

Regupol[®] America CEU Outline

Noise Control Solutions for Multi-Family Residential Applications

Course Description

This course reviews the dynamics of sound, how sound travels through buildings, and the architectural techniques used to control airborne, structure-borne, and flanking noise transmission in multi-family buildings.

Purpose

Demand has increased for noise control in multi-family construction, driven by consumer demands and stricter enforcement of existing codes. Residential noise control is a key component of design, because it affects occupant privacy and well-being.

Learning Objectives

At the end of this program, participants will be able to understand:

- What sound is and how it is transmitted
- The importance of noise control and building code requirements
- Proper acoustic design for walls and floor-ceiling assemblies
- Different types of underlayments and the benefits of using acoustic rubber underlayments

Important Points

- Residential noise control is a key component of design, because it affects occupant privacy and well-being
- Three types of sound that need to be addressed in acoustic design are airborne, structure-borne, and flanking sound transmission
- Sound Ratings include STC, IIC, and Delta IIC
- The International Building Code (IBC) specifies a minimum architectural design standard of 50 IIC and 50 STC for floor-ceiling and wall assemblies
- The four main noise control methods used to reduce noise in multi-family dwellings include absorbing sound, increasing mass, damping, and decoupling
- Acoustical rubber underlayments are among the most versatile and resilient underlayment products available
- Specialty acoustic underlayments have been engineered for specific types of floorings