

Impact Insulation Class according ASTM E492



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

Date of test: 08.07.2022

Construction: Vivafloor C5003 5 mm
 (from top to bottom) Redupax 9mm
 PE-film

Remarks: -

Receiving room:

Volume: 53,6 m³

Source room:

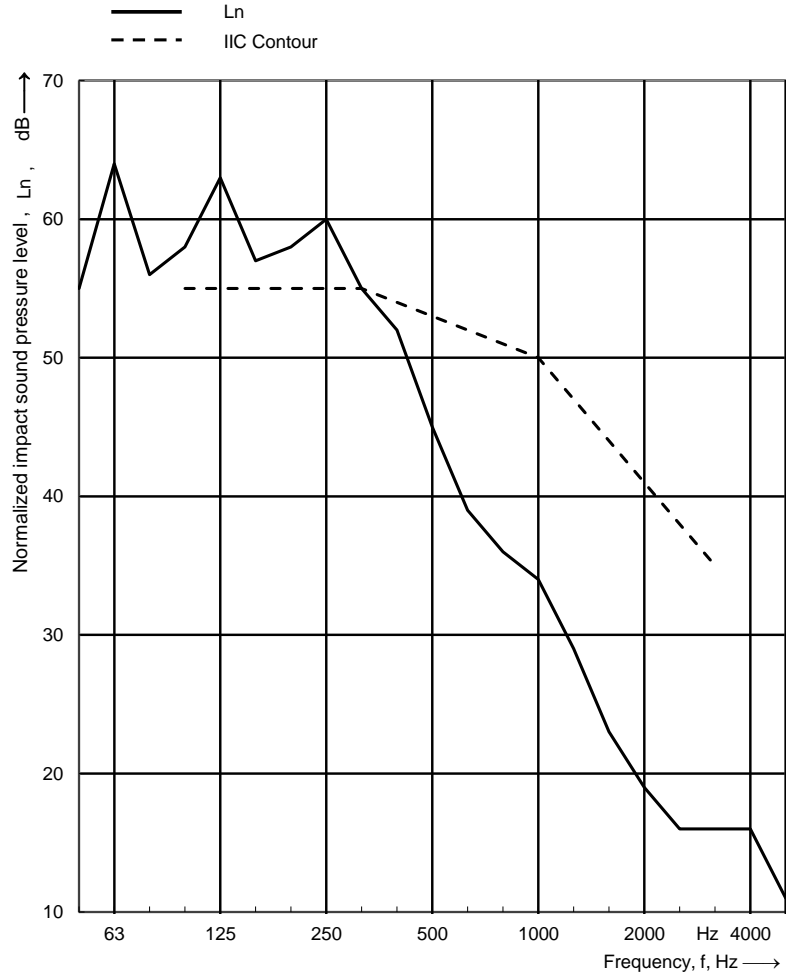
Volume: 52,1 m³

Air temperature: 18,3 °C

Relative air humidity: 51,3 %

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

Frequency f [Hz]	Ln 1/3 octave [dB]
50	55
63	64
80	56
100	58
125	63
160	57
200	58
250	60
315	55
400	52
500	45
630	39
800	36
1000	34
1250	29
1600	23
2000	19
2500	16
3150	16
4000	16
5000	11



Impact insulation class **IIC = 57 dB**
 Measurement according DIN EN ISO 10140
 Evaluation according to ASTM E989

Evaluation of IIC for
 Test report no.: A-2022-210-01

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: 08.07.2022

Construction: Vivafloor C5003 5 mm
(from top to bottom) Redupax 9mm
PE-film

Remarks: -

Receiving room:

Volume: 53,6 m³

Source room:

Volume: 52,1 m³

Air temperature: 19,4 °C

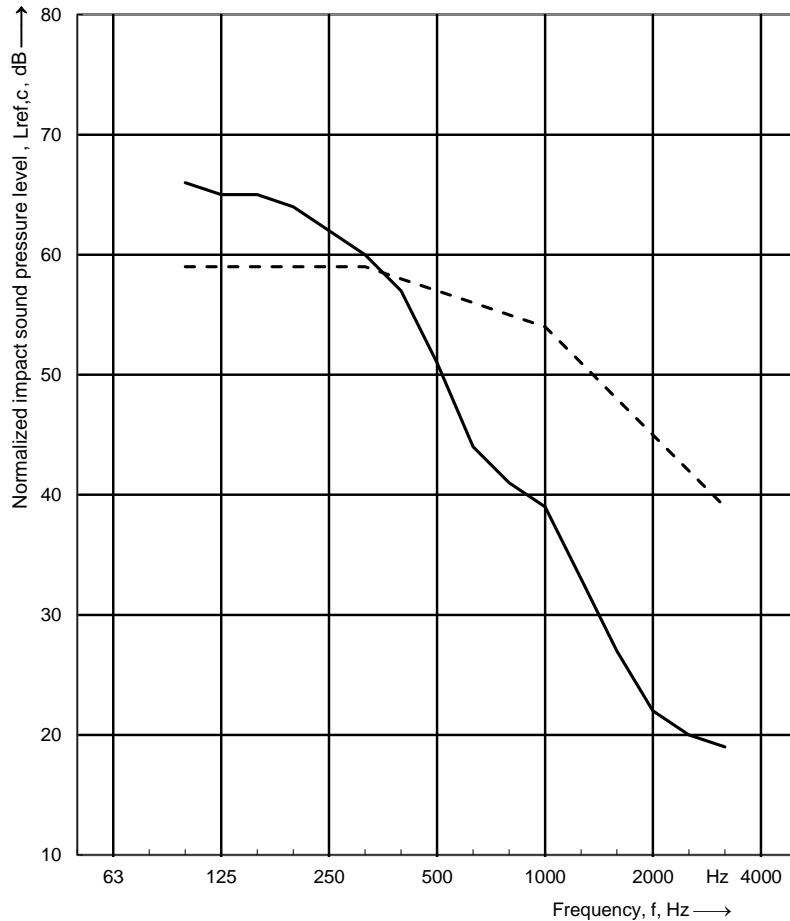
Relative air humidity: 51,3 %

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

— Lref,c
- - - IIC Contour

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

Frequency f [Hz]	Lref,c 1/3 octave [dB]
50	-
63	-
80	-
100	66
125	65
160	65
200	64
250	62
315	60
400	57
500	51
630	44
800	41
1000	39
1250	33
1600	27
2000	22
2500	20
3150	19
4000	-
5000	-



Increase in Impact Insulation Class $\Delta IIC = 25 \text{ dB}$
 Measurement according DIN EN ISO 10140
 Evaluation according ASTM E 2179 / ASTM E 989

Evaluation of ΔIIC for
 Test report no.: A-2022-210-01