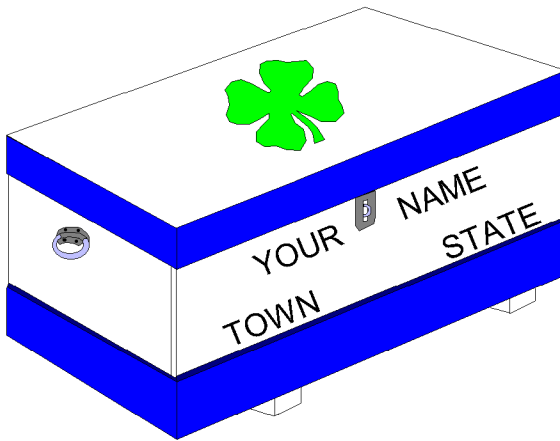


The Rhode Island 4-H Show Box



Introduction:

An essential item for the 4-H Member planning a livestock project is an Equipment Show Box. The show box provides a neat and orderly storage space for the equipment and supplies needed at local, state and regional fairs and field days. This Show Box is designed to be constructed of waterproof plywood and will provide dry watertight storage space during rainy weather.

Materials Needed:

Hardware:

- 1 pair- 4 heavy "T" hinges
- 2 each- 3-1/2" folding trunk handles
- 1 each- 3" hasp
- 1 piece light chain 24" long
- 1 box- #9 1-1/4" long flat head wood screws
- 1 box- #9 1-3/4" long flat head wood screws
- 1/2 lb- 2 penny finishing nails
- 24 each- #8 stove bolts 3/4" (attaches hinges)
- 24 each- washers
- 1 can- waterproof glue

* This manual was prepared by Lawrence J. Rondeau and has been used to make hundreds of show boxes throughout the years.

Lumber:

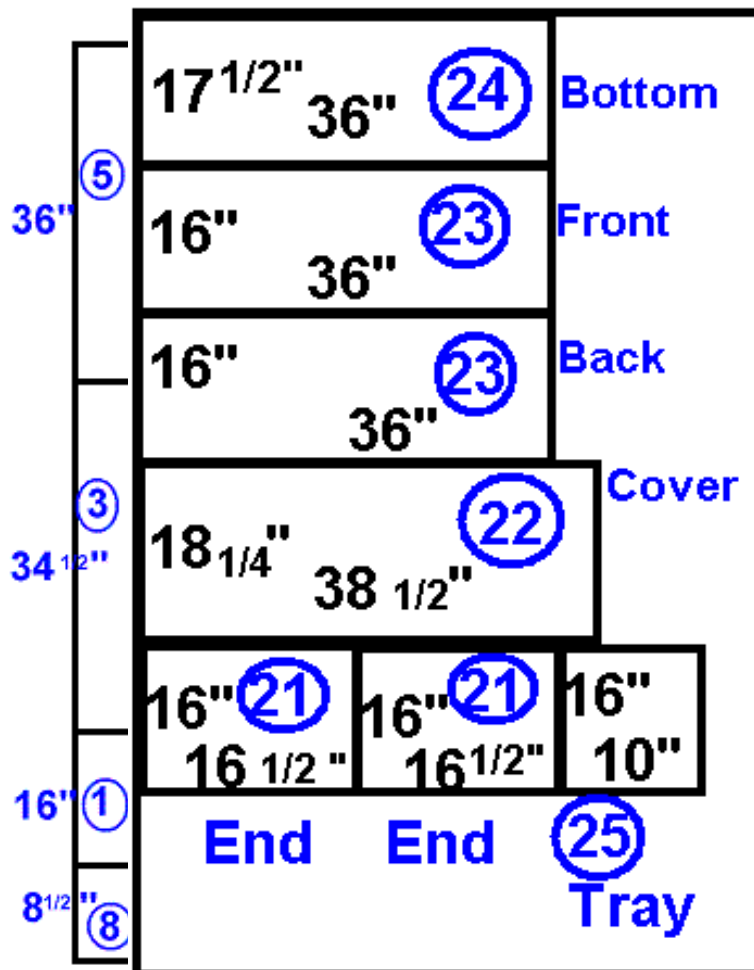
- 1-Sheet of 1/2" AC Exterior Plywood 4' X 8'
- 1-8' long, 6" wide, finished clear pine or fir
- 1-8' long, 8" wide, finished clear pine or fir
- 1-8' long, 3/4" thick, 3" wide chair rail or casing pattern molding

Finishing Materials:

- 1 Can- Plastic wood
- 1 quart- plywood sealer
- 1 quart- white enamel undercoat or sealer
- 1 quart- white enamel (outside)
- 1 can- one-half pint forest green enamel
- 1 can- one-half pint royal blue enamel

- | | | | |
|---|---|----|-------------------------------|
| 1 | 4 Pieces 2-1/2" X 16" End Side Frame | 21 | 2 Pieces 16"x16"1/2" End |
| 2 | 2 Pieces 2-1/2" X 11 1/2" End Bottom Frame | 22 | 1 Piece 18 1/4"x38 1/2" Cover |
| 3 | 2 Pieces 2-1/2"X34 1/2" Front & Back Bottom Frame | 23 | 2 Pieces 16"x36" Front & Back |
| 4 | 2 Pieces 2-1/2" X 34 1/2" Tray Slide | 24 | 1 Piece 17 1/2"x36" Bottom |
| 5 | 2 Pieces 2-1/2" X 36" Cover Front & Back Frame | 25 | 1 Piece 10"x16" Tray Bottom |
| 6 | 2 Pieces 2-1/2" X 16 Cover Side Frame | | |
| 7 | 2 Pieces 2-1/2" X 16 Tray Side | | |
| 8 | 2 Pieces 2-1/2" X 8 1/2" Tray End | | |
| 9 | 2 Pieces 2-1/2" X 16 Runners | | |

Layout of 1" Finished Lumber -----Layout of 1/2" AC Exterior Plywood



Instructions for Cutting Material and Assembly of the Show Box

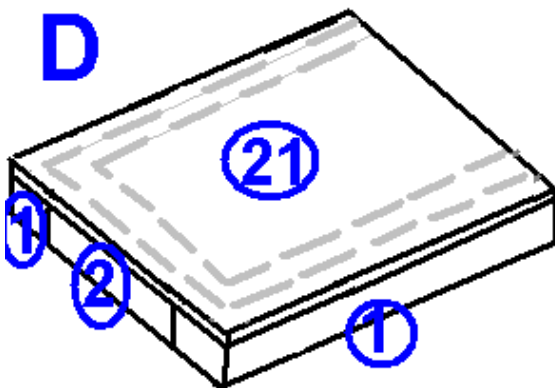
Buying:

When buying the material shown on the Material Sheet, the two pieces of pine or fir should be straight, fine grain and free of knots, holes, splits and cracks. Most lumber yards will rip cut these boards to the 2 ½" width shown. All other material is generally standard but the plywood should have sound faces or sides and free of open spaces between inner plys. Look over the plywood carefully and select the most perfect sheet available.

Layout:

Using the guide, carefully lay out the pieces on the 2 ½" strips and on the plywood. As you lay out each piece mark that piece with the same number as shown on the diagram in pencil. After all layout has been completed, check pieces to make sure all measurements are correct and are numbered. Cut these pieces and put aside for assembly.

****The plywood sheet will have two faces, one face, the "A" face or side will be free of any defects, the "C" face or side may have slight defects or imperfections. Place the "C" face up to mark out the Show Box parts and to cut.

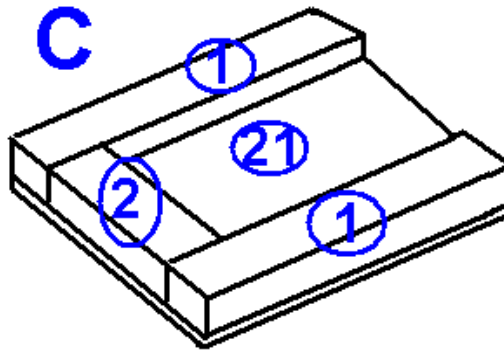


Assembly:

Step 1:

Find piece # 21 (End), 2 piece # 1's (End Side Frames) and piece # 2 (End Bottom Frame). Place #21 (End) on clean flat surface with number up. Lay sides #1 and Bottom Frames #2 on End #21 as shown in Sketch C.

Lightly trace the outline of the frames on the end and remove frames. Using a small brush, apply a thin coat of glue on Frames and on the end that you just outlined. Carefully place Side Frame #1 on End #21. Using a small hammer and the 2-penny finish nails, nail the Frame to the End using only enough nails to make a good contact between the pieces and hold them firm. Repeat the assembly with the other Side Frame and then the Bottom Frame.



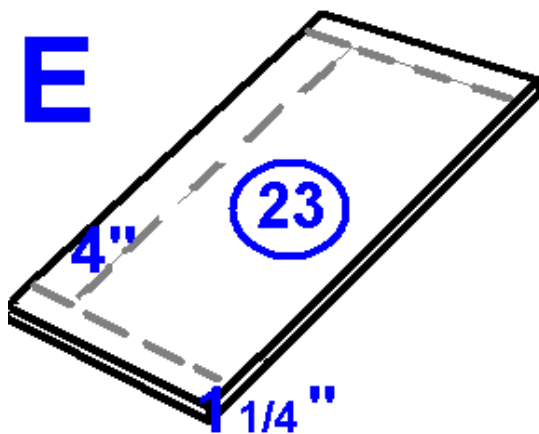
Turn End over and draw two lines as shown on Sketch D; the first line is ¾" from the edge and the second is 2" from the edge. Mark outside lines starting at the corners so spacing will be about 2" apart. Mark the inside line starting at the corner so the marks will be between the outside marks. Using the small drill; drill started holes at marks and countersink these holes. Screw the pieces together, setting heads of screws slightly below plywood surface.

Step 2:

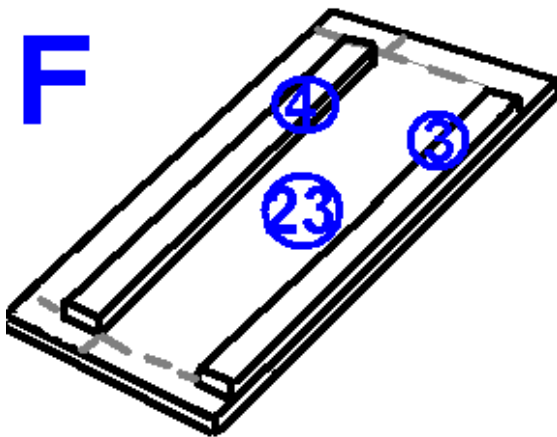
Repeat Step 1 for opposite End and put Ends out of the way.

Step 3:

To Prepare the Front #23, it is only necessary to attach the Bottom Frame #3 and Tray Slide #4. Lay the Front #23 with the Number side up; with a ruler mark off a line 1 1/4" in from each end and a line 4" down from the top, as shown on Sketch E.



After these lines are laid out, place pieces #3 and #4 as shown on Sketch F and mark outline of these pieces on Front #23.



Remove pieces #3 and #4, coat with glue; also coat the area outlined on piece #23. Carefully replace Bottom Frame #3 and Tray Slide #4, nail these pieces in place using 2-penny nails.

Turn the Front #23 over and mark off 4 lines; one line 4 3/4" down from top and one line 5 1/2" down from the top, 2" from one end mark the top line about every two inches for screw locations, mark the second line so marks are between the marks on the top line.

The next two lines are laid off 1" from the bottom and 1 3/4" from the bottom. Mark off for screws the same as described above. Drill and countersink the holes as marked and using the #9 - 1 1/4" wood screws, fasten pieces #3 and #4 to Front #23.

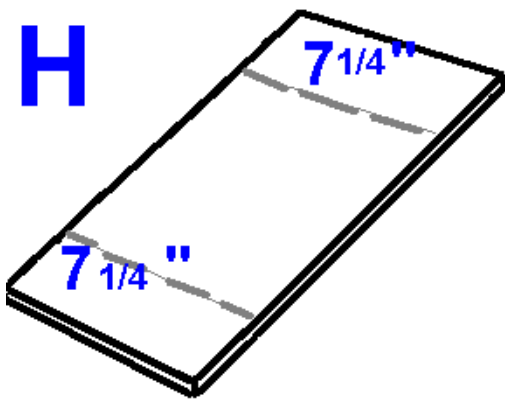
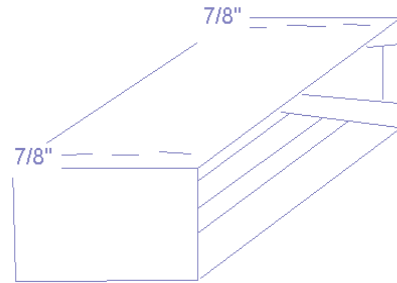
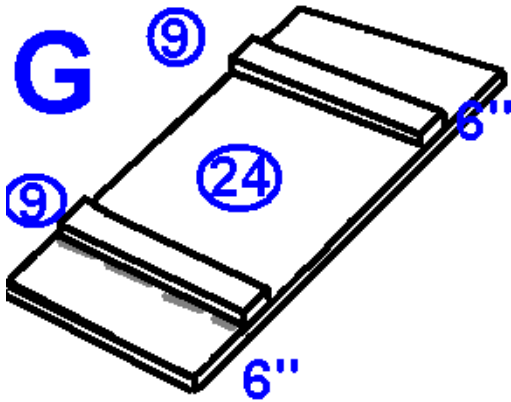
Step 4:

The Back #24 is assembled the same way as the Front #23---Follow the directions given.

Step 5:

The Bottom #24 has only the Runner #9 to be attached but this cannot be done until the Ends, Front and Back are assembled as the Bottom must be screwed to the other parts. If the Runners are installed now the screws cannot be put in under the Runners.

Even though the Runners cannot be installed yet, this is the best time to make your layout. Place the Bottom #24, number side down and mark lines 6" from each end as shown on Sketch G; Turn Bottom #24 over and mark a line 7 1/4" from each end as shown on Sketch H. Lay Bottom and Runners aside.



Step 6:

To assemble the Front #23, to Ends #21, lay out screw lines as shown on sketch J. After these lines are laid out mark for screws about 1" apart. Coat End and Side Frame that comes in contact with Front with a liberal amount of glue. Carefully place Front in position as shown on Sketch J, nail with 2 or 3 2-penny finishing nails to hold End and Front together. Drill and countersink holes and screw End and Front together using the #9 1/34" screws.

Step 7:

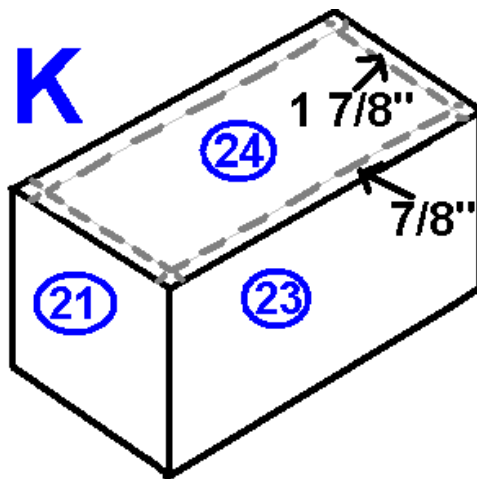
Repeat the above directions to assemble Back #24 to other End.

Step 8:

Now assemble the Front to the Back using the same method.

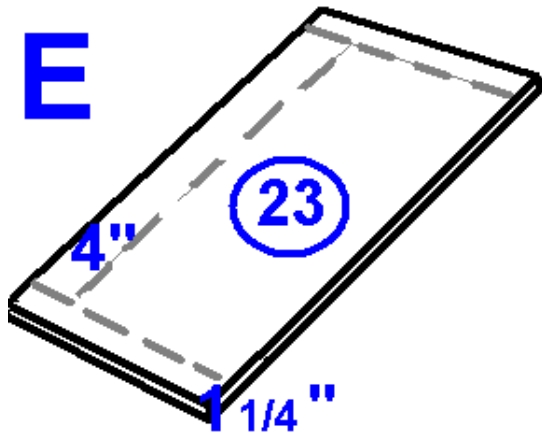
Step 9:

Turn the Box upside down; Layout screw lines as shown on Sketch K. Mark off screw locations about 1" apart, coat Front, Back, Ends and Bottom of Frames with a liberal about of glue, position as shown and nail to hold in position. Drill and countersink screw holes and using the #9 1 3/4" screws, fasten Bottom to Box.



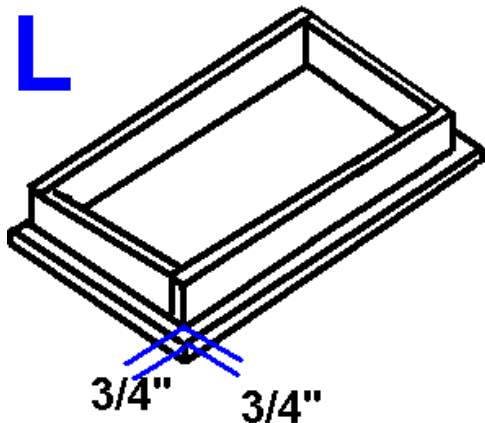
Step 10:

Position Runners on Bottom as shown on Sketch E and nail with one or two nails to hold in position. NOTE: Do not use glue on the runners; only use 4 or 5 #9 1 3/4" screws on the inside to hold: The Runners are only to protect the Show Box and are not part of the Box itself.

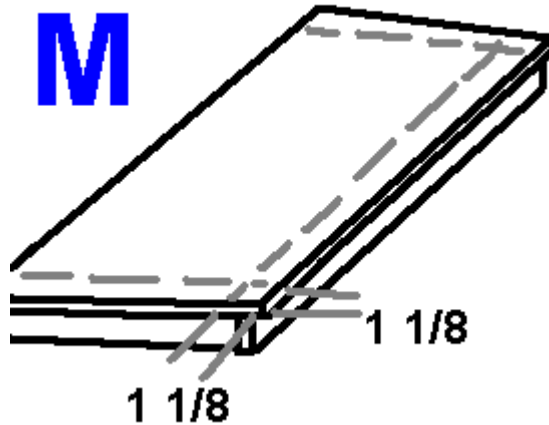


Step 11:

Place Cover #22, number side down and mark location of Cover Front and Back Frames #5 and Cover Side Frame #6 as shown on Sketch L. Also mark Frame Ends where they meet. Remove Frames, coat marked ends with glue, and nail pieces together.



Turn Cover #22 number side up and lay out and mark screw locations as shown on Sketch M. After Frame glue has dried, place on Cover #22 as shown on Sketch M. Clamp Frame to Cover to hold in position; drill and countersink screw holes. Screw parts together using #9 1 3/4" wood screws.



Step 12:

Mark center of Cover Front Frame; locate and install hasp.

Cut molding to size (front must be 36" long measured on inside of bevel end pieces 16" from bevel to end). And nail to frame using 2-penny nails. Note: There is no molding on rear of show box, and front molding must be fitted over hasp! Cut molding to size and nail to bottom of show box.

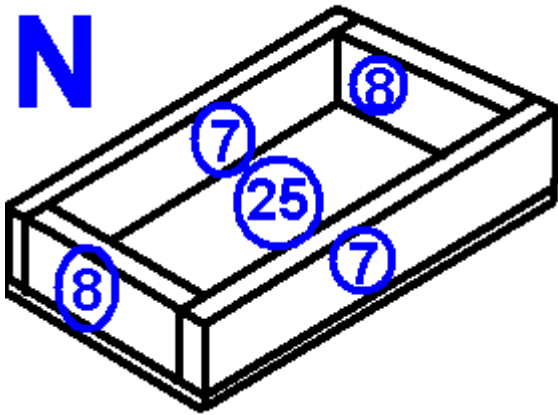
Step 13:

Using Sketch N as a guide, assemble the tray as shown. The tray can be nailed together instead of screws but parts should be glued for greater strength.

Step 14:

Locate hinges and install as shown on Sketch P. Open cover and install chain at the best place to keep the cover from opening too far.

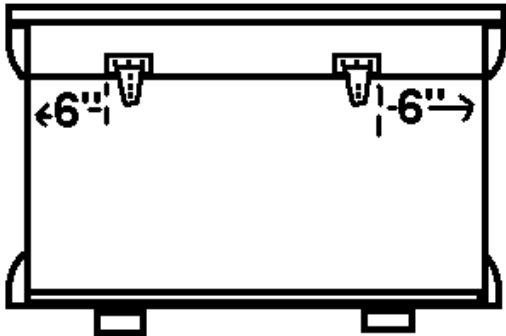
N



Apply one coat of plywood sealer, following instructions on the can, to inside and outside of box. Allow to dry completely (according to directions on can). Apply enamel undercoat or primer to entire box inside and outside.

Allow to dry, following directions on can. Sand lightly with 6/0 or 220 sandpaper. Wipe off dust. Apply white outside Enamel to box (inside and outside). Allow to dry, following directions on can. Paint top and bottom Molding, Handles and Runners dark blue enamel.

Trace the 4-H Emblem on the cover and paint with dark green enamel. Paint or stencil your Name, Town and State as shown on front of box. Allow to dry thoroughly and place your supplies inside.



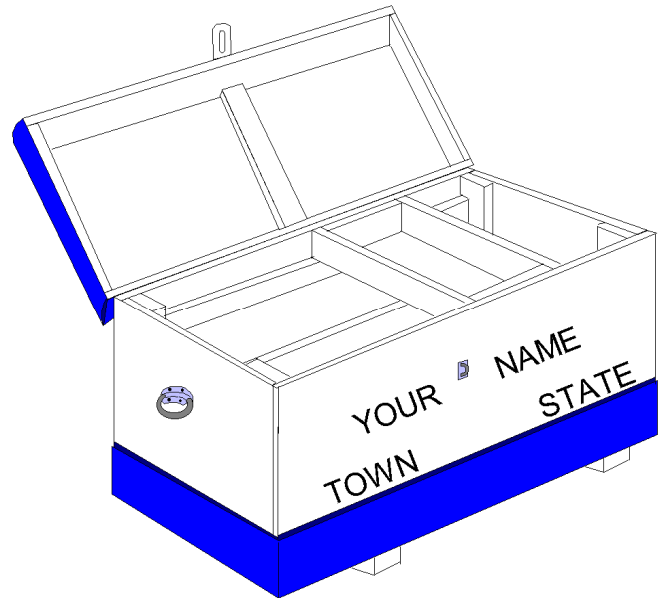
P

Final Finishing

Step 15:

Fill all holes over screw heads, small cracks at joints and any dents or scratches with Plastic Wood.

Allow to dry overnight then sand entire box smooth with 1/0 or 2/0 grade 80 or 100 grit sandpaper. Finish sanding with 6/0 grade or 220 grit sandpaper. Wipe off all dust.



Good Luck in The Show Ring!