RYOBI

FRAME: BRONZE LEVEL

Frame

CUTTING LIST

Item	Material	Size L x W x T	No.
Top & bottom	Maple	1122 x 60 x 30	2
Sides	Maple	820 x 60 x 30	2
Backing	MDF	1018 x 715 x 6	1
Glass		1000 x 700 x 4	1

MATERIAL LIST AND COSTING

Material	Size (mm)	No.	Unit Cost	Total $
Maple	2400 x 60 x 30	2	$17.52	$35.04
Glass	1000 x 700 x 4	1	$55.00	$55.00
MDF	1200 x 900 x 6	1	$6.50	$6.50
Biscuits	No 20	50 pkt	$7.20	$7.20
Framing tape	Roll	1	$12.00	$12.00
Hanging Kit		1	$4.50	$4.50

TOOL LIST

- PPE
- Mitre saw
- Router
- Trimmer
- Biscuit machine
- Random orbit sander
- 12mm straight cutter
- Combination square
- Tape measure
- Framing clamp/stringline & blocks

INTRODUCTION

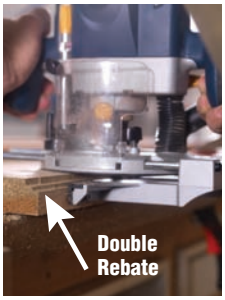
This simple but modern-looking frame starts out with just one length of standard section size timber. Here I have used Pacific maple, also known as meranti. Other species may be substituted to suit your own requirements. A double rebate is machined along the back inside edge to house the glass and the backing board. A chamfer is also machined to decorate the edge and lead the eye in towards your favourite artwork or print.

STEP-BY-STEP INSTRUCTIONS

1.

Backing rebate
Set up your router with a 12mm straight cutter to a depth of 6mm. Adjust the guide fence to a width of 12mm. Clamp the frame material securely to the bench and rout the first stage of the rebate on one long edge of each piece. Note: Push the router in a clockwise direction, or away from you if you're standing behind the router.

2.



Glass rebate
Re-adjust your router to cut to a depth of 10mm and the guide fence to a width of 6mm. Tip: Always make a trial cut on a piece of scrap material with the same dimensions before you tackle the real deal.

3.

Chamfer
A "chamfer" is a term we use in the trade that refers to a corner angled to 45°. This can be done by hand with a planer or, as shown here, I have used a chamfering bit in a trimmer and set the depth of cut to 8mm. Chamfer one long edge of each piece next to the rebates.

4.

Mitre cuts
Another trade term for you is a "mitre" – an angle cut at 45°. Two mitres will produce a 90°, or square, corner. Adjust your mitre saw to 45° and, with the material face down and the rebates facing you, cut the mitre. The rebates are the inside (or short side) of the frame.

5.

Biscuit slots
Mark the centre position of the mitred cut. Set your biscuit machine depth to suit #20 biscuits. Line up the centre line of the machine with the centre mark on your frame and cut one slot in each mitred cut.

6.

Gluing up
Apply yellow PVA in the biscuit slot and insert the biscuit, ensuring it is centred. Spread an even coat of glue over the surface and the biscuit. Tip: Apply glue to both surfaces, as end grain has a tendency to soak up the adhesive, consequently producing a dry, weak joint.

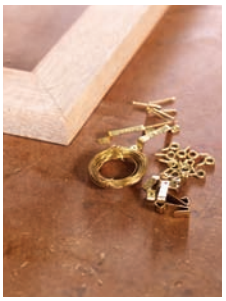
7.

Clamping
A number of methods can be used, including pipe or sash clamps, string and block (see next step) or my preferred method, as shown here, a framing clamp. Check frame for square by measuring diagonals and make necessary adjustments until measurements are equal.

8.

Alternate clamping method
An ol' favourite of mine is the string and block method. Tie off a piece of string tightly around the assembled frame. Insert scrap blocks at each corner. To tighten the joint, slide the blocks towards the mitre until the joint is nice and tight. Check for square and allow to dry.

9.



Finishing off.
Sand the face of the frame with 180-grit paper in the random orbit sander, and by hand on the edges and chamfer. Apply one coat of stain (jarrah in this case) and three coats of clear finish. Insert the glass, print and backing. Secure with tape and attach hanging clips.