



Sound Attenuation Requirements for Residential Condominiums

General

Wall and floor/ceiling assemblies separating units from each other or from public or quasi-public spaces, such as interior corridors, laundry rooms, recreation rooms, and garages, shall provide airborne sound insulation for walls and both airborne and impact sound insulation for floor/ceiling assemblies per Section 10-2.1608, Municipal Code.

Condominium homeowners association may require more restrictive standards than the Municipal Code. Please obtain the written approval from the condominium homeowners association prior to issuance of Building permits.

Airborne sound insulation

All wall assemblies enumerated or alluded to this section above shall be of a type of construction that has a minimum rating of **55 STC** (Sound Transmission Class). All floor/ceiling assemblies shall be of a type of construction that has a minimum rating of **50 STC**. Wood floor joints shall not be continuous between separate condominium units. Penetrations or openings in the construction for piping, electrical outlets and devices, recess cabinets, bathtubs, soffits, heating and ventilating and/or air-conditioning intake and exhaust ducts, and the like shall be sealed, lined, insulated, or otherwise treated to maintain the required rating, and such treatment shall be approved by the Building Official. Entrance doors to the unit shall be of solid construction and, together with perimeter seals, shall have a minimum rating of 33 STC. Such perimeter seals shall be maintained in effective operating condition.

Impact sound insulation

All separating floor/ceiling assemblies enumerated or alluded to this section above shall be of a type of construction which has a minimum rating of **50 IIC** (Impact Insulation Class). Floor coverings may be included in the assembly to obtain the required ratings but shall be retained as a permanent part of the assembly and may only be replaced by another floor covering which provides the same or greater impact insulation.

Verification of sound class

STC and IIC ratings shall be based on the results of laboratory measurements and will not be subjected to field-testing. The STC rating shall be based on the American Society for Testing and Materials System specified in ASTM E90 and E413, or equivalent. The IIC rating shall be based on the system in use at the National Bureau of Standards, or equivalent. Ratings obtained from other testing procedures will require adjustment to the rating systems set forth in this subsection. In documenting wall and floor/ceiling compliance with the required sound ratings, the applicant or sponsor of the condominium development shall either furnish the Building Official with data based upon tests performed by a recognized and approved testing laboratory or furnish the Building Official with verified manufacturer's data on the ratings of the various wall and floor/ceiling assemblies utilized in the project. Additionally, the Building Official will develop a ready reference file indicating the STC and IIC ratings of the wall and floor/ceiling assemblies commonly utilized in condominium structures.