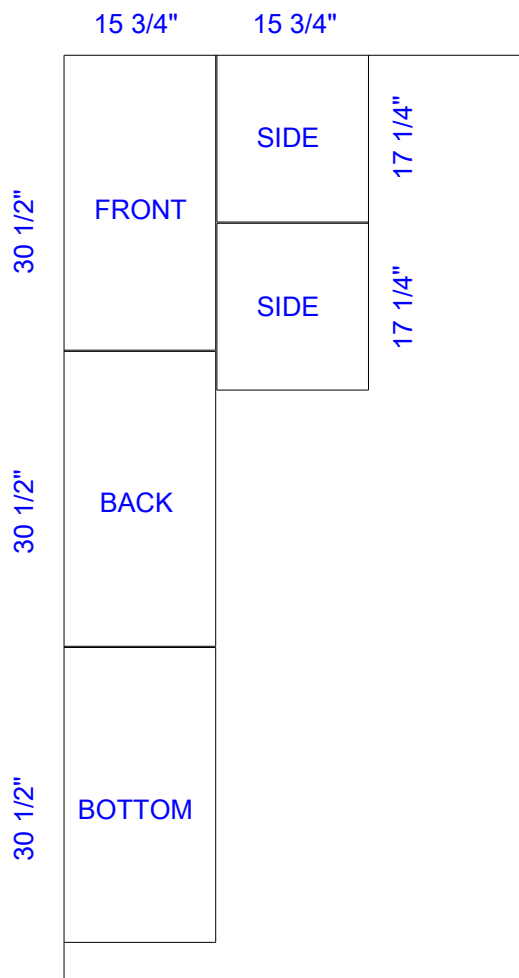


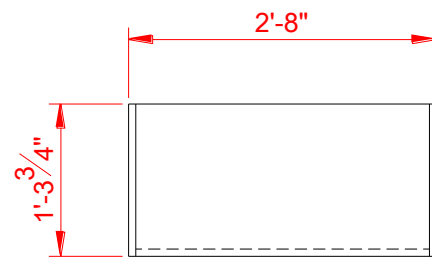
Hope Chest

Part 1: The Box

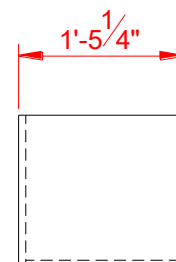
- The box is made out of a $\frac{3}{4}$ " sheet of pine veneer particle board.
- Cut out the parts for the box according to the cutting layout diagram. The layout is designed to get 2 boxes per sheet.
- Start with a partner and cut three $15\frac{3}{4}$ " strips lengthwise along the particle board using the table saw.
- Then according to the cutting layout, cut the pieces to length using the sliding compound mitre saw.
- Assemble the box according to the front and side views using $1\frac{1}{2}$ " screws. Keep screws at least 1" from the ends of the particle board to avoid splitting.



CUTTING LAYOUT



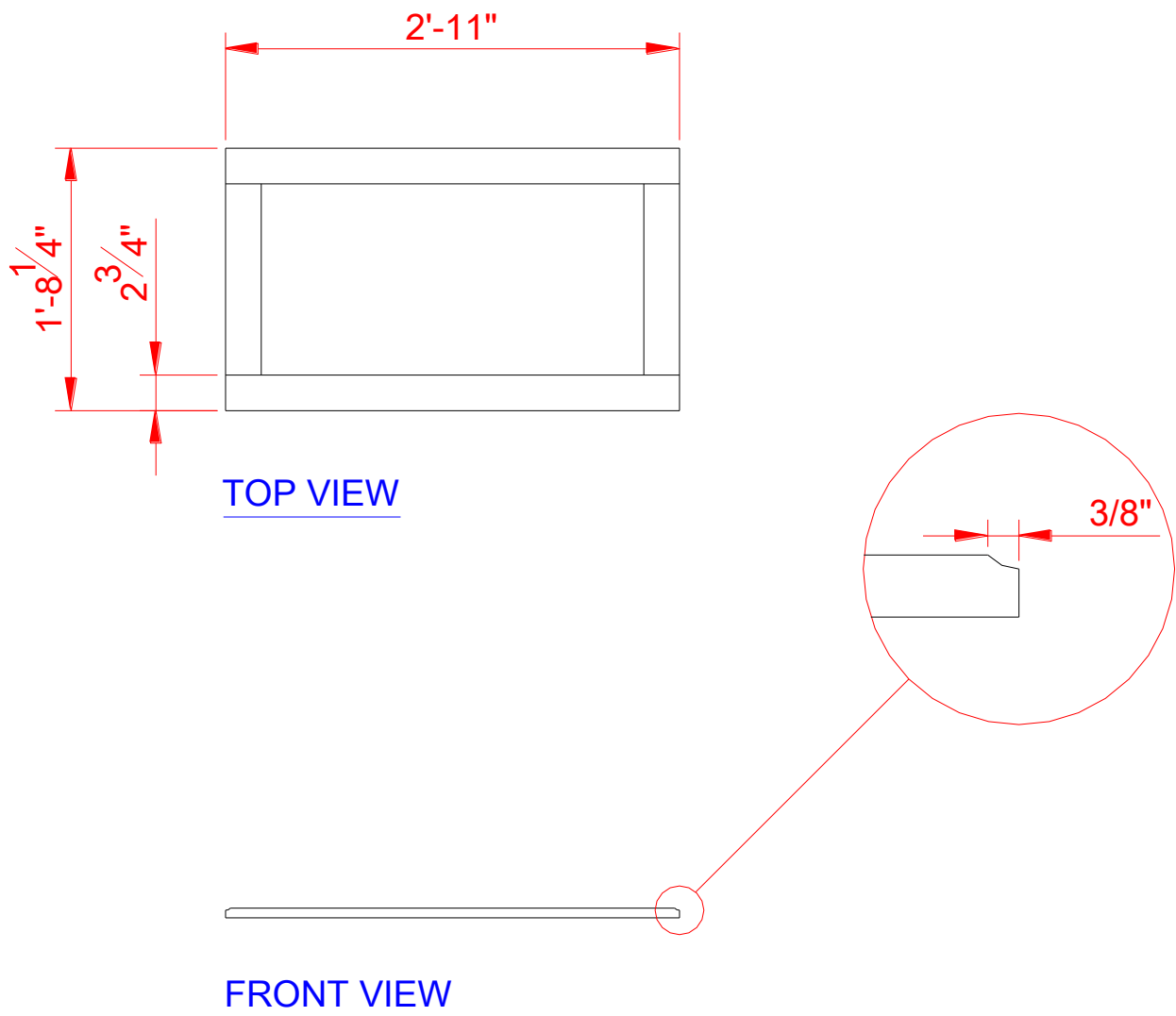
FRONT VIEW



SIDE VIEW

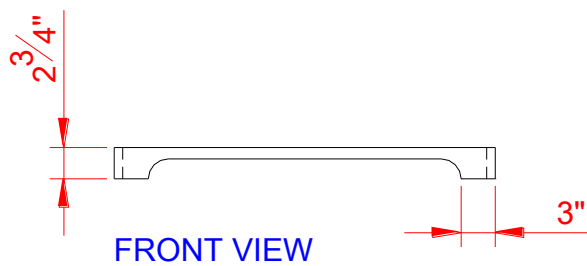
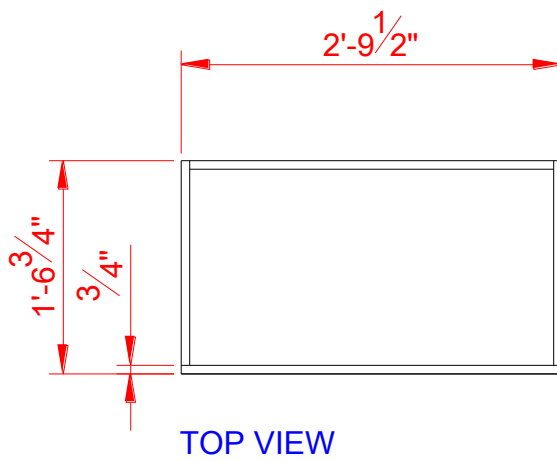
Part 2: The Web Frame

- The web frame is made from rough pine.
- Cut two pieces of pine, one at 36" and the other at 16" min.
- Mill the boards down to $\frac{3}{4}$ " thick and cut the four pieces of the web frame to size. You will get two pieces out of each board.
- Once all 4 pieces are cut to size, assemble using glue and wood biscuits. Clamp corners together using pipe clamps. Make sure the web frame and joints are square and flush. Let dry overnight.
- Sand the web frame and router the top outside edge using a 1" dia. Cove bit.



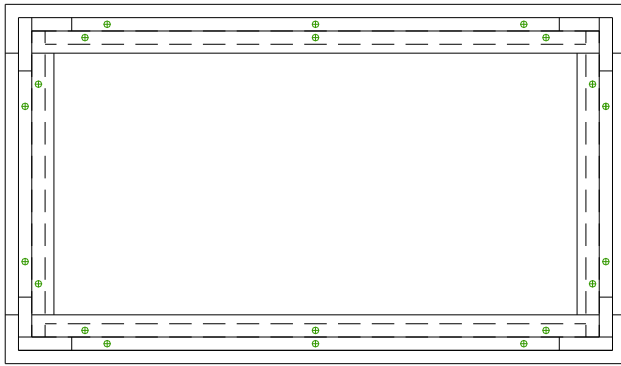
Part 3: Scalloped Base

- The base is made from rough pine.
- Cut two pieces of pine, one at 35" and the other at 19" min.
- Mill the boards down to $\frac{3}{4}$ " thick and cut the four pieces of the base to size. You will get two pieces out of each board. Note that the front and back piece aren't the same size.
- Using the scalloped base pattern, layout the design required for the base. Notice how the corners are overlapped and use the pattern accordingly.
- Cut out the scalloped edge of the base on the band saw and sand each piece.
- Assemble the pieces according to the diagram using two 1 $\frac{1}{2}$ " screws countersunk at each corner.
- Make some wood plugs and glue them in the countersunk holes.
- Chisel and sand down the plugs once they are dry.

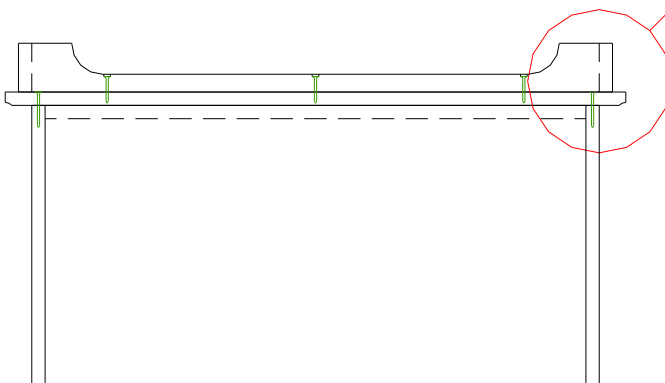
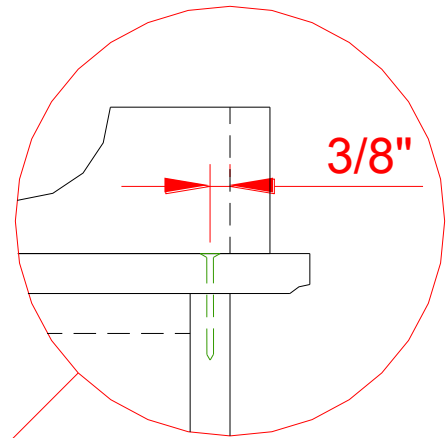


Part 4: Assemble Web Frame, Scalloped Base and Box Together

- Step 1: Center the scalloped base onto the underside of the web frame and attach using 1 ½" screws. Countersink screws so they almost go through the web frame.
- Step 2: Center the scalloped base and web frame assembly to the underside of the box and attach using 2" screws. If laid out correctly, the screws should go 3/8" from the inside of the scalloped base and line up with the center of the box panels. See detail.



UNDERSIDE VIEW

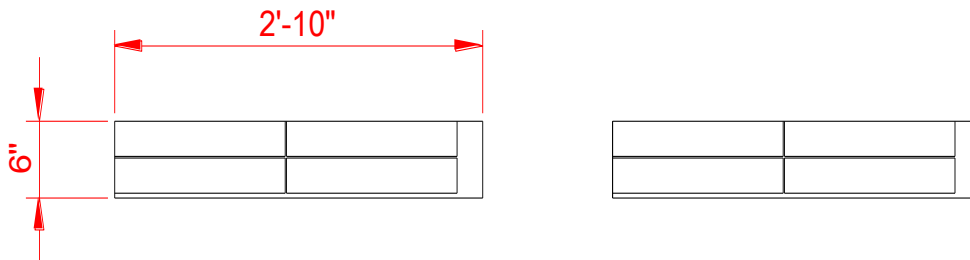


FRONT VIEW

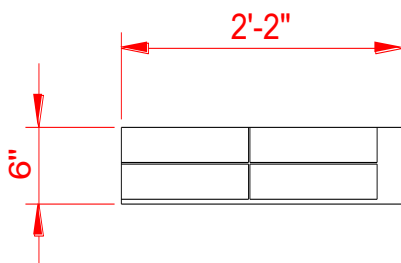
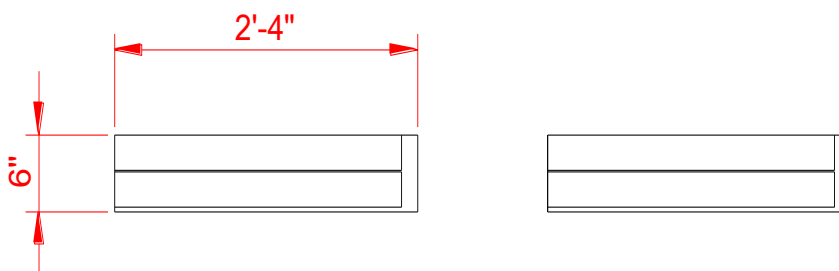
Part 5: Panel Frames

- All 4 sides of the hope chest box require a panel frame. The panel frames are made from rough pine.
- Cut 5 pieces of pine, 2pcs. 34", 2pcs. 28" and 1pc. 26" long.
- Mill the boards down to $\frac{3}{4}$ " thick and cut the pieces according to the cutting layout diagram. Note that each hope chest may be slightly different so cut pieces to fit **your** hope chest.
- Assemble the panel frames flush to the outside edges of the box and make sure all joints are tight. Clamp the frames to the box and attach with 1 $\frac{1}{4}$ " wood screws from the inside of the box.

VERTICALS: 8pcs. $\frac{3}{4}$ " x 2 $\frac{3}{4}$ " x 15 $\frac{3}{4}$ " +/-



HORIZONTALS: 4pcs. $\frac{3}{4}$ " x 2 $\frac{3}{4}$ " x 26 $\frac{1}{2}$ " +/-
4pcs. $\frac{3}{4}$ " x 2 $\frac{3}{4}$ " x 11 $\frac{3}{4}$ " +/-

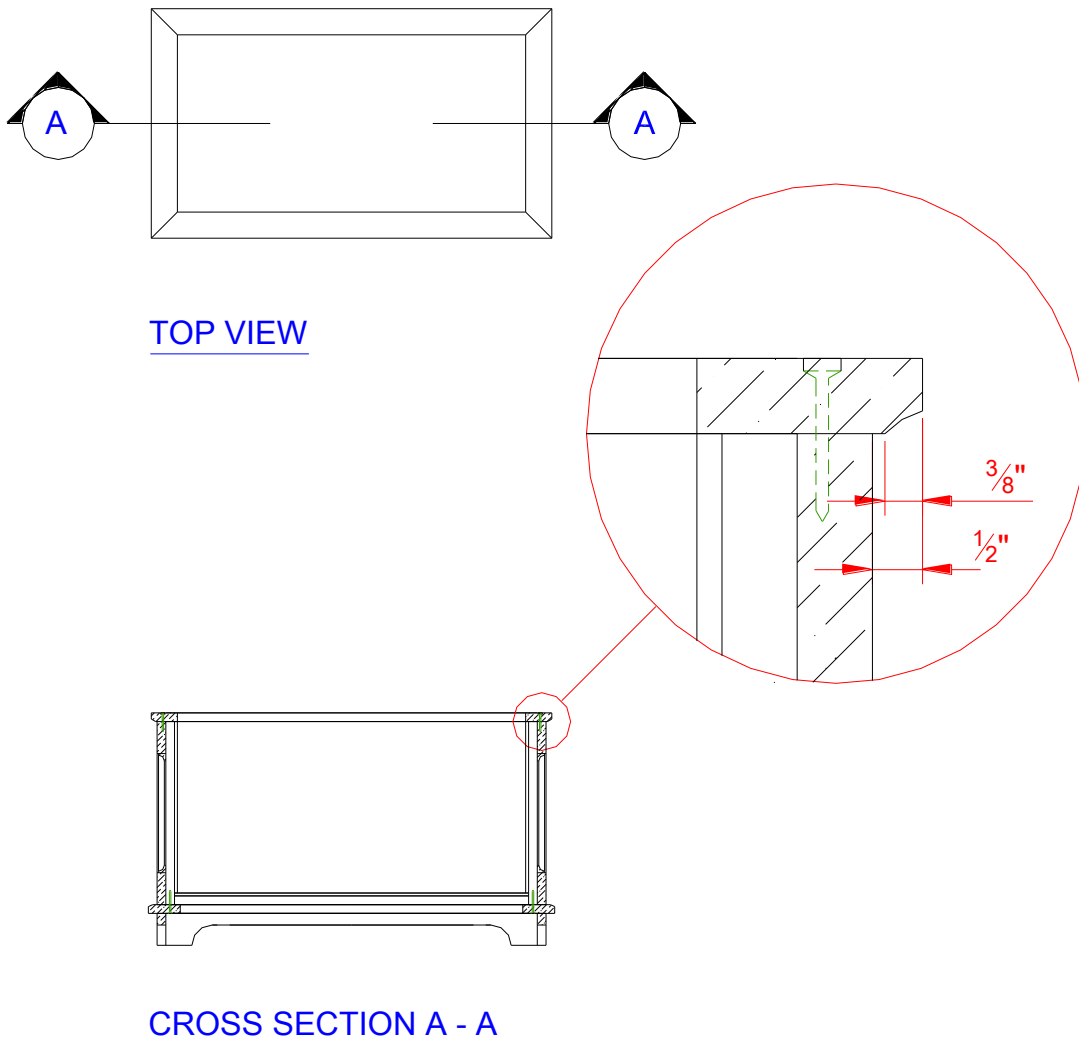


Part 6: Install Cedar lining and 5/8" Cove Moulding

- The inside of the hope chest is lined with 1/4" x 4" tongue & groove cedar.
- Run the cedar lengthwise along the bottom of the hope chest and vertically along the sides. Attach using a nail gun with 3/4" nails.
- Follow in class instructions for installation procedures.
- Install 5/8" cove moulding around the inside of each panel frame and along each outside corner. Attach using a nail gun with 3/4" nails.
- Follow in class instructions for installation procedures.

Part 7: Capping

- The capping is made from rough pine milled to $\frac{3}{4}$ " and sits along the top of the hope chest sides.
- Cut the width of the capping so the inside edge sits flush with the face of the tongue & groove cedar and the outside edge overhangs the panel frames by $\frac{1}{2}$ ".
- Router the bottom outside corner of the capping using a 1" dia. Cove bit.
- Mitre the corners of the capping making sure that when installed, the corners are tight.
- Attach the capping to the top panel frames using glue and 1 $\frac{1}{2}$ " screws. Make sure to glue mitred corners and countersink screws.
- Fill countersunk holes with wood plugs and chisel down once dry.



Part 8: The Lid

- The lid is made from rough pine milled and glued together to make a solid piece.
- Cut 4 pieces of rough pine and then mill the wood down to make 8 pieces that are $7/8"$ x $2\ 3/4"$ x $38"$
- Make sure all edges are jointed flat.
- Glue into 2 sections alternating the end grain to reduce warping.



- Once the glue is dry, scrape the glue and plane to $3/4"$ thick.
- Biscuit joint and glue the 2 sections together.
- Sand faces.
- Cut the lid on the table saw so it is $3/8"$ bigger than the capping on *ALL* sides.
- Router the top outside corner of the lid using a 1" dia. Cove bit.
- Attach the lid to the hope chest with a piano hinge and chain.
- Follow in class instructions for installation procedures.

Part 9: Lid Cleats

- The lid will require two pine cleats to add strength and keep the lid from warping.
- Cut the cleats according to the diagram. They will be $3/4"$ thick.
- Attach the cleats to in the position shown in the diagram. Use three $1\ 1/2"$ screws per cleat. Careful not to screw through the top of the lid.

