

Dragon Powered MDF Incense Box Makers' Notes



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I hope you enjoy making the incense box and that you won't have any difficulty with it. If you have any questions, you are welcome to e-mail me. As laser cutters vary, I'm afraid I won't be able to advise on general questions about your cutter.

There is a video showing the assembly of the box at <http://bit.ly/2egwMbP> which I encourage you to watch.

Hinges

These instructions supersede the instructions in the video:

The hinge shafts are made slightly thicker than the hinge parts to allow the hinge to move smoothly. Glue thin card, around 200gsm, to the face of the arc of MDF to be cut for the shafts. 200gsm card is around 0.34mm thick which will create a smooth running hinge.

If you are in a country that doesn't use metric measurements for paper, use card around 2.5 times the thickness of standard office copier paper.

Use smooth card for the hinge shafts, not textured artist paper.

Cutting

The DXF file has units of 1mm.

I designed the box to be cut from 4mm laser grade MDF. The 4mm MDF I buy is actually 4.1mm thick. If your MDF is less than 4mm or more than 4.2mm thick, you may need to modify the cutter files.

I cut the MDF on the cutter's honeycomb table. There will be smoke stains from the cutting which aren't a problem as I designed the box to be painted.

Sanding

Sanding MDF isn't generally a good idea – sandpaper lifts the fibres from the surface making a “furry” texture. It is a good idea to sand any fibres from the edges when the laser didn't cut cleanly through, especially of the hinge parts.

Painting

I recommend painting the box with household decorating paint. With good quality paint, two coats will be enough. If you wanted to, you could prime the bare MDF with MDF Primer. I have had good results putting the paint straight on to the MDF. Put thin coats of paint around the hinge to avoid gluing the it together with paint, preventing the lid from opening smoothly.

I recommend avoiding artist paint as even good quality artist paint can be translucent and would require many coats to get a good finish.

Clay paint will produce a “rustic” look with clear brush marks. This can look very pleasing if you enjoy this look. Clay paint is soft when dry and needs to be waxed or oiled to protect it.

License

The license for the cutter files is for one person to make as many lanterns as you like and sell them if you wish. The license is **not** commercial production by a business of more than one person. Please enquire if you wish to manufacture larger quantities of the lanterns.

Please do **not** share or sell the cutter files. I am a one man business, making a small living from my laser cutter. If you give away my files, you are potentially depriving me of my income.

Appendix

Materials

I designed the box to be made from 4mm MDF. In UK, all the MDF is available from Hobarts <http://bit.ly/2diRWoF>. A 600x400mm sheet is enough to make one box.

You will need good quality wood glue such as Titebond. I prefer Titebond Ultimate which is a little more expensive and has the reassurance of being perhaps the best wood glue available.

You will also need a wide 15cm (6 inch) rubber band to hold the box together while the glue dries. These bands are available from eBay.