



# Sound Vibration For Building Services For Dwellings

The Building Standards Department issues Builder Tips as part of our customer service program. They are designed to provide an improved understanding of the Building Code and to reduce the costs associated with correcting infractions. Please contact your area building inspector for further information or call the Building Standards Department at 905.475.4848 extension 2189

## 9.11.1. Protection from Airborne Noise

### 9.11.1.1. Required Protection

(1) Except as provided in Sentence (3), a dwelling unit and a suite in hotels shall be separated from every other space in a building in which noise may be generated by

(a) a separating assembly and adjoining constructions, which, together, provide an apparent sound transmission class (*ASTC*) rating of not less than 47, or

(b) a separating assembly that provides a sound transmission class (*STC*) rating of at least 50 and adjoining constructions that conforms to Article 9.11.1.4.

(See Note A-9.11.1.4.)

(2) Reserved.

(3) Construction separating a dwelling unit or suite in a hotel from an adjacent elevator shaft or a refuse chute shall have an *STC* rating of not less than 55.

### 9.11.1.3. Compliance with Required Ratings

(1) Compliance with the required *STC* ratings shall be demonstrated through

(a) measurements carried out in accordance with Sentence 9.11.1.2.(1) or

(b) the construction of separating assemblies conforming to Table 1 or 2 of MMAH Supplementary Standard SB-3, "Fire and Sound Resistance Tables," as applicable.

(2) Compliance with the required *ASTC* ratings shall be demonstrated through

(a) measurements or calculations carried out in accordance with Sentence 9.11.1.2.(2) or



(b) the construction of separating assemblies conforming to Table 1 or 2 of MMAH Supplementary Standard SB-3, "Fire and Sound Resistance Tables," as applicable, that have an STC rating not less than 50 in conjunction with flanking assemblies constructed in accordance with Article 9.11.1.4. (See Note A-9.11.1.3.(2)(b))

## OBJECTIVE

To limit the probability that the occupants of a dwelling unit will be exposed to excessive levels of airborne noise generated from the building services associated with another dwelling unit in the same building. Excessive noise levels can lead to negative effects of the living standards of persons.

In a Part 9 installation, cellular core ABS is not permitted. The City of Markham requires a sound resistance test report to be conducted prior to the installation of interior finishes. The purpose of conducting this test is to provide an indication of the construction will provide the required STC rating. Where construction differs significantly within a project, additional tests will be necessary to be performed and reports issued.

