
Subject: 2 pi tower baffles

Posted by [Shane](#) on Sun, 24 Jul 2005 04:25:02 GMT

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Having now got the kit from Wayne sitting in my living room I am thinking about what I want to do with the cabinets. I think I would like to use MDF with oak veneer (to match all the dark red mission furniture), but would like to have hardwood rounded corner edges that are say 1/16" proud on the front with a lighter stained front baffle as well as oversize hardwood base and top plates. It seems to me the only easy way to do this would be to double the front baffle, as I wouldn't think any type of spline to attach the corners would be very strong between the hardwood and MDF. Plywood I could see, but not the MDF. Also, will doubling the front baffle, but leaving the suggested inside dimensions the same, cause any acoustic problems?

Subject: Re: 2 pi tower baffles

Posted by [elektrartig](#) on Sun, 24 Jul 2005 13:49:10 GMT

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Shane, I did basically what you are contemplating. After making the basic MDF boxes, I then made a second outer baffle, consisting of MDF with a solid wood frame. The trick is to think ahead a little. For example: * Veneer the MDF portion of the outer baffle BEFORE you add the pieces that will create the frame. * It's easier to do the round offs before cutting the strips that will form the frame. Take your solid wood board, round off one side, then cut the rounded-off strip off of the board. I've made the front baffles so the frame is flush with the rest of the baffle, on the theory that soundwaves probably don't like the projections they would "see" if the frame were proud. YMMV. Whether doing solid wood frames or not, I almost always double my front baffle anyway, on the theory that the thicker it is, the less prone it should be to flexing and resonating. Don't know whether it's true. I don't have a picture of my Pi 2's, but here's a photo of another speaker with zebrawood veneer and a solid cherry frame.

Zebrawood Veneer w/ Solid Cherry Frame

Subject: Re: 2 pi tower baffles

Posted by [Shane](#) on Sun, 24 Jul 2005 15:17:44 GMT

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Thanks for the ideas. Are you just butt joining the hardwood to the MDF? Also, is regular wood glue Ok for gluing the double baffle together. I would think it might be hard to keep the top layer from sliding around while clamping. Using small brads or screws would eliminate that, right. Sorry, I'm not used to working with MDF, just hardwoods. And this will be a first try at veneering, also, for the same reason. Bill had a good idea to make the front flush and then put a shallow reveal between the hardwood and MDF. That would be better I think as far as soundwaves are

concerned.

Subject: Re: 2 pi tower baffles

Posted by [GarMan](#) on Wed, 27 Jul 2005 02:11:05 GMT

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When you're gluing two baffles together, you don't need a lot of glue. If it's sliding around, it's a sign that there's too much. A very thin layer should do. What you lack in a heavy glue layer is more than made up for by surface area. Imagine a butt joint between two pieces of 3/4" MDF. The joint is 4" long. Once that glue dries, it's strong enough that you can't break it apart with our hands. And there's only 3 sq in of gluing surface in that joint! On your baffle, it'll have over 400 sq in of surface area for bonding. What I would do is water down the wood glue and brush it on with a 3" brush. The water will let you apply a smooth even coat and increase dry time to let you cover the entire area. If you're still worry about sliding, take a carpet knife and score diamond patterns across the entire surface of one of the baffles. The grooves will let the glue squeeze out and keep the two pieces from floating. Gar.

Subject: Re: 2 pi tower baffles

Posted by [Shane](#) on Wed, 27 Jul 2005 02:39:16 GMT

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Thanks GarMan. I have made reflex/deflex bamboo backed osage longbows where the stresses are unreal and the only thing holding them together is Urac. Glue is almost always stronger than the wood it's bonding. I guess my dilemma right now is whether to try my hand at veneering, buy veneered MDF, or make the box out of double paneled 1/2" Baltic Birch.

Subject: Re: I'm going to reveal a closely guarded secret!

Posted by [BillEpstein](#) on Wed, 03 Aug 2005 21:34:05 GMT

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I may still do something commercial with this but here's the best reason to double the baffle: Muse the Cat, a.k.a. Cujo forced me to cover the 2226's whenever I wasn't in the room. I went thru a lot of tape and cardboard. And inconvenience. I kept thinking about the pair of 15" metal grilles I had from the 3677 project but I couldn't embrace the horror of screwing them on with those great big ugly clamps. Then it hit me! Remove the rubber surround from the grill thereby exposing the metal edges and YES! Some of the cross hatches lined up with the mounting holes. I backed out 4 screws and attached the grill. It looks great and Cujo has gone after easier prey. Fabric stretched across just the driver cut out also looks really good as BillFort has done. Elecktratis speakers

with the hardwood surround to the baffle is awesome. As for the glue, Terry Cain, 'whose hands we trust' opined that a squiggle zig-zag of glue is just fine for laminating panels. That's what I've always done making flattened "Z's" and then rubbing the 2 surfaces to get a surface tension attraction, then simply driving home a buncha screws. Countersunk, of course. How 'bout that lamp?

Subject: Cats are EVIL!

Posted by [Shane](#) on Sat, 06 Aug 2005 04:20:24 GMT

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They can mess up anything. Bill, do you have any advice on putting the mdf box together and veneering? It will be my first time using either material.

Subject: Re: Cats are EVIL!

Posted by [BillEpstein](#) on Sat, 06 Aug 2005 07:25:19 GMT

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Lotsa posts on the subject here and Pi. Bob Brines also has good tips. To screw or not to screw. If you use white glue and take your time you can clamp w/o screws. Either way make certain the edges stand proud of the panels a hair. Easy to sand an edge. PITA to sand a whole panel down. Goe to the Joes site and use his hot iron glue. Other Bill tried it and likes it.

Joe

Subject: Interference with cone?

Posted by [GarMan](#) on Sat, 13 Aug 2005 01:47:59 GMT

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Bill. I'm assuming you've attached the grill directly against the front foam gasket of the driver. Any problem with the cone (or surround) hitting the grill during high excursions? Gar.

Subject: Re: Interference with cone?

Posted by [BillEpstein](#) on Sun, 14 Aug 2005 01:36:36 GMT

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These grilles are like pie plates and only touch on th foam strip that runs around the very edge. Maybe a 1/2" wide. No problems.
