



FITNESS FACILITIES: SOUND AND SURFACE

By Brennan Prins

Sound Advice

When planning or renovating your college's fitness center, be certain to choose the right flooring, or you'll never hear the end of it. Picture your university's fitness center. It's probably similar to those of other private colleges and universities: There's likely an area for weightlifting, rows of exercise machines, big mirrors, windows pouring in natural light, and a separate space for group exercise classes. The floor probably resembles your standard run-of-the-mill fitness center floor, and this is where the design and construction choices become problematic.

Everything may look impressive, but looks can be deceiving, and appearance alone is not how your fitness center will be judged once it is filled with students and staff there for their unique fitness regimens. Your decision to understand how sound travels in your facility can lead to your entire facility's success or failure.

Fitness Is Changing

Your university's fitness center isn't the old-fashioned health clubs that have been around for decades. Everything about it is different, with its sprawling size, complex regulations, and mind-boggling array of equipment.

One method of exercise is increasing in popularity: group fitness classes, with proprietary workout regimes from the likes of Zumba®, BODYPUMP™ and CrossFit. These and many other programs challenge students with high-intensity training that pushes them beyond anything fitness experts of just a few years ago could have imagined. However, with more pushing comes more force. With force, there comes both vibration and noise.

Once you combine vibrations and noise within mixed-use buildings, which are increasingly becoming the norm in these impressive centers—especially those on elite, private college and university campuses—and you’ll understand that the reduction of structure-borne noise in fitness centers is essential.

The Invisible Killer—Noise Pollution

Any sound that’s too loud or lasts too long—like that of a student dropping a barbell or a room full of CrossFit participants running in sync—can result in unnecessary stress, anxiety and annoyance for others nearby. And this pervasive noise won’t just stay in the room. In most cases, the acoustics of a fitness center

will allow the audible structure-borne sound to travel through standard floor mats, floors and ceilings, disrupting those in adjoining rooms, buildings, or living spaces.

In fact, neglecting the noise factor has compromised or ruined countless fitness centers.

Choose Noise Abatement Wisely

In essence, you want to find ways to stop or reduce sound every way you possibly can. For airborne noise, seal air leaks in walls, insulate air ducts, and use acoustical sealant along joints. However, do not neglect what’s beneath your feet; impact and footfall noise/vibration will travel through the floor and into connected structures.

Understanding the effects of structure-borne sounds and vibrations from athletes and equipment is a science. Circuit training, treadmills, spin classes, dance, CrossFit and aerobics, and the noise pollution generated from each need your attention; all of these activities require appropriate flooring to mitigate sound. The result is a pleasing experience for students, which encourages repeated visits to the fitness centers.

Weighing Your Options

As administrators of campus fitness centers, you can choose one of two options:

- Tell yourselves that sound won’t be an issue in your fitness center and hope for the best.
- Choose resilient rubber surface tiles that are designed to dissipate structure-borne noise for guaranteed better experiences for your students and staff.

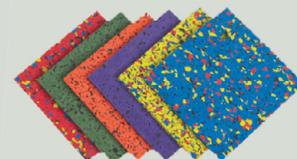
If you’re leaning toward option two, then you have made the right choice. The result will be a surface that greatly reduces the bounce of weights, humming vibrations of fitness equipment and repetitive thumps from group exercise.

Certainly, you want to do your research into flooring manufacturers and installers. Many university administrators believe that fitness center flooring is all the same, but the reality is there’s a significant difference. We’ve seen fitness centers struggling to remain in their space because of their inability to control the noise from within their center with sub-standard surfacing solutions.

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look at a product's test results, usually another eye-opener, since some rubber tile products have been engineered to reduce structure-borne noise by as much as 38 decibels.

Obviously, in these facilities, aesthetics matter tremendously. Luckily, you don't need to sacrifice style for practicality. There's flooring that is aesthetically pleasing yet can take a beating and absorb the sound of everything students want to do, without noise creating an unpleasant environment for students seeking to become or remain fit and healthy.

Here's a final piece of sound advice: Ensure that a plan for "noise" is in your fitness center plan. Let the experts handle the rest.

Don't Let the Science Floor You

You need to take several variables into account, such as the shape of your fitness center, the walls and bracketing systems, doors, windows and ceiling, and of course the flooring assemblies. However, it's not just about what's inside the room that counts. In short, you need to have a holistic approach to noise mitigation and consider the construction materials of adjoining spaces.

Much of this information is new to administrators, which is why flooring professionals are often eager to share everything they know about the particulars.

One of my favorite parts of going through the process of choosing the right flooring is the initial meeting I have with a prospective customer. I'll show them the differences between our options and how one rubber floor product can be superior to another. We'll also

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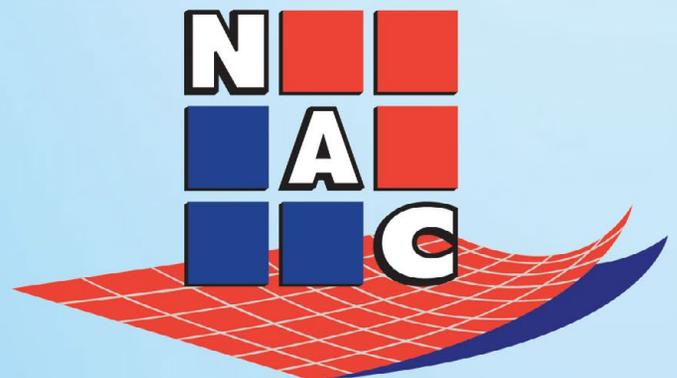
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