Baltic Birch Memory box (Nominal size 10w x 10h x 12l)

Overview

Tools - Table Saw , Router table , palm sander

Techniques - Rabbet Joint , Rabbet (bottom) , Dado (to support sliding top)

Bill of Materials

12 mm Baltic Birch approx 4 square feet depending upon exact size of memory box
6mm baltic birch. Approx 2 square feet depending upon exact measurements of memory box

Cut list

2 - 12.5 inches x 10.5 inches 12 mm baltic birch (front and back)
2 - 10.5 inches x 10.5 inches 12 mm baltic birch(2 sides)
6 mm baltic birch (cut to size required about 12 x 10.75 inches for bottom)
6 mm baltic birch (cut to size required about 12 x 10.75 inches for sliding top)

NOTE: There is flexibility with the exact dimensions of the memory box as opposed to using dimensional lumber which is limited by width of top (1 x 10 or 1 x12)

Instructions

1**.**Cut front/back/sides as per cutting list dimensions
2.Router rabbet on both sides of front and back (picture below)
3.Router rabbet to support baltic birch bottom on from, back and both sides (picture below)

4.Router groove to support sliding top on all four pieces. One side to be cut flush with bottom of groove to allow entry of sliding top. (Picture below)
5.Sand the inside surfaces of front/back/ 2 sides with 120 grit sand paper before assembling.

6. Assemble front, back and two sides using clamps (picture below)
7.Fill cracks which may be on some of the joints with wood filler(picture below)
8.Sand after wood filler dries
9. Decorate top (and possibly front) with desired profile (two pictures below)

Finishing -
I have used water based stain (SAMAN brand,Golden Wheat or Sesame as light coloured stains are required) on the outside of the front , back and two sides .
I have found it easier to finish (with SAMAN waterbased semi-gloss varnish) before the bottom is attached with a roller is you desire to finish the interior
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Baltic Birch Memory box
Step 1.Front, back and two sides cut to size.

Baltic Birch Memory box

Step 2 Router rabbet on sides of front and back (depth 4-6mm width12mm)

Baltic Birch Memory box

Step 3 .Router bottom of 2 sides , front and back in order to receive bottom (depth same as rabbet above (4-6 mm) width 6-7 mm to allow room for 6 mm bottom width)
You can see the piece on the left is a front or back as it has rabbet on both bottom and side. The side pieces (on right) only have routed rabbet on bottom.

Baltic Birch Memory box

Step 4 .Dados (grooves)to receive the sliding top are cut at the top of each of the four sides of the box . On one side the groove is removed by trimming flush with the bottom of the groove. This allows entry of the sliding top .
Grooves can be cut with router (1/4 inch bit) or on table saw. Dado gives more control over width with use of shims to ensure better fit but easier to use router bit.

You can see routing on all four sides of the front (and back) .
Two on each side to receive the adjacent side
One of the bottom to receive the bottom 6 mm baltic birch and grove at the top to receive the 6 mm Baltic birch sliding top.

Baltic Birch Memory box

Step 6.Clamping the front, back and two sides. Note racoon paw print on box. This end is the one where the top enters into the slots. There is a jig (at bottom) to allow easy assembly and clamping .

Here you can see the one side has been cut flush with the bottom of the grove as this permits entry of the sliding top

Baltic Birch Memory box

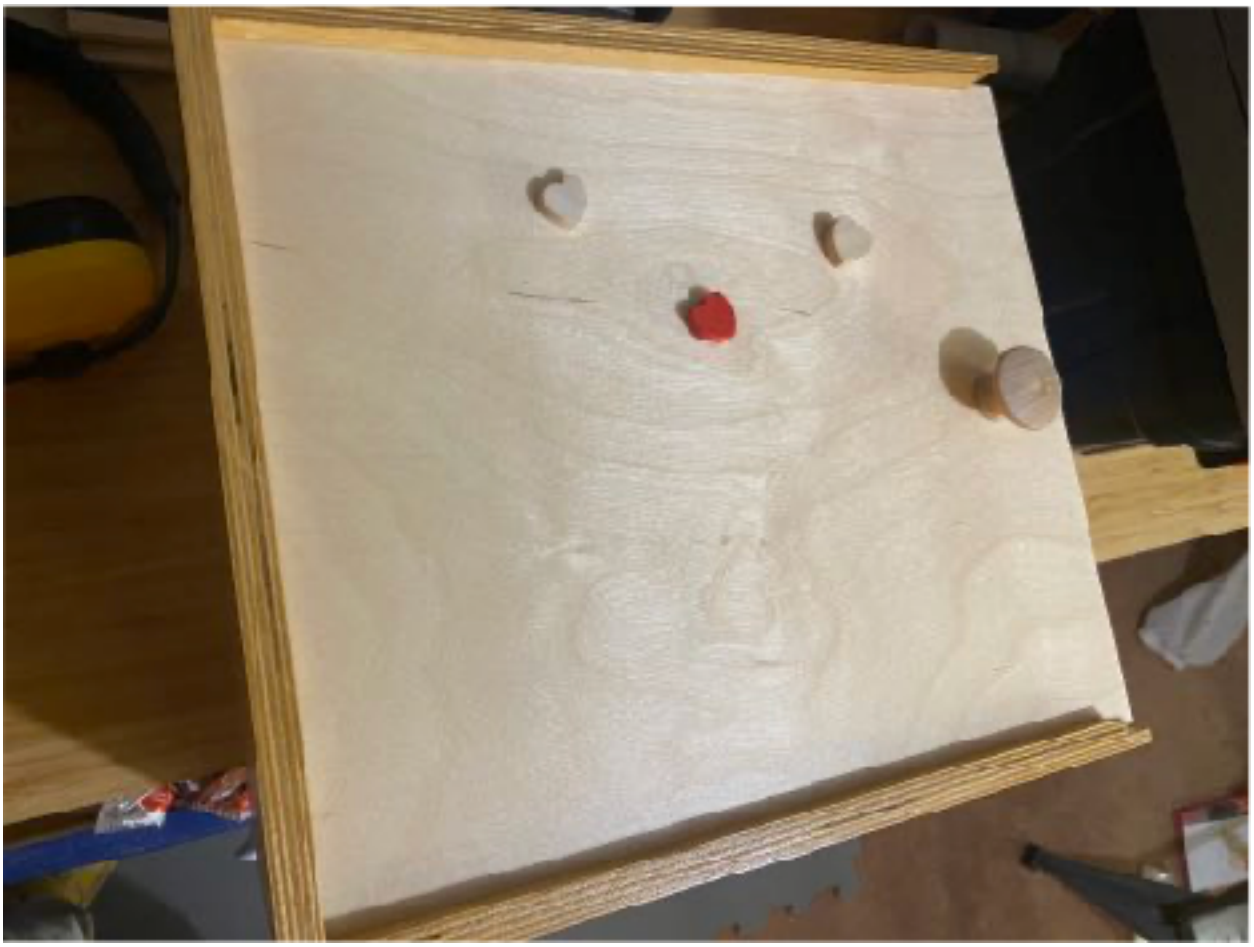
The assembled box ,minus top and bottom. Again you can see opening for insertion of the sliding top.

Baltic Birch Memory box

Step 7.Wood filler for some of the joints may be required and then sanded down prior to finishing

Baltic Birch Memory box

Top view of box showing decorative hearts and knob for opening and closing



Baltic Birch Memory box

A different baltic birch memory box with large heart instead of knob for sliding open the top. Note that I do not stain top or bottom.