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4 Acoustics Myths DEBUNKED

Sound consultant Kenric Van Wyk offers some insight into several common misconceptions about church facility acoustics. By Jeremy Mika

The acoustics inside a church can make the difference between a properly communicated message and a garbled-up mess. To help churches overcome acoustic challenges, let's examine some of the prevailing myths about church sound.

Myth #1 **Acoustics Can** **Be Addressed Later**

Kenric Van Wyk is president of acoustic consulting group Acoustics by Design (AcousticsByDesign.com). He says one of the most prevalent myths among church decision-makers is that acoustics do not need to be addressed during initial facility planning and design, but can be tweaked after construction instead.

"Unfortunately, by the time a project is completed, not only is it much more expensive to 'fix,' but there is little to no money left over to treat the space," Van Wyk says. "Many times the space is too

reverberant and too noisy."

Van Wyk concedes that things, like acoustical panels, can be added later, but the problem with these post-construction solutions is that they often look like they are just slapped on the walls, completely altering the room's look and appearance. Not only that, but the panels are relatively expensive to install, as they can cost anywhere from \$10 to \$15 per square foot.

There are a variety of acoustical components that can be incorporated in the facility planning phase that are cheaper and more seamless than acoustical panels and other add-ons. Many acoustical materials can be incorporated into facility designs, such as metal decks, soundblox, and carpeting. Also, sloping or canting the walls could be done with no added cost during construction, but it is quite expensive to add this element as diffusion after the facility is constructed.

"The good news is that good design can

be integrated into the architecture at a fraction of the cost of fixing it later," Van Wyk says. "When done right, [the design] creates a pleasing atmosphere that is enhancing to a worship service, optimized for speech intelligibility for clarity of sound, and a comfortable environment for fellowship."

Myth #2 **Only the Worship** **Center Needs Treatment**

Another common myth churches buy into is that only the worship center needs to be fitted for sound. As Van Wyk attests, ministry happens in most every room of a church, any day of the week. Allowing for clarity of sound only in one room is a trap that church leaders should avoid if at all possible.

Most churches use conference room and classroom spaces to conduct Bible study and teachings. Lobbies and common areas are fellowship areas used before and after

services. Gymnasiums, which might also double as secondary worship services, and cafés host casual, but important conversations. All of these ministry spaces are vital to the life and vibrancy of a church community.

"We often hear from churches [that] the classrooms are too loud and reverberant, or members leave immediately after church because the lobby is too loud, or the secondary worship space isn't designed well," Van Wyk says.

If your church has a facility with these types of challenges, know it is fixable. The importance of hiring a professional acoustic consultant, however, is critical. When searching for a consultant, be sure to choose one that belongs to the National Council of Acoustical Consultants (NCAC.com).

Myth #3 Acoustical Panels Are Ugly

Churches can be leery of hiring a consultant to make acoustical changes to their facilities because they are afraid the changes might negatively affect the appearance and feeling of a room. The

truth, however, is there are many acoustical products on the market designed with a high aesthetic value.

"It is true that, in the old days, many acoustic fabrics for fiberglass panels were a burlap [material] that was open weave and sagged," Van Wyk says. "Fabric technology has come a long way, however, and most reputable acoustic panel manufacturers can utilize your choice of fabrics."

Along with the acoustical fabrics, there are also many perforated wood, metal, and gypsum products that can be used. Oftentimes, these materials can be retrofitted to seamlessly fit into the design of a room. Another option available is the use of acoustic plasters. These building materials are expensive, but they look like dry-wall and can be used on walls and ceilings.

Myth #4 Electronics Can Fix Anything

An expensive sound system will take care of all of the acoustical issues present in a room – Van Wyk says this is another common myth for which churches fall.

"Bad acoustics are still bad acoustics," Van

Wyk says. "Electronics can help to compensate for some acoustic problems, but not most of them. The cost of electronic 'Band-Aids' is often more expensive than just doing it right with good acoustical design."

Van Wyk says the correct acoustic set up includes a combination of a low reverberation time, a quiet background noise level (from the lobby, kids areas, mechanical noise, and exterior noise), and a well-designed sound system. The system should be selected and oriented to put acoustic energy down onto the congregation. Again, the best course of action to take is to call a NCAC-certified professional to test your church's rooms.

Churches looking to build a new facility that is acoustically conducive to quality sound (or simply to make their current facility as acoustically correct as possible) would be wise to keep a few of these tips in mind – and not fall prey to the myths of acoustical challenges.

JEREMY MIKA is a Franklin College journalist. He has written for the Indianapolis Star and designed publications for Vineyard Church.

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