

---

Subject: Re: Throat size for woofer

Posted by [DMoore](#) on Wed, 31 May 2006 00:00:47 GMT

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

---

The old-school rule-of-thumb was a 2:1 ratio (available cone to throat opening size) or about 70% maximum of the available cone area. Modern calculations like Don Keele's work use a variety of T/S specs to derive the size for maximum EFFICIENCY for a particular driver IN A GIVEN HORN. The throat size in turn effects the length of the horn. Without specifics, in general, if you are indeed talking about an Altec A7-ish horn, try 8 or 9" wide for a 15" driver suitable for horn loading. It also depends on the horn itself, however, for very short (14" long) straight horns (A7) with an Fc of 80Hz, 9" is right in the ball park. Again, it DEPENDS! There are exceptions of course, most of the B&W drivers would be most efficient with smaller throat openings, etc. Download D.B Keele's T/S Horn design paper from his website and do the math manually. It's somewhat tedious, but it's fairly simple to do. DM

---