

#### Material



- 1. MDF (Medium Density Fibreboard)
- 2. Dowels (Diameter 1 cm)
- 3. Sandpapers
- 4. PVAc Glue
- 5. Ruler / Tape Measure
- 6. Paint
- 7. Brush
- 8. Thinner
- 9. Melamine Sanding

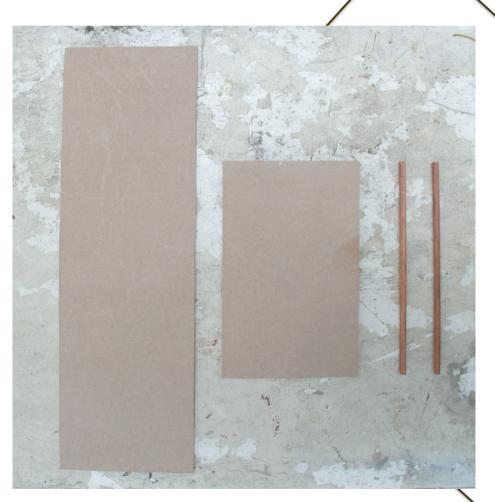


- Drill (Size : 1cm)
- Jigsaw
   Regular Saw
- 4. Screw Saw



Tools

#### 1. Measure the Parts

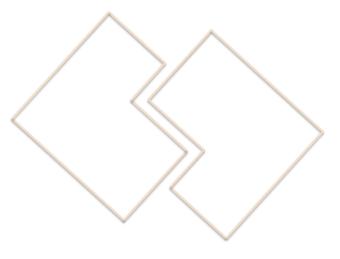


Determine the measurements for the shelf and don't forget to factor in the width of the saw blade.

There are 6 parts of MDF on this shelf:

- 1. 26 x 20 cm
- 2. 22 x 20 cm
- 3. 17 x 20 cm
- 4. 22 x 20 cm
- 5. 42 x 20 cm
- 6. 43 x 20 cm

And 6 parts of Dowel: every cut is 25 cm



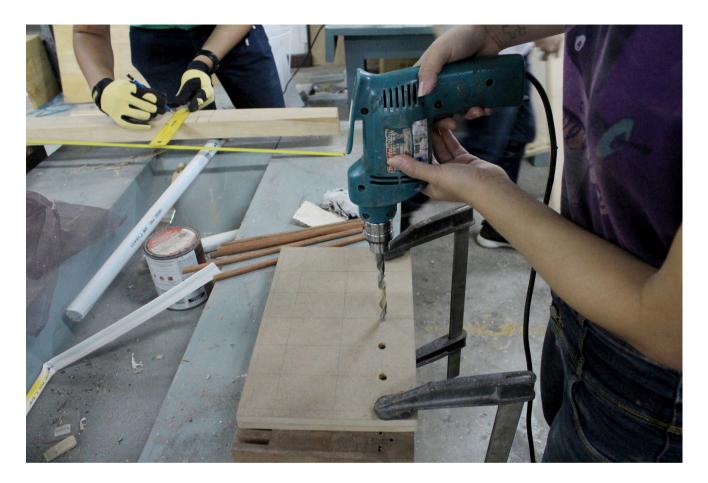




You can either use the jig saw or regular saw but make sure you placed the MDF in table or bench to support and balance the MDF.

After you cut all the parts, use sandpaper to make the surface smoother and even.

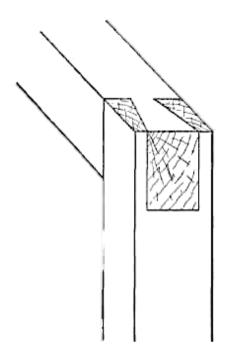
#### 2. Cut the Parts

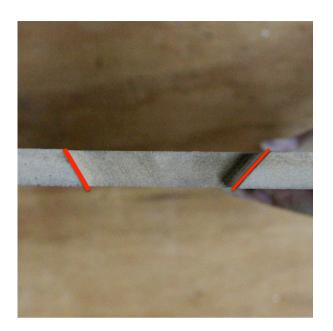


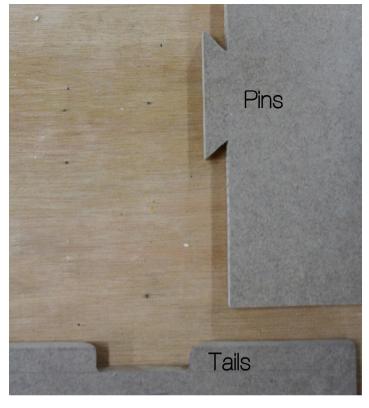
Use the size of the drill same as your Dowels diameter. Drill it on the 22 x 20 cm part.

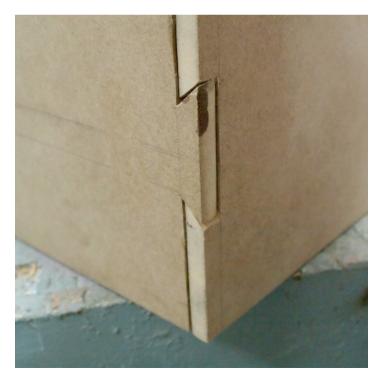
The space between the Dowels is 4 cm or it can depend on your belongings that you will put on the shelf.

## 3. Drill the MDF for Placing the Dowel









Dovetail Joint can be a little tricky because you have to make trapezoidal shape, but dovetail joint is resistance to being pulled apart.

Size: 4 cm to 6 cm

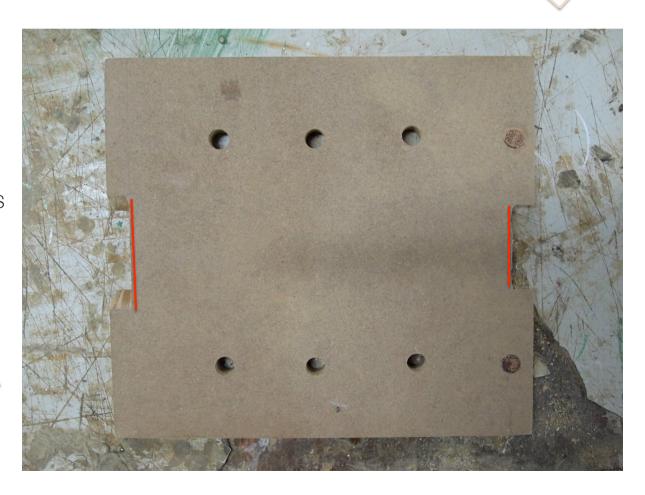
### 4. Make Dovetail Joint

#### 5. Determine the Parts with Dovetail Joint

There're 2 parts of dovetail joint, Tails and Pins. You have to decided which parts that will use the tails or pins.

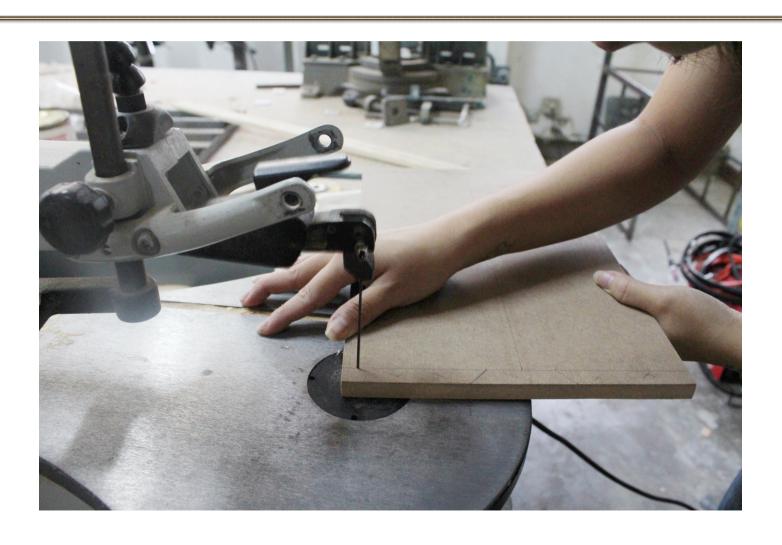
- 1. 26 x 20 cm (Pins)
- 2. 22 x 20 cm (Tails) \*\*
- 3. 17 x 20 cm (Pins)
- 4. 22 x 20 cm (Tails)
- 5. 42 x 20 cm (Pins)
- 6. 43 x 20 cm (Tails)

\*\*on this part, one of the tail is backward so all the parts of this shelf is locked.



#### 6. Cut the MDF to Make the Dovetail Joint

To cut the Dovetail Joint, you can use screw saw and after that you should use sandpaper to make the joinery more precisely.



## 7. Attach the Joinery



Use PVAc Glue or white glue before you attach the joinery.







8. The Result after Joinery

## 9. Cover the Tiny Holes





As a beginners, usually it's hard to make a perfect dovetail joint and you will leave holes on the joinery. You can cover the holes with PVAc glue and wood powder.

Don't forget to use sandpaper after that to make the surface smooth.











Mix the Melamine Sanding with Thinner Comparison: 1.1

Cover the Whole MDF without leaving any parts behind

10. Cover the Whole MDF with Melamine Sanding



# 11. Painting

Paint it with your favourite colors!



#### 13. Result



The Bookshelf is now ready to use. You can drill it to your wall or put it on your table.

To make it become a table, simply make it again and after that all you need is laid it on the top of each other.

