

RYOBI

COFFEE TABLE: SILVER LEVEL





PROJECT CENTRE

SILVER LEVEL

Coffee Table

CUTTING LIST

Item	Material	Size h x w (mm)	No.	Edge
Sides	17mm Jarrah veneered MDF	320 x 295	4	4 Sides
Top & Bottom	17mm Jarrah veneered MDF	566 x 295	4	2 long
Upper Top	17mm Jarrah veneered MDF	1195 x 595	1	4 Sides
Lower Top	17mm Jarrah veneered MDF	1195 x 595	1	4 Sides
Stand-offs	Aluminium tube	65 x 25 x 25	8	
Shelf		1190 x 564 x 10	1	Polished

MATERIAL LIST AND COSTING

Material	Size (mm)	No.	Unit Cost	Total Cost
Jarrah veneered board	2400 x 1200 x 17	1	\$140.00	\$140.00
Aluminium	600 x 25 x 25	1	\$5.02	\$5.02
Toughened glass	1190 x 564	1	\$187.00	\$187.00
Brass connector bolts	M6 x 100	8	\$0.71	\$5.74
Threaded inserts	M6 x 20	8	\$0.99	\$7.94
Biscuits	No. 20	16	\$7.60 (pkt 50)	\$7.60
Shelf supports	5mm	8	\$1.26 (pkt 12)	\$1.26
End caps	25 x 25	16	\$0.47	\$7.52
Particleboard screws	28 x 8g		\$7.20	\$7.20
Feet	60mm	4	\$4.90	\$19.60

TOOL LIST

- Cordless Drill / Driver
- 5, 6 & 9mm Drill Bits
- Combination square
- Biscuit joiner
- Tape measure / rule
- 4mm allen key
- Router / 10mm straight bit
- Tape measure
- 600mm clamps
- Random orbit sander
- 600mm clamps
- PPE Personal Protection Equipment

INTRODUCTION

The material I used for this stylish contemporary coffee table was 17mm jarrah veneered MDF and was professionally finished with a two-pack clear satin polyurethane. Veneer board is generally supplied with a face side (best face) and a downgraded back (inside face). Accurately cutting veneered board, or any sheet material for that matter, is best left to experts. Large dedicated panel saws with a scribing blade are used to produce multiple, accurately cut, chip-free pieces in no time at all. I strongly recommend that you contact your local cut-to-size specialist or cabinetmaker to assist you. They may also be able to do the edging for you. A few extra bucks spent here will have you well on your way to producing your very own stylish lounge room addition. **Approx \$350**

STEP-BY-STEP INSTRUCTIONS

1.



Marking out ends

Pre-sand all internal faces with 180-grit fitted to the random orbit sander. Lay both ends face-to-face, ensuring all edges are flush. Label the top edges and measure down 160mm and square this position down the front edge with a combination square.

2.



Shelf support holes

Lay open both ends with inside faces up and front edges facing you. Square the shelf positions across the face. Set your combination square to 40mm and mark the intersecting points both at the front and back edges.

3.



Drill holes

Use a small nail and hammer to centre punch the hole positions before drilling 5mm holes to a depth of 10mm. Tip: Use masking tape around the drill bit to act as a depth stop and prevent undue stress caused by drilling through the face!

4.



Machining ends

Clamp the end pieces securely in the vice, with the inside face facing you. Machine two #20 biscuit slots at the top and bottom. The biscuit slot positions may be measured or, alternatively, position the biscuit machine flush with the edges of the board.

5.



Machining top and bottom

Clamp the top piece securely to the bench with the face side (best face) up and machine two corresponding #20 biscuit slots in each end. Repeat this process for the bottom piece, also with the face side up.

6.



Gluing up

Apply yellow PVA glue to the biscuit slots and the edges of the top and bottom, then spread with a small brush. Tip: Keep the glue towards the outer edges to prevent squeeze-out on the inside of the box. Clamp securely, using scrap pieces of timber to avoid bruising the surface.

7.



Create a shadowline

Fit a 10mm straight cutter and parallel fence to the router and adjust to create an 8mm wide and 3mm deep rebate. Securely clamp the upper top to the bench with the face side (best face) down. Follow good routing practices and work in an anti-clockwise direction.

8.



Building up the top

Lay the lower top over the upper, with the face side up. Ensure all edges are flush then clamp securely. Drill six 5mm clearance holes (corners and mid points) through the lower top only (use masking tape as a depth guide for safety). Attach with 28mm x 8 gauge particleboard screws.

9.



Marking out connector holes

Position jig (see box out) on each corner of the top, ensuring the stops are pushed firmly against the edges, then strike the nail to mark the hole positions. Repeat this process on the top corners of the cabinets and drill a 6mm hole through the cabinets only. Sand outside faces of cabinets.

10.



Threaded inserts

Drill a 9mm hole to a depth of 20mm (don't forget the masking tape trick) in the underside of the top at the positions marked by the jig. Use an allen key to screw in threaded inserts until flush with the surface. Sand the underside of the top with random orbit and 180-grit disc.

11.



Prepare for stand off

Cut the aluminium square section (see safety note) to length and knock in end caps. Clamp securely in vice, mark the diagonals and drill a 6mm hole in each end. Clean off plastic waste from around the hole. Repeat this process for all eight pieces.

12.



Assembly

Begin with the cabinets right way up and insert connector bolts from top's underside, slide stand-off over the bolts. Flip cabinet over and align the bolts with threaded inserts. Start each thread by hand before tightening with allen key. Attach the feet to the underside, centrally positioned between the stand-offs and 60mm in from the side faces.

13.



Box out Accurately measuring and marking out the positions of the stand-offs is a critical step — well actually it's eight critical steps (two for each cabinet and four for the top) — to the overall appearance of this project. However, making a simple jig from an offcut of MDF and pine will eliminate at least seven of those steps. The marking out will only have to be done once, and the good news is, if you are slightly out, it won't matter because the holes will all be slightly out. So in this rare case, two wrongs DO make a right!

14.



Safely cutting aluminium

Set up a stop on the drop saw to make accurate repetitive cuts. When cutting the aluminium stand-offs, ensure the piece is securely held in position with a clamp. This is definitely NO place for your fingers!

