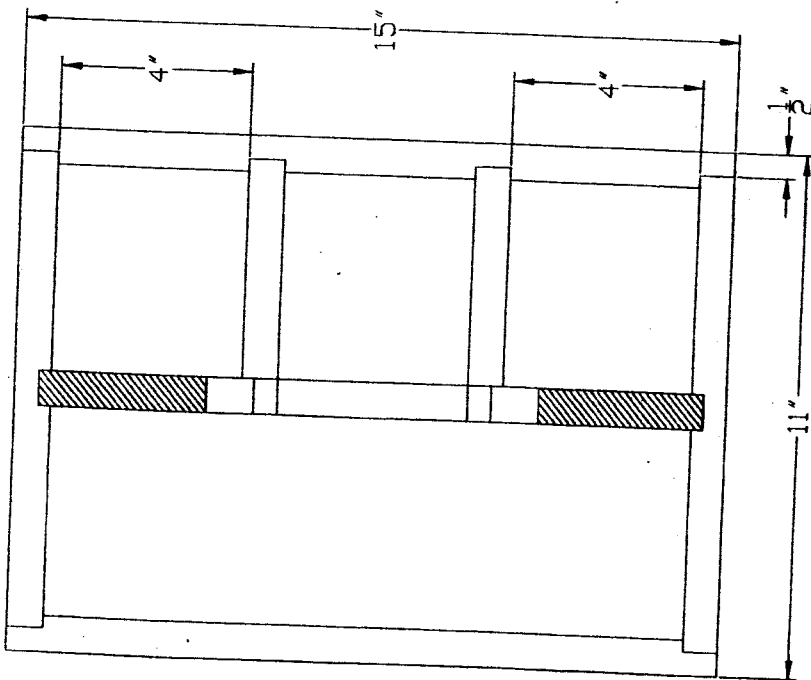
Combination square; framing square; sliding "T" bevel; carpenter's hammer; wood chisel; miter box; keyhole saw; back saw; auger bit; bit brace; twist drill; hand drill; block, smooth, jack planes; wood rasp; screw driver; sanding block; nail set; bar clamp; wood screw pilot bit.

POWER TOOLS:

Table saw, radial arm saw, jointer, saber saw, electric drill, disk/belt sander, band saw, high speed wood bit, finishing sander.

MATERIALS:

No. 2 Pine (1 x 12), 1/4 ACX plywood, #8 x 7/8" flat head wood screws, 3d, 6d nails, sandpaper, glue.



WOODWORKING PROJECT CONTINUED:

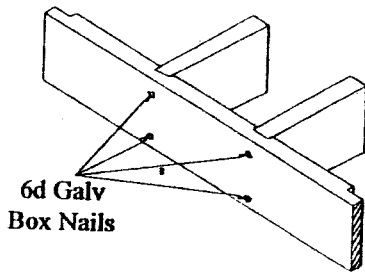
PROCEDURE:

1. Study the plans and complete a cutting list before coming to lab.
2. Obtain the materials from the instructor and carefully lay out the components to minimize wastes. Be selective and cut out loose knots in the wood. Have the instructor approve the layout.
3. Rip all pieces to width on the table saw. Use the jointer to smooth the edges of the large board between rip cuts. Put your name on the rough edge.
4. Cut the side and end pieces to exact length on the large radial arm saw. Do not cut the nail box handle and short dividers to exact length at this point.
5. Check the ends for squareness with a combination square.
6. Lay out the dado and rabbet joints 1/4" deep and 3/4" wide. Have the instructor check the layout before cutting.
7. Cut the dado and rabbet joints with the radial arm equipped with the dado blade.
8. Check the accuracy of the dados and rabbets with a piece of 1/4" plywood for the depth and a piece of pine material for the width.
9. Briefly fit the sides and ends together. While holding the parts together with a bar clamp measure the exact length of the center divider (handle) and cut it to length. Also cut the short partitions to exact length. Number all your joints so that you consistently put the same parts together; be sure the smooth side is up. Check overall width and length against that specified on the drawing.
10. Cut the miters for the center divider (handle) with the miter box or band saw.
11. Cut the handle slot in the center divider by first drilling two 1" holes with an auger or high speed wood bit and then cutting the center out with a keyhole or saber saw.
12. Assemble the nail box using all-purpose wood glue on all joints and place proper fasteners using the assembly procedure on page 10. Check the frame for squareness with a framing square or by measuring diagonals before the glue dries. Check the squareness of the partitions with a combination square. Use bar clamps to hold the project together.
13. Cut the plywood bottom to the appropriate size using either the table saw, radial arm saw, or bandsaw.
14. Attach the bottom to the frame with glue and nails as specified.
15. Install the flathead screws as specified. A "screwmate" may be used to drill the holes and form the countersink at the same time.
16. Smooth all edges with sandpaper or a block plane.
17. Return all tools to their appropriate location. Clean your work area.
18. Submit your project for grading.

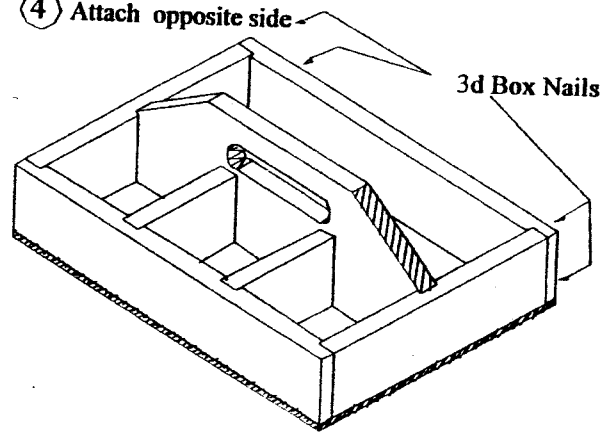
Nail Box Assembly Sequence

****Glue All Joints****
****Finished Sides & Edges Up****

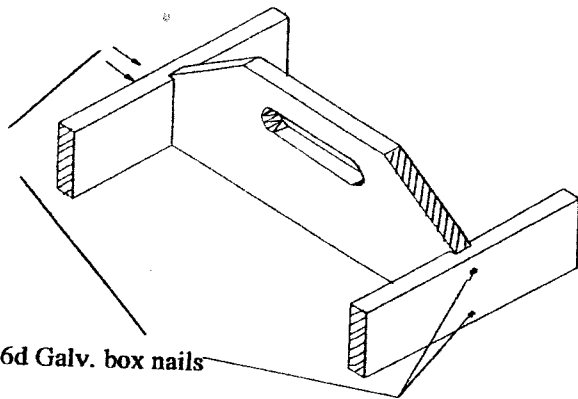
① Attach short dividers to side pieces



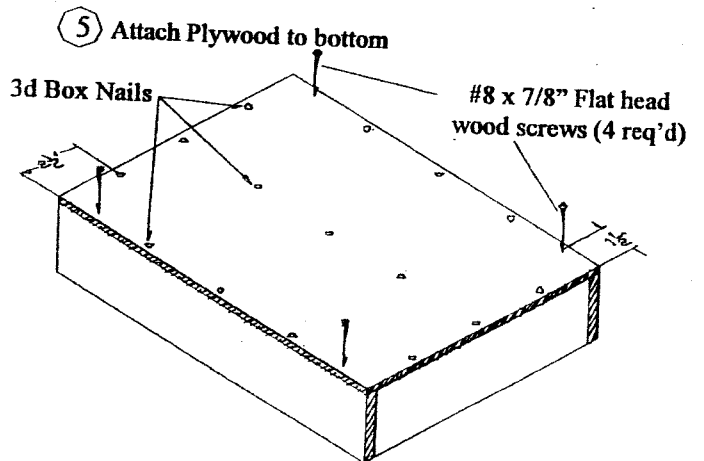
④ Attach opposite side



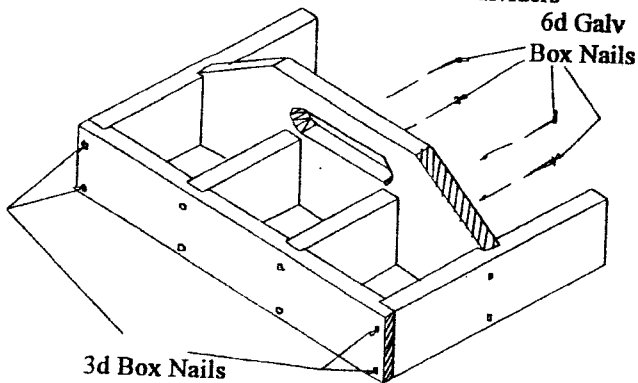
② Attach ends to center divider



⑤ Attach Plywood to bottom



③ Attach ends & handle to side & dividers



⑥ Apply final touches

