

# Impact sound insulation according ISO 10140-1

Annex TS -  $\Delta L_w$

Laboratory measurements of the reduction of transmitted impact noise by floor coverings on a heavyweight reference floor

Annex TS - Impact sound insulation

Date of test: 22-5-2024

Construction:  
(from top to bottom) No covering  
Comfort Flex 6.5mm

Remarks:

Receiving room:

Volume: 51,2 m<sup>3</sup>

Source room:

Volume: 100,0 m<sup>3</sup>

Air temperature: 21,0 °C

Relative air humidity: 61,0 %

Boundary conditions:

Tapping Machine positions: 4

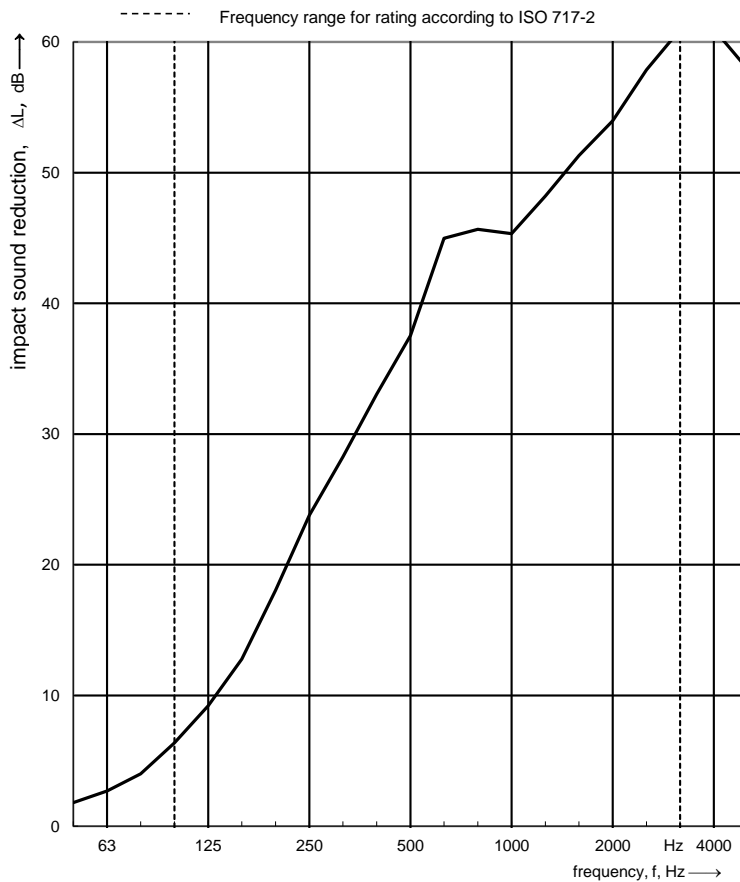
Microphone positions: 4

Category / sample area: II

Type of reference floor: Heavyweight

| Frequency<br>f<br>[Hz] | $L_{n,0}^*$<br>1/3 oct.<br>[dB] | $\Delta L$<br>1/3 oct.<br>[dB] |
|------------------------|---------------------------------|--------------------------------|
| 50                     | 61,9                            | 1,8                            |
| 63                     | 65,9                            | 2,7                            |
| 80                     | 60,3                            | 4,0                            |
| 100                    | 62,4                            | 6,4                            |
| 125                    | 63,6                            | 9,2                            |
| 160                    | 60,8                            | 12,8                           |
| 200                    | 54,9                            | 18,0                           |
| 250                    | 49,7                            | 23,8                           |
| 315                    | 46,0                            | 28,2                           |
| 400                    | 43,1                            | 33,1                           |
| 500                    | 41,5                            | 37,5                           |
| 630                    | 34,6                            | 45,0                           |
| 800                    | 33,8                            | 45,7                           |
| 1000                   | 33,9                            | 45,3                           |
| 1250                   | 31,0                            | 48,2                           |
| 1600                   | 27,4                            | 51,3                           |
| 2000                   | 24,3                            | 54,0                           |
| 2500                   | 19,7                            | 57,9                           |
| 3150                   | 15,1                            | 60,9                           |
| 4000                   | 12,5                            | 61,0                           |
| 5000                   | 11,3                            | 57,9                           |

\*) informative, without room correction



Evaluation according to ISO 717-2

$\Delta L_w = 31$  dB

$\Delta L_{in} = 18$  dB

$C_{i,\Delta} = -13$  dB

$C_{i,r} = 2$  dB

The results are based on measurements, which were performed under laboratory conditions with artificial excitation (standard procedure).

Test report no.: UF\_2724\_01\_Comfort Flex 6,5mm

