Acoustical Surfaces, Inc.

SOUNDPROOFING, ACOUSTICS, NOISE & VIBRATION CONTROL SPECIALISTS

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We Identify and S.T.O.P. Your Noise Problems

A Home Acoustic Problem Solved!

Dear Ted at Acoustical Surfaces:

I have a 5.1 channel home theater amp with more than 100 watts per channel for the first 5 channels and a separate 150 watt amp for the subwoofer.

The speakers are all modest RBH metal-woofer 2-ways. RBH is an upscale but not stratospheric speaker company. The subwoofer amp drives a 12" JBL woofer that Carl used for a while in his Jetta . The sub is mounted in an attractive elm enclosure that Carl built in shop class. We are uncertain about it's theoretical acoustic properties.

All this is installed in a 12'x14' room and is clearly a bit of overkill as far as the potential SPL is concerned. The only sound absorbing items in the room are the carpet, a sofa, and a chair (and sometimes the cat, if I don't turn it up too loud).

It was only common sense that some sound absorbing materials would improve the sound quality in this small space. The PEPP panels fit the bill. They were rigid, paintable , cuttable and light. They were easy to mount with J-hooks fastened to the panels with sheet rock screws.

They hang from the horizontal bar you see in the photo. At the bottom of each panel are two lag bolts topped with felt pads to serve as stand-offs from the wall. It was tricky cutting the bevels on the bench-saw because the plastic binds the blade if it isn't fed absolutely straight. The other hard part was painting the white panels. I used a roller, but color consistency was very sensitive to how much paint was applied. I'll need to spray them (an outside summer job) to try to even out the color. I tried to avoid soaking them with paint from the roller because I figured that would block some of the holes and so degrade sound absorption.

The effect of the panels on the sonic qualities of the room is highly subjective. If you've ever been in an anechoic chamber, you know that it feels as if someone has stuffed cotton in your ears; it's almost as if the air pressure is different.

The most anechoic chamber I've ever been in is a quimze . There is some of that in this room, but not enough so most people would notice. Carl and I think the panels help. I know that I can turn the amp up to 0 DB and hear no distortion so, as far as I'm concerned, these panels are a definite improvement. The main point to make is that the audiophile (which I'm not) is much better off spending some money on acoustic design as they are on audio equipment. I'd even venture to say that money spent on acoustic design is much more cost effective than money spent on audio equipment.

We are considering doing a number on these panels (like we did for the tablecloths for Carl's high school graduation party) to reclaim some of the artistic real estate. The table coverings we produced were so popular that someone asked to take them home after the party.)

Overall, I am very pleased with the acoustic improvement in this room. I think you have a marketing opportunity among audiophiles who do not understand how the sonic properties of their listening spaces can be so easily improved.

They'll spend untold sums for high-end audio equipment. If they're willing to do that I'll bet that their aesthetic constraints are minimal. (Just look at how ugly some of the high-end massed speaker systems are.) I suggest that you market to them some out-of-the-box solutions to acoustic dampening. How about free-standing upholstered panels? Or, in a typical sheetrock room with an 8' ceiling, you should offer 1'x4' lateral ceiling panels. These could easily be fastened to lateral trusses (as in my house) with included hardware. The average guy could screw these to the ceiling in an hour. *I'll buy 8.*

Regards,

Steve