

DID YOU KNOW?

SOUND SUPPRESSION SYSTEMS

BUILDING TRUST



SOUND PROBLEMS



Have you ever asked someone to turn the music down? Maybe someone has asked you! Either way you have experienced the phenomenon of, or lack thereof, sound suppression systems.

There is an onslaught of marketing information on sound suppression values but thankfully, for wood floor adhesives we can focus in on two key terms: **Sound Transmission Class (STC)** and **Impact Insulation Class (IIC)**. These terms may also be preceded by an "F" for a value measured in the field or a "Δ" to signify the contribution of a single component in a system to the overall sound rating.

SOUND MEASUREMENTS

Test	Impact Insulation Class (IIC)	Sound Transmission Class (STC)
Description	Measurement of sound suppression through floor/ceiling assemblies due to contact vibration	Measurement of sound suppression through floor/ceiling assemblies due to airborne noise
Types of sound	Foot Fall, moving furniture, dropped toys	Talking, radio, TV, movies
Sounds not covered	Creaking sounds from the when weight of a person bends joists or other loose wood elements	Machinery, industrial processes, bowling allies, power transformers, some musical instruments or systems, vehicles, aircraft and trains.
ASTM Tests	ASTM E492/E989/E1007	ASTM E90/E336/E413/E1332

In most states an IIC/STC rating of 50 is required as part of the building code but a field rating of 45 can be permissible. When selecting a wood floor adhesive keep in mind that each glue is tested as part of system. Therefore, it is important to ask the glue or sound mat manufacturer how the IIC/STC rating was achieved. One can also use the ΔIIC/STC value as a guide to directly compare the sound reducing capability of each product.



SIKA RECOMMENDATIONS

Ceiling	Slab Design	Wood Floor	Sika Product	IIC	ΔIIC	STC
5/8" Gypsum	6" Concrete	7/8" Engineered	Sika Acoubond System	59		
None	6" Concrete	3/8" Engineered	Sika Acoubond System	52	23	52
None	6" Concrete	9/16" Engineered	SikaBond-T35, 5mm Impacta Regupol	51	21	
None	6" Concrete	9/16" Engineered	SikaBond-T21	50	21	
None	6" Concrete	5/8" Engineered	SikaBond-T100	45	17	50



FOR MORE INFORMATION

Visit us at SikaSecure.com

Floor Covering: No. 6

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