

RYOBI

WORK BENCH: SILVER LEVEL





PROJECT CENTRE

SILVER LEVEL

Work Bench

CUTTING LIST

Item	Material	Size H x W x T	No.	Edge 5mm radius
Sides	BB hoop pine plywood	1800 x 295 x 17	2	1Long
Top	BB hoop pine plywood	766 x 290 x 17	1	1Long
Bottom	BB hoop pine plywood	766 x 290 x 17	1	1Long
Shelf	BB hoop pine plywood	766 x 290 x 17	1	1Long
		766 x 225 x 17	2	1Long
Division	BB hoop pine plywood	600 x 285 x 17	2	1Long
Adjustable Shelf	BB hoop pine plywood	372 x 280 x 17	1	1Long
Base	BB hoop pine plywood	766 x 75 x 17	1	1Long
Back	BB hoop pine plywood	1800 x 800 x 17	1	
Tool Well				
Sides & Division	Radiata Pine	167 x 66 x 18	3	
Front & back	Radiata Pine	766 x 66 x 18	2	
Bottom	CD plywood	766 x 203 x 12	1	
WorkBench				
Rails	Radiata Pine	762 x 42 x 18	2	
		564 x 42 x 18	3	
Top & bottom	CD plywood	762 x 600 x 12	2	4 Sides
Legs	Pine	730 x 42 x 42	2	4 Sides

MATERIAL LIST AND COSTING

Material	Size (mm)	No.	Unit Cost	Total Cost
BB hoop pine plywood	2400 x 1200 x 17	2	\$130.00	\$260.00
CD plywood	900 x 600 x 12	2	\$14.04	\$28.08
Radiata pine	2400 x 66 x 19	1	\$5.00	\$5.00
	3600 x 42 x 19	1	\$5.00	\$5.00
	1800 x 42 x 42	1	\$9.18	\$9.18
Pegboard	900 x 600 x 4	1	\$28.00	\$28.00
Bolt - set screw	3/8 x 2 inch	2	\$1.25	\$2.50
T-nut	3/8 inch whitworth	Pkt 4	\$2.70	\$2.70
Furniture glides	3/8 x 1.5 inch	Pkt 2	\$7.50	\$7.50
Leg plates	3/8 inch whitworth	2	\$2.60	\$5.20
Washers	3/8 inch	4	\$0.20	\$0.80
Furniture studs	3/8 inch	Pkt 4	\$2.88	\$2.88
Particleboard screws	50mm x 8g	100	\$8.75	\$8.75
Shelf supports	5mm diameter	Pkt 12	\$1.26	\$1.26

TOOL LIST

- PPE
- Cordless drill
- Tape measure
- Try/combo square
- Random orbit sander
- Router
- Drill bits 3, 5, 7, 9 and 11mm
- Hammer
- Spanner or adjustable wrench

INTRODUCTION

Have you ever thought how nice it would be to have sturdy workbench to enjoy your favorite pastime, but never had the room in your garage? Well stand by – this unit may just be the answer! This fold-away bench is constructed from 17mm BB hoop pine plywood (the 'BB' refers to the face finish - 'B' grade on both sides). More commonly available and less expensive plywood on the market is 'CD' ie: C grade on one face and D grade on the other. In my opinion, the extra cost of BB is certainly justified. Sheets are available in 2400 x 1200 and can be cut using your circular saw and straightedge or, alternatively, for a few extra bucks you could have it professionally cut. The storage ideas are really only limited to your imagination and personal requirements, and modifications can be easily made to suit those. For example, screwing the lid of a glass jar (use two screws) to the underside of the shelf makes the perfect spot to store those screws or nails that you know you have but can never seem to find! **Approx \$370**

STEP-BY-STEP INSTRUCTIONS

1.



Marking out

Lay both sides flat on bench with inner faces together and all edges flush. Mark out shelf positions (see diagram 1) on the top face before squaring down both front edges. Round over the front edges of sides and shelves with a 5mm rounding over bit fitted to your router.

2.



Pilot holes

Lay open the ends and square the layout lines from the front edges across the inside face and drill three 5mm clearance holes for each shelf. When drilling holes be aware of the overall individual width of the shelves as they do vary.

3.



Tool well

Glue and screw the tool well with two 50mm x 8g screws through each side into the end. Drill a 5mm clearance hole and 3mm pilot hole. Turn over and attach plywood bottom by gluing and screwing.

4.



Assembly

Begin by screwing and gluing through the sides into the shelves. Hold shelf accurately in position on the pre-marked pencil line. Drill a 3mm pilot hole into the ends of the shelves and attach with 50mm x 8g screws.

5.



Dividing up

Measure and mark a pencil line to position the division in the centre of the shelves. Secure with three 50mm x 8g screws. Turn cabinet over and attach back with 50mm x 8g screws spaced approximately 300mm.

6.



Feeling peckish

The workbench achieves its stability by using a construction method known “sandwich panel”. The upper and lower pieces of plywood are the bread and the 42 x 19 frame is the filling, if you like. Glue and nail or screw the frame together before using the same technique for the plywood.

7.



Pivot point

Measure and mark a centre line 33mm in from both the cabinet outer edge and the face of the bench. Drill an 11mm hole through the frame. Repeat this process for the opposite side, ensuring your measurements are taken from the same outer edge. Knock in the T-nut with a hammer.

8.



Leg plates

Measure and mark the centre position of the leg plates 100mm in from both front and sides. Drill an 11mm hole through one layer of plywood and screw on the plate, ensuring the threaded centre hole of the plate is accurately aligned with the hole in the plywood.

9.



Swinging bench

Push the bolt through a washer and insert both through the 9mm pivot hole in the side. Align with T-nut before screwing in place. Tip: If the bench is slightly loose and has sideways play inserting a washer between the bench and T-nut will solve the problem.

10.



Storage ideas

Drill four 5mm holes to accommodate the shelf supports. This may be in the centre position or an alternate one, depending on your own requirements. Screw the pegboard to two 19mm spacer blocks positioned behind it. Attach tool holder with 32mm x 8g screws.

11.



Height Adjustment

In one end of each leg draw an 'x' from corner to corner to locate the centre point. Then carefully drill an 11mm hole approximately 50mm deep. Screw a nut onto the thread of the furniture glide to act as a lock nut before screwing the adjustable foot assembly into the T-nut.

12.



Wooden leg

The other ends of the legs require an accurately drilled 7mm hole to accept a threaded furniture stud. Thread a nut onto the machined thread as far as it will go and use a spanner to thread the other end into the end of the leg. Remove the nut.

