



Pac International offers multiple AIA approved continuing education courses

Design Details For Good Acoustics: Part 2 - Ceilings

Credits Course #PAC004 | 1.0 LU/HSW @AEC DAILY

About This Course

Acoustical design requirements are frequently based on laboratory test data. Walls constructed in a lab for testing are built under ideal conditions and with high levels of precision. These walls also do not have any of the attachments or penetrations that are ubiquitous in real-world construction. Selecting a tested wall design that meets an STC requirement is not enough to provide adequate sound isolation in the real-world. To achieve good sound isolation it is imperative that designers understand how to treat the myriad of details that can compromise a wall's performance. These include: electrical boxes, hanging cabinets, window mullions, control joints, intersections, and more. In this presentation we: discuss why a detail is important for noise control, provide the acoustical impact of poor detailing based on test data (when available), and provide acoustical best practices for the details.

Objectives

- ✓ Understand the differences between the construction of assemblies used for laboratory testing and those constructed in the real world
- ✓ Understand the basic mechanisms for sound transmission through an assembly, the difference between the structural path and the cavity path, and how to apply this knowledge to evaluating the acoustical performance of construction details
- ✓ Understand acoustical best practices for common design details of walls
- ✓ Understand how requirements for fire-rated designs can affect the acoustical design details