

Three layered pine box (nominal size 10w x 10h x 12l)

Bill of Materials

1x4 knotting pine-	78 inches
1x3 knotty pine	39 inches
1x10 knotty pine	12.5 inches
6mm baltic birch	11.5x8.5 inches

Tools - Table saw , Router table , Drill press, Japanese flush cut saw, orbital and palm sander, chisel

Technique - counter sink screw holes , drill through centre of width of stock , router rabbet to receive bottom , router profile on top (optional) . Make plugs if not using purchased plugs . Cutting plugs flush.

Cut list

1x4 4 - 12 inches (front and back for two layers)
1x4 4 - 7.5 inches (sides for two layers)
1x3 2 -10.5 inches (front and back for one layer)
1x3 2 - 9 inches (sides for one layer)
1x10 - 12.5 inches (top)
6 mm baltic birch (cut to size required about 11.5x 8.5 inches for bottom)

Instructions

- 1.Cut fronts/back/sides as per cutting list dimensions
- 2.Router groove to support baltic birch bottom (see picture)
- 3.Drill centre line countersunk screw hole 3/8 inch from end on each of the following pieces (see pictures)
 - bottom layer 1x4 each of the 12 inch front and back
 - middle layer 1x3 each of the 9 inch sides
 - top layer 1x4 each of the 12 inch front and back
- 4.Drill one 3/8 hole through width of second and third layers so they can be screwed to the layer below . One hole on each of front/back and two sides . You need to make sure hole on third layer is not in the same place as hole in second layer (see picture for first piece on second layer)Sand the inside surfaces of fronts/back/side with 120 grit sand paper before assembling.
- 5.Assemble the first layer. (See picture)
Screw piece (one with screw holes near end) of second layer into first layer. (see picture)
Continue with remaining pieces on that layer. Alternate method is to assemble second layer then screw into first layer
Repeat for top layer
- 6.With assembled three layers you can now cut bottom to size
Fill cracks with wood filler and sand after wood filler dries. An orbital sander with 80 grit may be required depending upon how much material is to be removed on the different layers.
- 7.Cut plugs to fill screw holes (optional as purchased plugs can be used)
Install plugs (small amount of glue) then cut/sand plugs smooth with surface of box
- 8.Finish top piece with desired profile (see picture)
Top can be routed to insert into box or hinged with a chain when open. (see pictures)
Decorate box if you wish (see pictures)

Three layered pine box (nominal size 10w x 10h x 12l)

Finishing - I have used water based varnish over the pine without stain. If stain is used a light colour is requested

Step 1 cut to size for all three layers.

Step 2 Routed front and back but not all the way across , sides routed all the way across for bottom for the bottom layer as per picture below



Step3 Counter sunk holes drilled for two of four on each layer



Three layered pine box (nominal size 10w x 10h x 12l)

First layer laid out in jig ready for assembly. Front/back pieces glued and screwed into sides



Start of second layer, align (with clamps) and screw/glued into bottom layer . Alternate method would be to assemble second layer then screw into lower level



Three layered pine box (nominal size 10w x 10h x 12l)

Three layers assembled and wood filler applied



Sanded and plugs installed



Three layered pine box (nominal size 10w x 10h x 12l)

Routed top to insert into box



Top chamfered on three sides (45 degree profile)



Three layered pine box (nominal size 10w x 10h x 12l)

Optional top with hinges/chain as opposed to insert into box



Decorative hearts added to box

