

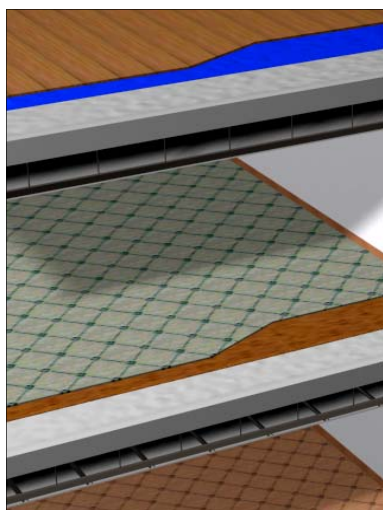


Sound is classified into two basic types

- **Airborne Noise** – talking, music, TV
- **Structure-Borne Noise** – impact floor noise commonly referred to as footfall noise, dragging furniture, dog walking, etc

STC (Sound Transmission Class)

- A value for evaluating the performance of interior walls and the floor/ceiling assembly to stop or insulate **airborne**
- The higher the STC number the better the ability of the assembly to block airborne noise
- Weight & mass play a major factor in the overall STC rating, the heavier the structure the higher the STC ratings will be



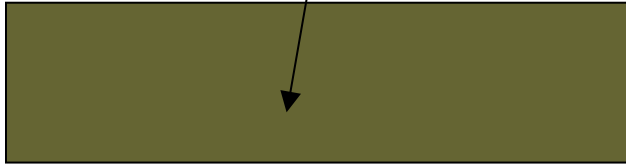
IIC (Impact Isolation Class)

- A value for evaluating the performance of the floor/ceiling assembly from **structure-borne noise**
- Floor underlayments in general are light-weight and designed specifically for impact isolation (IIC)
- The higher the number the better the performance
- Weight & mass helps with low frequency performance and will help the IIC performance of an underlayment

Note: The Δ IIC is a new ASTM test that measures the improvement in decibels. Example a Δ IIC 21 would mean a 21 point improvement. The Δ IIC tests is only tested on a 6" concrete slab with no ceiling below.

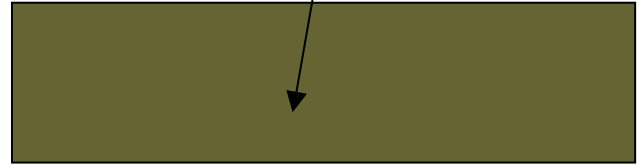
Typical STC & IIC Ratings of untreated floor / ceiling assemblies

6" Concrete Slab



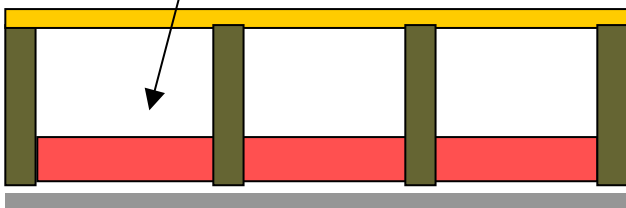
STC 55
IIC 28

8" Concrete Slab



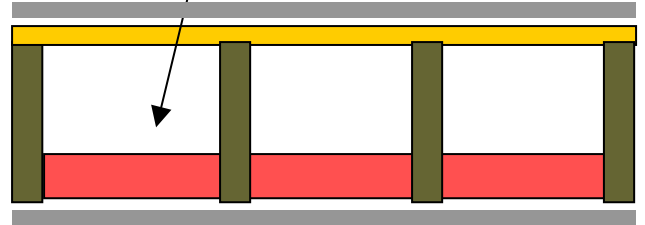
STC 58
IIC 34

Wood Frame Construction



STC 37
IIC 35

Wood Frame Construction with gypsum topping



STC 50
IIC 38

Underlayment Product Selector

Model	Floated Eng. Hardwood & Laminate	Glue down Eng. Hardwood	Solid nail down Hardwood	Vinyl, Linoleum & LVT Plank	VCT	Tile, Stone, Marble	Carpet & Carpet Tiles
Jumpax				✓	✓		
VC300				✓			
Soundeater			✓				
Redupax	✓						
Paladin	✓						
Regupol ProBase	✓	✓	✓			✓	✓
CeraZorb						✓	
Superfloor							✓