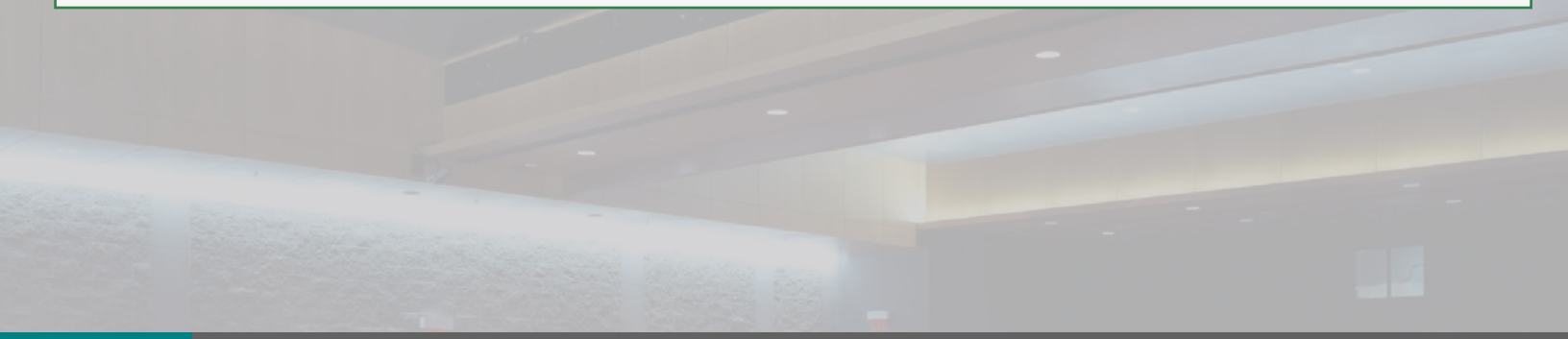
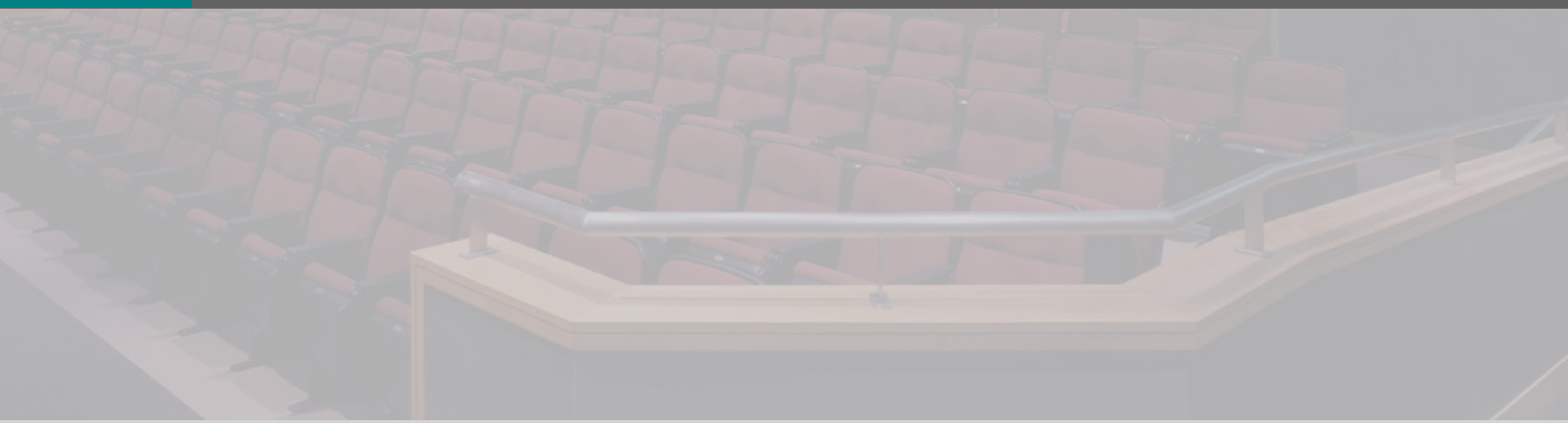


DESIGN GUIDELINES

for use with *ANSI/INFOCOMM 1M-2009 Audio Coverage Uniformity (ACU) in Enclosed Listener Areas*



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DESIGN GUIDELINES For

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ANSI/INFOCOMM 1M-2009 Audio Coverage Uniformity (ACU)
in Enclosed Listener Areas
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Introduction

These design guidelines describe the processes involved in designing loudspeaker systems to the requirements outlined in ANSI/INFOCOMM 1M-2009, Audio Coverage Uniformity (ACU) in Enclosed Listener Areas. It is not intended to replace the Standard, which can be obtained from the ANSI online bookstore: http://webstore.ansi.org, but to help designers understand the complexities of:

1. Identifying the intended use of the space and system(s)
2. Identifying the listener area(s)
3. Loudspeaker selection, placement, and aiming
4. Modeling the design
5. Documenting the listening area and measurement locations

As you can see, these guidelines follow a process in which you determine your client's needs and expectations, and then collaborate with the design team to achieve those goals. It may require closer coordination to ensure the team understands your design approach. As noted in the abstract for this Standard:

"One of the fundamental goals of sound system performance for both speech reinforcement and program audio is the delivery of uniform coverage in the listening area. A well-executed audio system design is one that allows all listeners to hear the system at approximately the same sound pressure level throughout the desired frequency spectrum range, no matter where positioned in the designated listening area. This Standard provides a characterization of and a procedure to measure this spatial coverage, with criteria for use in the design and commissioning of audio systems."

Purchasers of the design guide are encouraged to buy the ACU Field Guide for measurement and testing procdures. Digital copies are available from the ANSI online bookstore. See address above.

You may send comments to: standards@infocomm.org.

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