

ISHOA GUIDELINES FOR FLOORING SOUNDPROOFING ON 2ND AND 3RD FLOORS WHEN INSTALLING WOOD, MANUFACTURED WOOD, TILE, STONE, VINYL OR LAMINATE FLOORING:

Kitchens, bathrooms & laundry areas are excluded from these requirements though a commercially available soundproofing underlayment is required in these areas. Please specify sound ratings on ARB submission.

MANDATORY REQUIREMENT IS DELTA IIC 21 OR ABOVE

It is important that you use a soundproofing product that is Delta IIC tested for your specific flooring material.

Please share this information with your contractor.

DEFINITIONS:

STC – stands for Sound Transmission Class. This range covers the majority of common noises heard such as speech, television, music, barking dogs etc. ED+A Sound Engineers has rated the Indian Springs floor assembly without any floor covering at STC 47. A minimum STC 50 is international building code. This rating should be met by any of the soundproofing products that also meet the Delta IIC 21+ requirement.

IIC – stands for Impact Isolation Class. This range measures how well a building floor attenuates impact sounds such as footfalls. Underlayment products are notoriously IIC rated inaccurately with some claiming IIC ratings that cannot be achieved. This is done by rating the products on floor assemblies not reminiscent of the ones being addressed. ED+A Sound Engineers has rated the Indian Springs floor assembly, without any floor covering at IIC 30. Our intent is to meet the minimum requirement of IIC 50 after the underlayment is added.

DELTA IIC – Delta IIC shows what a soundproofing product *adds* to the floor assembly in terms of isolating impact footfall noise. This test starts by testing a full assembly, typically on 6-8 inches of concrete with nothing above or below the concrete. The underlayment is installed on the concrete and the same test is repeated. The DELTA IIC rating is the performance *gain* between the first and second test. A higher number shows better performance. This is a true definition of the performance of an underlayment and therefore the one required.

There were no soundproofing requirements when Indian Springs was built, though current minimum standards require IIC 50 or above. The additional requirement for an underlayment of DELTA IIC 21 added to the basic floor assembly rating of IIC 30 gives us a minimum rating of IIC 51. Any rating above this is, of course, superior. A good soundproofing product is resilient like rubber. Flexible vinyl, corks, rolls of composite materials, or similar, are not significantly resilient products.

Examples of products that meet minimum requirements. Please be sure to check if suitable for your flooring material:

Delta IIC 21+ rated:

- PliteQ GenieMat RST10 & RST05
- Floor Muffler
- Eco Ultimate Silencer/Eco Silencer HD FDF
- Roberts Consolidated – Sound Barricade
- Legged & Platt – Whisper Step
- Quietsound 5mm