Noise reduction & Sound-Insulation Properties

of Vinyl Sheets, Tiles & Carpet Tiles

Use below data as a performance index to consider in reducing the noise caused by walking or falling objects.

Noise level by walking or dropping something on floor is shown by the Impact Sound Level. Usually the rooms floored by carpet or PVC sheet with cushioning effect will generate less impact sound to offer quiet surroundings.

Bigger value means the better noise reduction.

Category	Product name	Thickness (mm)	Sound reduction (dB)	Evaluation
Vinyl sheet	CF SHEET-SD	3.5	22.2	**A**
	CF SHEET-H	1.8	14.9	B
	CARESAFE NW	4.5	14.3	B
	HOSPILEUM NW + Underlay sheet	6.5	14.0	B
	CF SHEET-P NW	2.3	10.6	B
	SF FLOOR NW + Underlay sheet	7.3	13.2	B
	NS REAL DESIGN NW	2.5	9.2	B
	SF FLOOR NW 3.5mm (made to order)	3.5	9.1	B
	SF FLOOR NW	2.8	8.9	B
	HOSPILEUM NW	2.0	6.1	C
	NS SHEET NS800	2.5	5.7	C
	FLOORLEUM PLAIN/MARBLE NW	2.0	3.0	D
Vinyl tile	LOOSELAY 50 NW-EX	5.0	4.7	C
	ROYAL WOOD / ROYAL STONE	3.0	1.8	D
	MATICO V	2.0	1.5	D
Carpet tile	**GA-100**	6.5	22.0	**A**
	GA-8900	6.0	21.4	**A**
	GA-100 + Underlay sheet	10.5	21.4	**A**
	GA-8900 + Underlay sheet	10.0	17.0	**A**
Others	Cork	5.0	7.0	C
	Linoleum	2.5	3.6	D
	Wood flooring	12.0	2.0	D
	Concrete	–	0	D

[Criteria for Evaluation]

Rank	Noise generation	Sound reduction (dB)	
A	↑	≧15	Sounds like noise is reduced to half
B	Not easy	7-15	Sounds like some noise is reduced
C	Easy	4-7	Sounds like noise is not reduced much
D	↓	<4	Sounds like almost no noise reduction

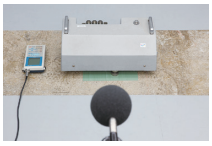
● Test Method

Measuring sound-reduction level (Independent test by TOLI)

Tapping machine sound of 1000Hz is measured by noise meter.Read the difference of noise level by tapping concrete slab and the flooring on the slab.

Instruments: Tapping Machine, Hammer: weighs 520g with 3cm diameter.

Tap height:4cm, Microphone distance from the tapping machine 2M (horizontal), 1.5M(vertical).



Testing device by TOLI R&D

● Guide for Evaluating the Data

Sound reduction is shown by improvement (dB) in the chart.
The **bigger value shows** the better sound reduction due to floor covering.

Compared with the walking sound by high-heeled shoes on concrete slab of 74.2 dB & 1000Hz as main frequency, describe the sound reduction on each flooring.

*All the testing was conducted by TOLI's in-house labs unless otherwise specified. The data shows actual test results, not guaranteed value.