

Impact Insulation Class according ASTM E492



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

Date of test: 14.10.2021

Construction: Lamelparket 14 mm
(from top to bottom) Redupax 9mm
LDPE-film 0,02 mm

Remarks: -

Receiving room:

Volume: 53,6 m³

Source room:

Volume: 52,1 m³

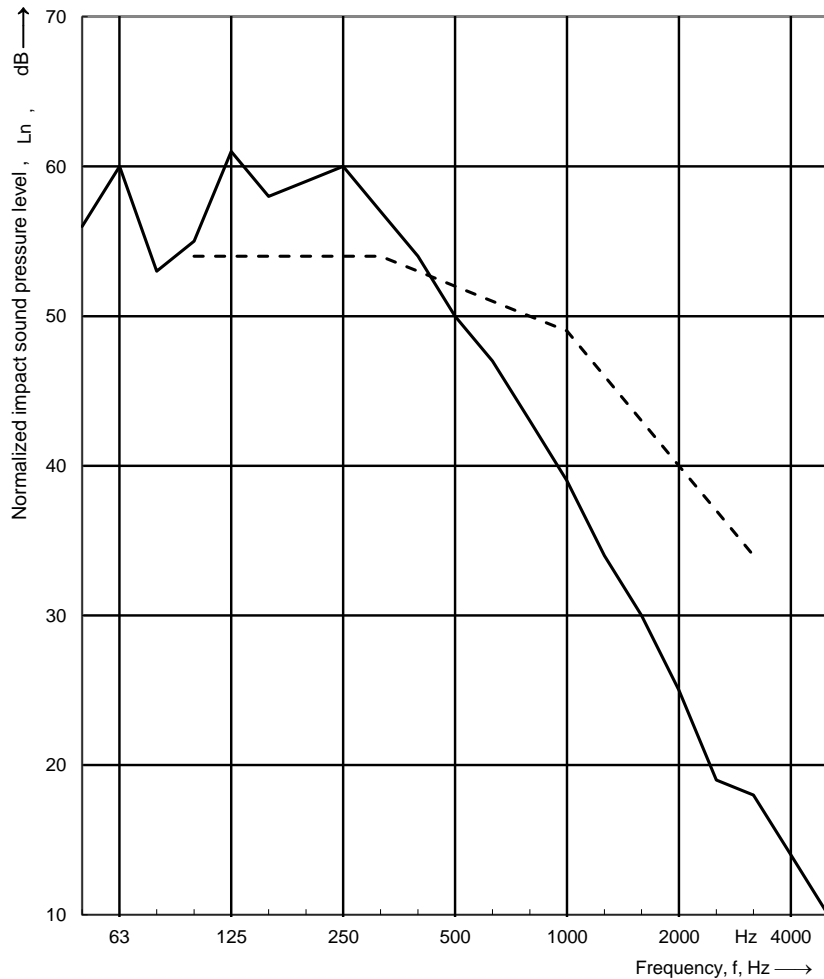
Air temperature: 18,3 °C

Relative air humidity: 51,3 %

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

— Ln
- - - IIC Contour

Frequency f [Hz]	Ln 1/3 octave [dB]
50	56
63	60
80	53
100	55
125	61
160	58
200	59
250	60
315	57
400	54
500	50
630	47
800	43
1000	39
1250	34
1600	30
2000	25
2500	19
3150	18
4000	14
5000	10



Impact insulation class IIC = 58 dB
 Measurement according DIN EN ISO 10140
 Evaluation according to ASTM E989

Evaluation of IIC for
 Test report no.: A-2021-484-01

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: 14.10.2021

Construction: Lamelparket 14 mm
(from top to bottom) Redupax 9mm
LDPE-film 0,02 mm

Remarks: -

Receiving room:

Volume: 53,6 m³

Source room:

Volume: 52,1 m³

Air temperature: 19,4 °C

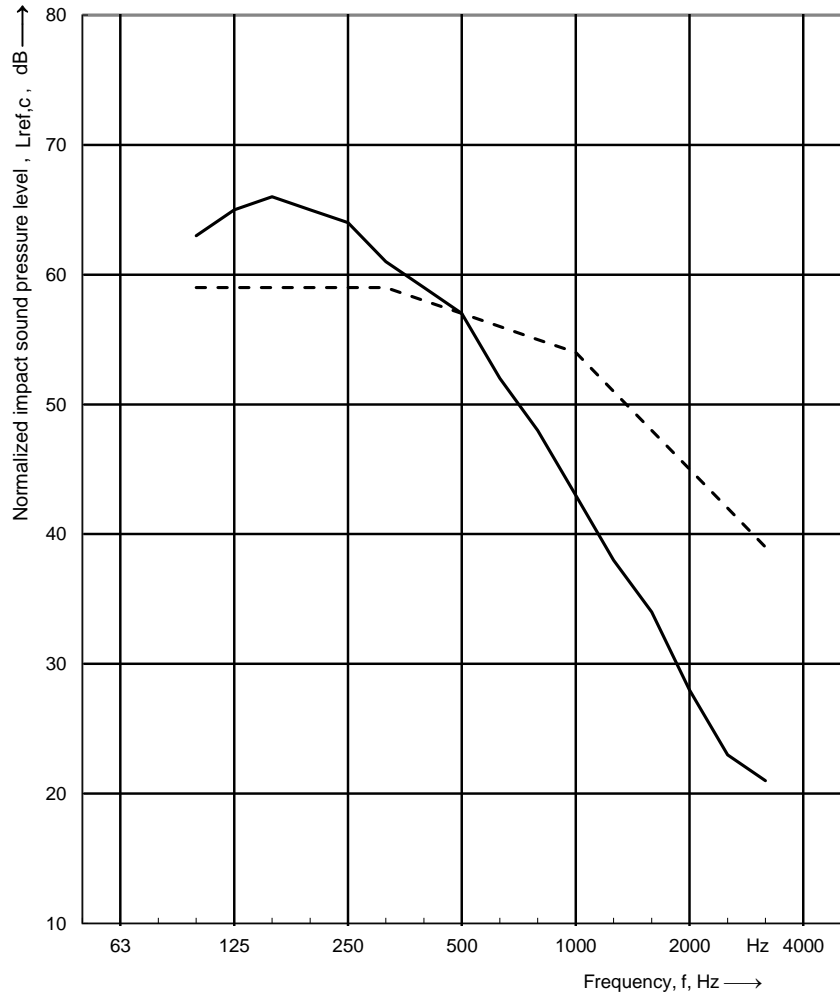
Relative air humidity: 51,3 %

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	63
125	65
160	66
200	65
250	64
315	61
400	59
500	57
630	52
800	48
1000	43
1250	38
1600	34
2000	28
2500	23
3150	21
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-2021-484-01