

---

Subject: Wayne, my bass horn design...

Posted by [Adam](#) on Tue, 23 Jul 2002 15:46:04 GMT

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

---

Hey dude, Do you remember that huge design I was planning? the like 300 cubic foot bass horn, 40 Hz flare in half space, 4,500 sq inches of mouth and around 12 feet of horn length? I've been contemplating for a very long time about how to build this thing and still keep it mobile. My first idea was to just build it all out of plywood, which I can do, but the weight would be huge. I am guesstimating about 700 pounds of plywood per horn. My second design was to use a sandwich of 1/2" plywood and expanding foam. The idea is to use a 1/2" inner horn wall, use perhaps 2x6's as "studs" every 16" (almost creating a wall like building a house) and then another 1/2" layer of plywood. After that, I could fill all the cavities with mass amounts of expanding foam. My third idea was to pretty much engineer the whole thing out of solid styrofoam, maybe giving the actual horn walls a couple of layers of fibreglass. Only trouble is, that much fibreglass would be very expensive and I don't even know where to get styrofoam chunks that huge. If you recall the design, it's ridiculously huge. The mouth is slated to be 8 feet wide and 4 feet tall, with the largest unit being 4 feet deep as well, with a smaller bolt on section making up the rest. So pretty much, the longest length that needs to be braced is roughly eight feet. Also figuring I can only use cross bracing inside the horn mouth no more than every two feet. Also, I'm wondering what happens when you load a single horn with multiple woofers. If I were to load this thing with four JBL 15's as opposed to my original single 15" plan, would I also have to make the mouth area and everything four times as large? Or can I just quadruple the rear and front compression chambers? Thanks man... With some help, I'm hoping to get a revised design up soon. Adam