

---

Subject: ports and grills

Posted by [uW](#) on Mon, 04 Feb 2002 12:12:11 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

If I'm going to allow aesthetic concerns to overrule best engineering practices and use an inset front board covered with grill cloth, 1. Will the grill cloth have a showstopping effect on the port? 2. Does it make sense to shorten the length of the port to account for the thickness of the front board? 3. Can I get around consideration 2 by sizing the front board hole diameter larger than the port diameter? If so, any guess as to by how much? 4. Or are all of these things relatively minor concerns, once I've already set my stubborn head to build speakers with a front board? Thanks very much, -uW

---

Subject: Question for wayne about ports

Posted by [Garland](#) on Mon, 04 Feb 2002 12:56:40 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

I thought I'd jump in here with a related question. I routed a 3/4" radius on the mouth of my 3.5" port in my Theater 4's. Is this OK? Thanks! Garland

---

Subject: Re: Answers about ports

Posted by [Wayne Parham](#) on Mon, 04 Feb 2002 16:56:31 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Ports with radiused entry and exit help reduce turbulence through the port. In general, I think I prefer having a larger port so that airspeed isn't excessive in the first place. But it certainly doesn't hurt to radius the ends, and sometimes looks cool. It will usually raise the Helmholtz frequency slightly compared to a straight port with no radius. You can put a grille over the port, but again, one should concern themselves with port airspeed and the possibility of choking the port. About the width of the front baffle and what effect it has on port length, the port length should be considered to be the distance from entry to exit. If the port is glued on the back of a 3/4" baffle, then consider it to be 3/4" longer. Total length is all that matters, not what materials are used to make the duct.

---

---

Subject: Thanks, Wayne! <nt>  
Posted by [uW](#) on Mon, 04 Feb 2002 19:10:09 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

---

---

Subject: Ditto(nt)  
Posted by [Garland](#) on Mon, 04 Feb 2002 23:24:35 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

nt