

Impact Insulation Class according ASTM E492



Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine

Date of test: 21.11.2023

Construction: Click laminaat 8mm
(from top to bottom) Redupax 9 mm

Remarks: -

Receiving room:

Volume: 53,6 m³

Source room:

Volume: 52,1 m³

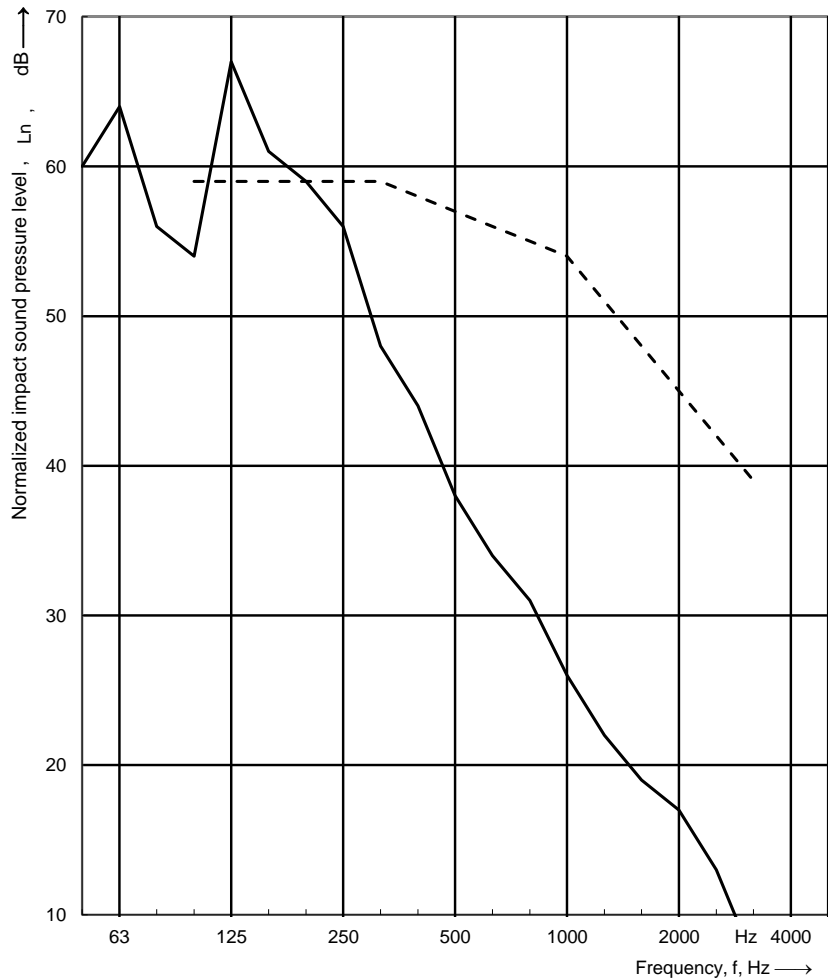
Air temperature: 17,0 °C

Relative air humidity: 59,0 %

Floor Type: 140 mm concrete slab with 330 kg/m²

— Ln
- - - IIC Contour

Frequency f [Hz]	Ln 1/3 octave [dB]
50	60
63	64
80	56
100	54
125	67
160	61
200	59
250	56
315	48
400	44
500	38
630	34
800	31
1000	26
1250	22
1600	19
2000	17
2500	13
3150	7
4000	3
5000	1



Impact insulation class **IIC = 53 dB**
 Measurement according DIN EN ISO 10140
 Evaluation according to ASTM E989

Evaluation of IIC for
 Test report no.: A-2023-243-01

Delta Impact Insulation Class according ASTM E 2179



Laboratory Measurement of the Effectiveness of Floor Coverings
in Reducing Impact Sound Transmission Through Concrete Floors

Date of test: 21.11.2023

Construction: Click laminaat 8mm
(from top to bottom) Redupax 9 mm

Remarks: -

Receiving room:

Volume: 53,6 m³

Source room:

Volume: 52,1 m³

Air temperature: 17,0 °C

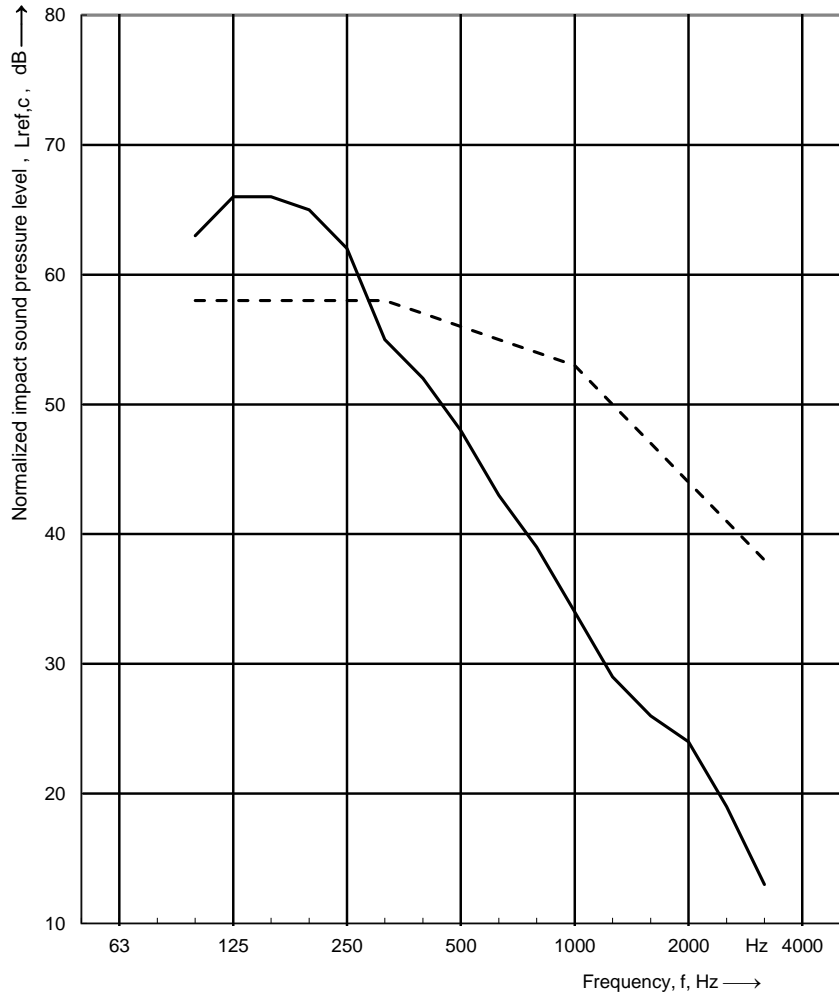
Relative air humidity: 59,0 %

Floor Type: 140 mm concrete slab with 330 kg/m²

— L_{ref,c}
- - - IIC Contour

$$L_{ref,c} = L_{ref} - L_d$$

Frequency f [Hz]	L _{ref,c} 1/3 octave [dB]
50	-
63	-
80	-
100	63
125	66
160	66
200	65
250	62
315	55
400	52
500	48
630	43
800	39
1000	34
1250	29
1600	26
2000	24
2500	19
3150	13
4000	-
5000	-



Increase in Impact Insulation Class $\Delta IIC = 26 \text{ dB}$
 Measurement according DIN EN ISO 10140
 Evaluation according ASTM E 2179 / ASTM E 989

Evaluation of ΔIIC for
 Test report no.: A-2023-243-01