Good, Fast, Cheap:

Acoustic Treatment Ideas for a Temporary Space

by Bruce Black

Moving into a temporary space, whether an apartment as you look for a permanent residence in a new city after relocating, or because of environmental catastrophes like the L.A. fires or Hurricane Helene on the East Coast, you still have to make a living. In moving into a new home, most likely a rental, sound professionals like us are also faced with setting up a space to continue working. A spare bedroom or other room in your new, temporary home can provide you a space to work in, but the acoustics will most likely stink. Acoustically speaking, that room is an echoey, lousy sounding drywall box. It's a difficult place for a sound professional to work in. I offer here a way to make that room into a space where you can continue your work in a decent acoustic environment. And you can put it together yourself from inexpensive, common, and readily available materials at a reasonable cost, taking only a day or two for installation.

In a rental, you must consider using treatments that will not damage the walls when you take them down to move. This counts out glue. But with the approach I outline here, you can easily remove the acoustic treatments without damaging the wall or the treatments. This keeps your landlord a happy camper—and keeps you happy when you get your deposit returned. In addition, this allows you to reuse the treatments when you move to a new location. This is effective, inexpensive, and quick. Or in popular vernacular, *good, fast, cheap.*

What's the approach?

Absorption is the prime mover in making your room's acoustics workable. (FYI, there are three other types of acoustical treatment—diffusion, barrier, and vibration isolation).

The most popular material for absorption is fiberglass products. But there are many concerns about breathing the glass fibers that may find their way into the air and into your lungs, as well as outgassing vapors. For safety, fiberglass treatments need to be contained behind something like acoustically transparent fabric, which in turn requires a frame. This becomes more expensive and time-consuming.

But there is an absorbent material that can be exposed to the room without any concerns. It's recycled denim insulation, so it doesn't have any hazardous fibers. This is also resistant to pests, and is Class A fire rated—something you and your landlord will appreciate. It may not have the most eye-pleasing look, but we're talking about getting back into business good, fast, and cheap here.

Recycled denim absorbent is available from Parts Express as Acousta-Blue 50mm Sound Damping Denim (https://www.parts-express.com/Sonic-Barrier-Acousta-Blue-Speaker-Cabinet-Sound-Absorbing-Denim-50mm-x-40-x-48-13.3-Sq.-ft.-260-568). I specify the 50mm (two-inch) thick material rather than the 25mm (one-inch) because it absorbs to a lower frequency—around 350 Hz versus 800 Hz for the one inch. This difference in frequency is in a range that has a big influence on the clarity of the sound, so the two inch will have a much more positive effect on your room's sound. The denim insulation comes in 48- by 40-inch sheets. Installing them vertically, you can cover wall space

The Acousta-Blue absorptive panel. Note how limp it is.

10 feet wide by four feet high with three panels. That's 50% of a 10-foot wall—a good thing. Of note, Home Depot also advertises denim insulation batts on its website, but these are 3.5 inches thick and won't work with the attachment method I'll be outlining below.

Now we attach them to the wall.

First, you need some jumbo binder clips. Amazon has inexpensive ones. (https://www.amazon.com/dp/B0DCFMWF4Z). These are three inches wide and open to just under two inches, enough to stuff the top edge of the denim panel into. Also order some 3M Command Large Utility Hooks, available from Amazon (https://www.amazon.com/dp/B018IZAL6G) or a home center. Be sure to get the large five lb. per hook type.

A jumbo binder clip. Note the wire bail handles.

Once those arrive, clip three binder clips along the top of the panel; one in the middle and one on each side, a few inches in from each edge. Using three clips helps keep the panel flat against the wall. If you use a set distance between the binder clips on the sides and the center of the panel, say 15 or 16 inches, and space the hooks at the same distance, it will make it easy to hang the panels later. But if you find they aren't matching up quite right, it's easier to move the binder clip to match the spacing of the hooks rather than moving the hooks.

The three binder clips mounted on the top of the panel.

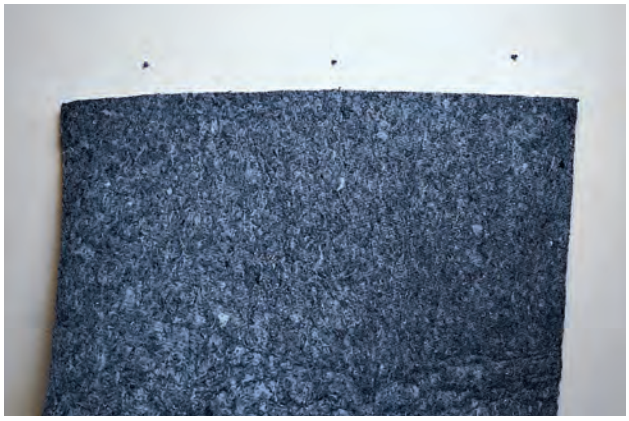
The panels should be installed so the bottoms are high enough to clear the top of your table or work surface. Usually, 32 inches above the floor will suffice, but measure to be sure. On walls with no table, work surface, sofa, or other furniture up against it, 30 inches above the floor will work well.

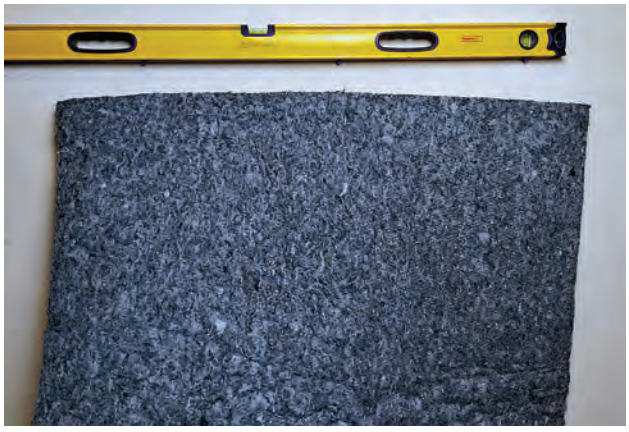
Install panels first on the wall behind your speakers (the "front wall"). If possible, this should be an uninterrupted "stripe" of panels along the full width of that wall. This will give your sound more clarity and better localization. You can just leave any excess spacing at the corners to avoid cutting down panels.

The wall opposite your work position (the "back wall") should also have panels installed on it. These can be fewer panels spaced apart; however, one panel should be horizontally centered on the wall. These alternating absorptive and reflective wall surfaces will give some acoustic "air" to your room's sound.

If there is side wall space available on each side of your listening position, install panels there as well if there aren't any windows. If there is a door, you can install a panel on it, but you'll need to cut down its width to match the door.

Next, mark your wall with a pencil where you want to install the hooks (don't use a pen—it will permanently stain the paint). The hooks should be three inches higher than where





you want the top of the panel to be. This ensures the panel bottom will clear any workspace, table, or furniture, as outlined above. Using a level to draw a line for the panel top will make sure the panel hangs level and true.

Install the Command hooks on the wall at those marks. Be sure to follow the instructions to clean the wall with an alcohol wipe, press the strip against the wall for 30 seconds, and then wait an hour. This gives the adhesive time to cure properly, ensuring the hook will carry its full rated load. A falling panel shouldn't hurt anyone or anything, but it's an annoying distraction to have to reinstall it.

Hang your panels by flipping up the binder clip wire bails on the back of the panel and leaving the front wire bails sitting flat on the face. This will keep the bail from sticking out from the wall and having things snag on it. Now hook the back wire bails on the three Command hooks. Repeat with each panel you want to install and you're done—good, fast, and cheap.

When it's time for you to move, remove the panels and slip the hook off its bracket. The bracket comes off by tugging down on the adhesive's tab. No residue is left behind after it pops off the wall. You can reuse the panel, the binder clips, and even the hooks (if you replace the Command adhesive strip). This cure gives you a better sonic signature in your room by removing flutter echoes, excessive reverberation, and the early reflections that give the room that signature hollow sound.

One last thing to consider is putting your speakers and sub on Sorbothane isolation hemispheres. Doing so will clean up your sound, especially in the low end, and reduce the amount of sound migrating to other parts of your home through its physical structure. Once this vibration energy makes it into your room's physical structure, your walls vibrate sympathetically and radiate sound. This in turn does some serious damage to your room's low-end response. Sorbothane is a very high-performance, inexpensive vibration isolation material that will keep your speaker cabinets' vibrations out of your room structure. Sorbothane is available at IsolateIt.com (https://www.isolateit.com/collections/sorbothane-bumpers). It's important that the Sorbothane is matched to the weight of your speaker. If you're unsure, the proprietor of IsolateIt.com, RJ, is there to help. When I mentioned putting together this article, he even offered a 10% discount using the code AUDIOVIDEO10. Please note that I do not make money from any recommendations made in this article.

In the end, this treatment plan is designed to get you up and working quickly in a good, acoustically effective environment with minimal expense and installation time.

Removing the Command strip is straightforward and simple.