

Standard impact sound level, L'nT, according to ISO 16283-2

Measurement of the impact sound insulation of ceilings in buildings with the standard acoustic tapping machine.

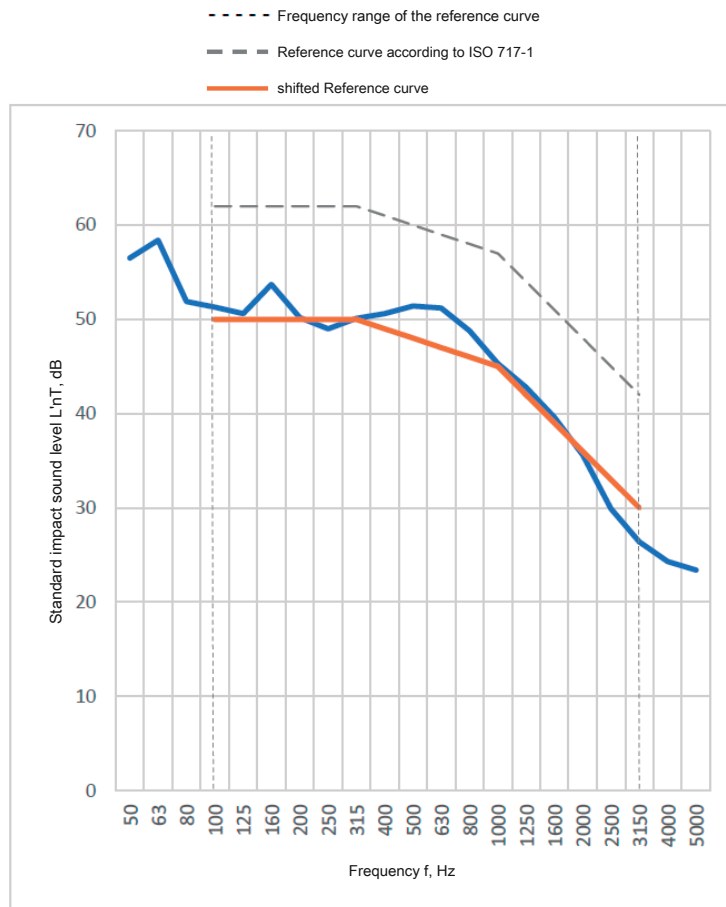
Client:

Test clatuin: 01/12/2021

Description of the structure and position of the separating component and the test arrangement, measuring device, etc. :

Volume of the reception room: 40 m<sup>3</sup>

frequency f Hz	L'nT third dB
50	56,5
63	58,4
80	51,9
100	51,3
125	50,6
160	53,7
200	50,2
250	49
315	50,1
400	50,6
500	51,4
630	51,2
800	48,8
1000	45,3
1250	42,8
1600	39,6
2000	35,6
2500	29,9
3150	26,4
4000	24,3
5000	23,4



\*B: L'nT = <= displayed value, b corrected

Evaluation according to ISO 717-2

$$L'_{nT,w}(C_I) = 48 \text{ (-2) dB}$$

$$C_{I,50-2500} = 1 \text{ dB}$$

The determination is based on building measurements obtained in third octave bands

No. of the test report: 2020 0054 Dartun:

Name of the testing institute: Akustik Engineering Luckinger eU Signature:

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Figure 7 L'nTw SR bedroom top 11 -> ER bedroom top 6

## 11. Assessment

In the table below are the  $L'_{nTw}$  Values and requirements according to the current OIB guideline 5 are shown. The result of the measurement in the original state was taken from the report by MA 39-20-03624.pdf.

Measurement	$L'_{nTw}$	OIB 5 requirement	Fulfills
SR1 SZ Top 11 -> ER1 SZ Top 6 * SR1 SZ	57	48	No
Top 11 -> ER1 SZ Top 6	48 (47.1)	48	YES

\* Measurement result of the measurement of the MA39 before conversion

Table 2  $L'_{nTw}$  results, OIB 5 guideline

The following diagram shows the comparison before / after the conversion.

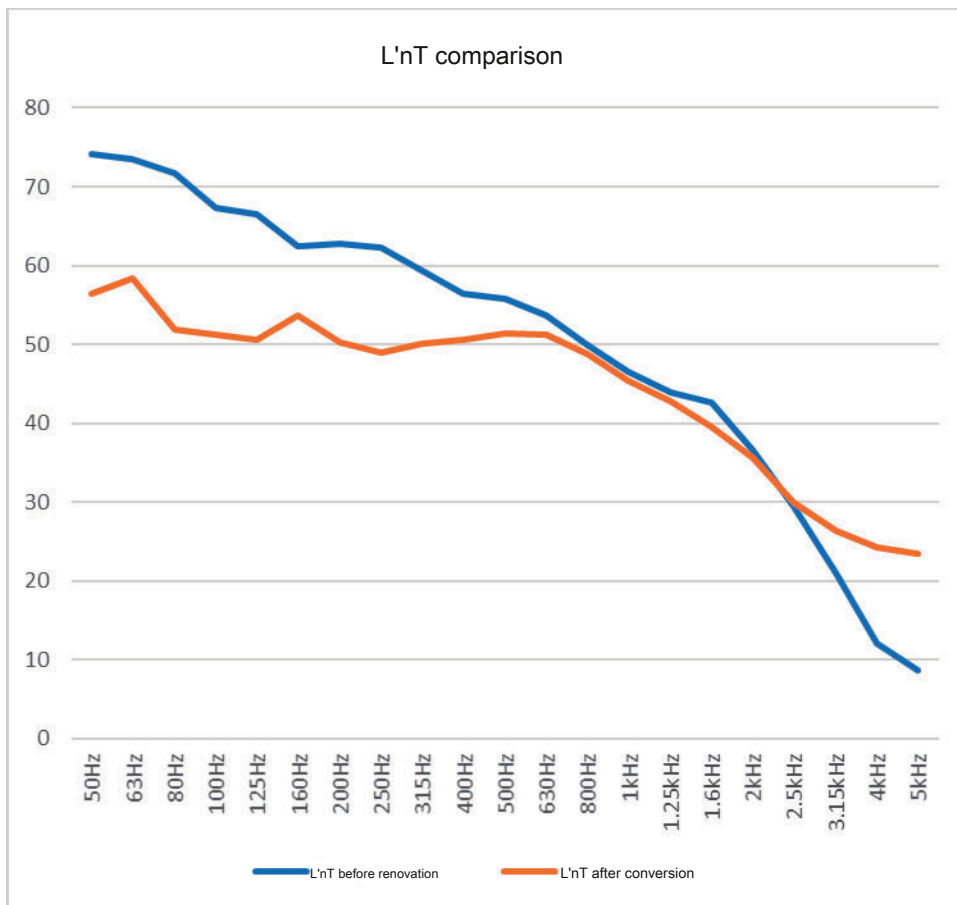


Figure 8 Comparison before / after the conversion of  $L'_{nTw}$  SR1 bedroom top 11 -> ER1 bedroom top 6

You can clearly see the improvement. In the frequency range above ~ 800 Hz, there is practically no improvement. Here the flank of the outer wall determines the result. A cladding is recommended for improvement, which was then installed in the bedroom.