
Subject: OT - Studio design question

Posted by [pbraun](#) on Thu, 15 Oct 2009 04:49:05 GMT

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While I'm in a question-asking mood....

Now that I've got the mixing bug again, it's time to put up some damn walls in this concrete box of a basement.

My little corner paradise will be about 12' wide by 17' deep, with roughly 7' ceiling clearance.

Since you have to put bass traps in the corners anyway, would it be smart to frame out the walls and then frame the corners at a small diagonal, essentially creating an octagon-shaped room? That would eliminate 90-degree corners, at least vertical ones.

I'm going to do this with alternating studs for inside and outside surfaces, glued to the walls and floors for extra isolation, two layers of drywall on both sides, dense rockwool in between. I live in a condo, and share one of the walls with our neighbor's basement, plus I share the ceiling with the CFO and I've learned it doesn't pay to piss her off on "Survivor" night.

Due to the cost of such a project, I'll probably be doing one wall at a time, but want to have the overall plan down before I start.

I've read at least a dozen articles on home studio construction, and they all say something different. And while I'd love to have layers of mass-loaded vinyl in between each layer of drywall, suspended on isolation channel, as of tonight we still haven't won Powerball so that ain't happening.

Subject: Re: OT - Studio design question

Posted by [pbraun](#) on Thu, 15 Oct 2009 04:50:28 GMT

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And I forgot to add that this is a mixing room only. I have no room for recording -- all of my recording will either be done at a friend's studio, or with my mobile Paris rig.

Subject: Re: OT - Studio design question

Posted by [JeffH](#) on Thu, 15 Oct 2009 06:37:47 GMT

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Paul,

Take a look at

http://www.realtraps.com/part_studio.htm

My new room is based on this config (Scaled to fit 17' as well). I am amazed at the difference the lack of parallel walls makes. Even with nothing in the room, the acoustics are pretty smooth before the absorbers.

Hopefully I'll actually get it up and running in the next couple months.

Jeff

Subject: Re: OT - Studio design question
Posted by [dnafe](#) on Thu, 15 Oct 2009 09:51:16 GMT
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No doubt you've probably been to these sites but just in case

<http://www.johnlsayers.com/phpBB2/index.php>

<http://www.recording.org/forum-34.html>

<http://forum.studiotips.com/viewforum.php?f=35&sid=5774d4ba12d1f1f6fe3bf306e097c80>

Subject: Re: OT - Studio design question
Posted by [pbraun](#) on Thu, 15 Oct 2009 17:58:05 GMT
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OK, my head just exploded. Gimme a minute to clean the brain matter off my monitor.

(wiping, wiping, wiping...)

I'm back.

I may go with the trapezoidal room concept, but frame the outside square to make it look neater. Gotta go with double walls anyway, nothing says they have to be parallel.

No matter what, it will have to be "plan once, build piece-by-piece" as budget allows.

And who knows? Once I fix up the rest of the joint, I may set up a recording space in the other part of the basement. It would have to be musos I know and trust, 'cuz I'm not comfortable with strangers walking through my living room and seeing our art collection...

Subject: Re: OT - Studio design question
Posted by [kerryg](#) on Thu, 15 Oct 2009 18:34:27 GMT

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You could see if it's feasible to do *just the ceiling* in this stuff. It's expensive compared to regular drywall (between \$50 and \$120 a sheet, although it's hard to pin it down) but if my math isn't completely out to lunch all you'd need is five 4x12 sheets to cover a (assuming "slightly less than" after framing) 12x17 ceiling.

If you could get that amount for a couple of hundred bucks (it installs like drywall so you'll save tons by installing it yourself) then for that pretty reasonable price the sound barrier between you and the CFO would be as good as it's realistically going to get in a residential space.

Roxul SafeNSound is excellent value for insulation, and it works great.

Subject: Re: OT - Studio design question
Posted by [JeffH](#) on Thu, 15 Oct 2009 20:49:17 GMT
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Paul,

Mine is built out inside of an existing structure. I lucked out with side adjacent to the outside wall because building the trapezoid left a little crawl space. When I realized I needed a lightpipe from my machine area, there was a built in crawl space (albeit for a pretty small person).

Jeff

Subject: Re: OT - Studio design question
Posted by [mylescdavis](#) on Thu, 19 Nov 2009 20:06:04 GMT
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Hi, Paul -

I'd suggest you try the simplest and cheapest approach first.

At your Home Depot (or local big box building supply equivalent), find some fiberglass or rockwool slabs 2 inches or 4 inches thick. 703 is the Owens Corning fiberglass variety; the Rockwool you want is approximately 45kg/m³ in density. It's named differently in different countries.

What you want to do is cut these panels (they're usually 2 x 4 feet, or 600 x 1200mm) so that you have the largest triangles you can make, or that you can tolerate in your room from a losing-floorspace point of view. Stack them up from floor to ceiling in two corners. If you like what happens (as you probably will), do the same in your other two corners. It will be great for mixing - you'll be surprised at the difference in what you hear (and don't) in the room.

You can also make wood frames for these panels and hang them on the walls, which is important to do at any reflective spots between you and your monitors.

A whole industry has grown out of making acoustic stuff to sell to people. 95% of it can be done yourself, pretty cheaply, with the same materials the manufacturers use. They're selling convenience, not better technology.

You can see these in my studio here: <http://mylescochran.com/studiofrance.htm>

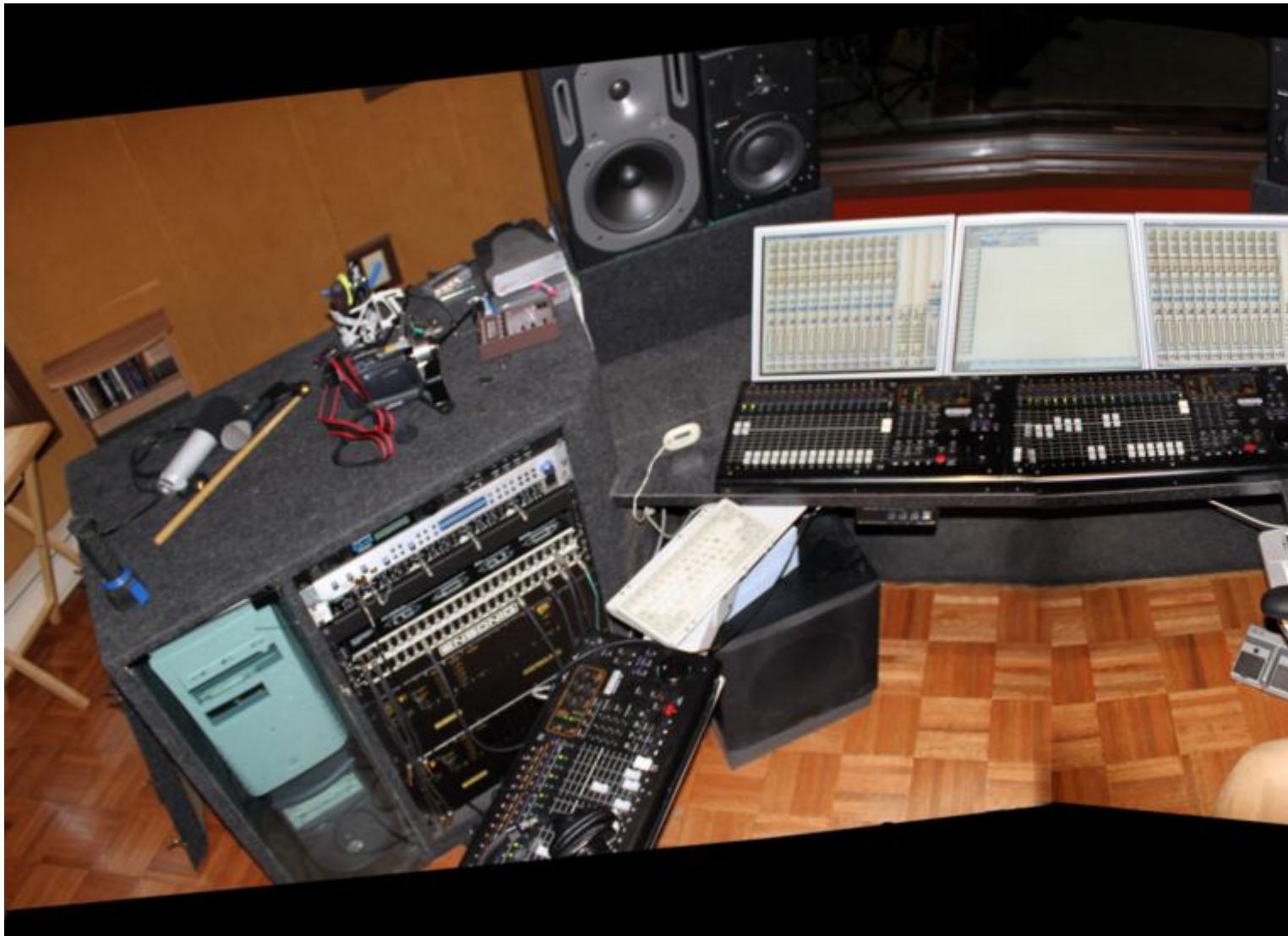
Subject: Re: OT - Studio design question
Posted by [mani1147](#) on Fri, 20 Nov 2009 15:44:24 GMT
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Hi Paul, I have an octagon shape room and I like it but one thing I want to suggest that I missed when designing my setup is "A proper machine room/area" for all those loud equipment fans. If your still in the design phase, now's the time. If you already thought of it, cool. I went with an area in my desk for the computers and MECS but I would definitely take them out of the control room if I was to do it over. They aren't that loud but it would have been so easy to do back then.....Along with other things I suppose....oops, did I say that out loud!!

just my 2 cents, good luck
Rob_A

File Attachments

1) [desk.jpg](#), downloaded 441 times



Subject: Re: OT - Studio design question
Posted by [pbraun](#) on Fri, 20 Nov 2009 21:54:18 GMT
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I kinda dig the trapezoidal LCD in the middle...

I've planned on remoting the pcs already. I've got a square wire restaurant shelf about 6' high with three shelves - bottom one will hold the G5 and the APC 2500 UPS, middle shelf will hold the HP XW Twins, and I'll probably just lay the G4 with the Oasys card on it's side on the top shelf. All those cables will be routed through a passthrough stuffed with sound-deadening uhhhh....stuff.

I was toying with mounting the Oasys G4 in the rack with the MECs since I have a spare set of Marathon rackmounts, but then I realized that would put the fan/HD noise of the G4 in the studio instead of outside.

Actually, is there a reason to keep the MECs in the studio? Could they also be outside the room

with snakes connecting them to a patch bay?

Since I'm building the walls from scratch, I'm still toying with a trapezoidal room. I'll definitely go with the DIY corner blockers and things that have been mentioned - cheaper is more gooder, in this case.

Subject: Re: OT - Studio design question
Posted by [mani1147](#) on Fri, 20 Nov 2009 22:03:09 GMT
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So you like my " trapezoidal LCD " do ya.....!!
Amazing, I paid 700 bucks a peice for those LCDs back in 03, times are a changin. My stich job definitely leaves something to be desired. Have to put that Canon wide angle lens on the xmas list.

As for your MECs, I would try to get them out of the ctrl room as well. With mine, one of em is whisper quiet but the other is quite loud, time for a new fan soon but I dread having to venture back there into the abyss of cables.

Rob_A

Subject: Re: OT - Studio design question
Posted by [pbraun](#) on Sat, 21 Nov 2009 03:58:35 GMT
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Well, that would solve the problem of where to put the Oasys G4. I can rack it under the MECs and leave them outside the room.

I would imagine that if I decided at some point to do any recording here, as long as I know they're calibrated properly, as long as my preamps don't go red then I don't have to worry about the blinky lights on front of the input cards.
