Subject: Re: Mid Horn Throat Covering?

Posted by Wayne Parham on Sun, 15 Jan 2012 16:21:20 GMT

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For the midhorn throat, I would suggest something like the metal screen mesh used in prosound. You could also get a section of the mesh used as a gutter guard.

Do understand that while a screen or grille can be used without much audible difference, they usually make a slight but measurable difference. So it's important to choose the material and position carefully.

The thing about "acoustically transparent" material is it never really is. It always causes an impedance change, which in turn, causes some energy to be reflected back. This can causes ripples in response, depending on the distance from the source and the amount of reflection. The screen used in compression drivers isn't too bad because its position and material are such that it isn't objectionable.

That brings me to the reason I suggested the mesh for the midhorn. It affects the response less than a cloth, simply because the holes are larger. The very top end of its range is where the distance between the cone and the throat makes any reflection from the throat be self-cancelling. The mesh is more acoustically transparent in that range, whereas a cloth makes enough reflection to create some ripple. So go with a metal mesh if you need a protective grille on the midhorn throat.