Subject: [Pi2 Tower] Insulation on braces
Posted by tman on Mon, 03 Jan 2011 11:06:15 GMT
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Here I am for other quite stupid questions of mine!
I'm afraid to be trying hard your patience: I hope I have a newbie immunity...!

Must the insulation sheets hanged on the upper braces reach the bottom of the speaker? Or have they to stop to the lower ones?
And must they be well fastened down? Or have they better to sway?
I'm not sleeping about it...

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by Wayne Parham on Mon, 03 Jan 2011 13:41:10 GMT
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The insulation on the braces should span the cross-section left to right and front to back, sort of like making "compartments" inside the speaker. The sound has to pass through the insulation to get to the port. It blocks midrange but bass passes right through. Like this:

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by tman on Mon, 03 Jan 2011 13:51:47 GMT
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Thank you again, all is clear now!
I was on a misunderstanding: I thought I had to cross the cabinet up and down...!
Is it so evident that English is not my mother language?

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by justphil on Wed, 05 Jan 2011 14:14:20 GMT
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It has nothing to do with your english as I thought exactly the same as you =)

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by tman on Wed, 05 Jan 2011 14:24:41 GMT
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I console myself, than!
I hope you didn't close the cabinets yet...

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by justphil on Thu, 06 Jan 2011 15:12:18 GMT
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Wayne,
In the picture provided is that the 2pi tower without the baffle?

If so you have 3 sets of braces but I would swear the plans say I would use 2 braces. 1 set under the woofer and the other set 15" up from the bottom. Did you just maybe make a place for the insulation to sit up at the top of the cab and maybe it isnt a brace?
You also say the braces should be slightly preloaded. Does this mean that you would build the cab as shown without the baffle and the braces cut ever so slightly bigger so they have to be somewhat forced into the cab creating a tight fit?

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by Wayne Parham on Thu, 06 Jan 2011 15:55:04 GMT
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You're right, only two sets of braces are required, one 1/3rd the way from the top (just under the midwoofer) and the other 1/3rd the way up from the bottom. They should have insulation sitting on them, spanning the cross-section.

That photo was one of Shane's builds, and he put in an extra brace. That's OK, but not required. The reason I posted this photo was to show how the insulation siting on top of the braces spans the cross-section of the cabinet.

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by justphil on Fri, 07 Jan 2011 00:16:35 GMT
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excellent thank you =)

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by justphil on Fri, 07 Jan 2011 13:53:50 GMT
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How is the insulation attached to the walls of the cab? With some kind of adhesive?

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by Wayne Parham on Fri, 07 Jan 2011 15:16:05 GMT
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I use white glue. Works perfectly. You might think it would tear away, but I've had speakers out there like that for decades, some that have been moved a lot. So it works well.

Cut a sheet of insulation to size, take the vapor barrier backing off, run a long beads all around on the surface of the wood you want to attach the insulation to. Then just press it into place.

At one time I tacked the insulation in with staples. It's fast and easy. But occasionally the staples come out over time, and you'll find them stuck to a magnet or bouncing around inside, even worse. That caused me to rethink the staples idea, and I never do it that way anymore. It's easier to tack in the insulation with a staple gun, but I don't think it's as good as white glue.

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by justphil on Fri, 07 Jan 2011 15:32:11 GMT
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Thanks Wayne. You are an amazingly helpful person. Hope to start on my cabs this weekend or the next. These will be replacing some 15 or so year old pioneer floor standers Cs-N775's. They are 4 way speakers. How do you think the 2pi will compare? I know that is a hard question to answer but perhaps you may have an idea =P
Here is what the speakers look like.
http://www.canuckaudiomart.com/details/177486-pioneer_csn775_4way_floor_speakers_150w_/

Subject: Re: [Pi2 Tower] Insulation on braces
Posted by tman on Fri, 07 Jan 2011 15:47:36 GMT
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And what about rockwool as insulation?
I know it's a very good sound insulator but that could be a little
dangerous, too. Someone suggested to treat it with hairspray (yes),
in order to "fix" the irritant dust emanation.
The reason is that I cannot find the R13 insulation and the fiber
glass here available is considered much more dangerous than
rockwool...