

## Reduction of impact sound pressure level according to ISO 10140

No. of test report: 21-407-M2  
 Date of report: 2021-11-30  
 Date of test: 2021-11-26  
 Name: Carl Nyqvist

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

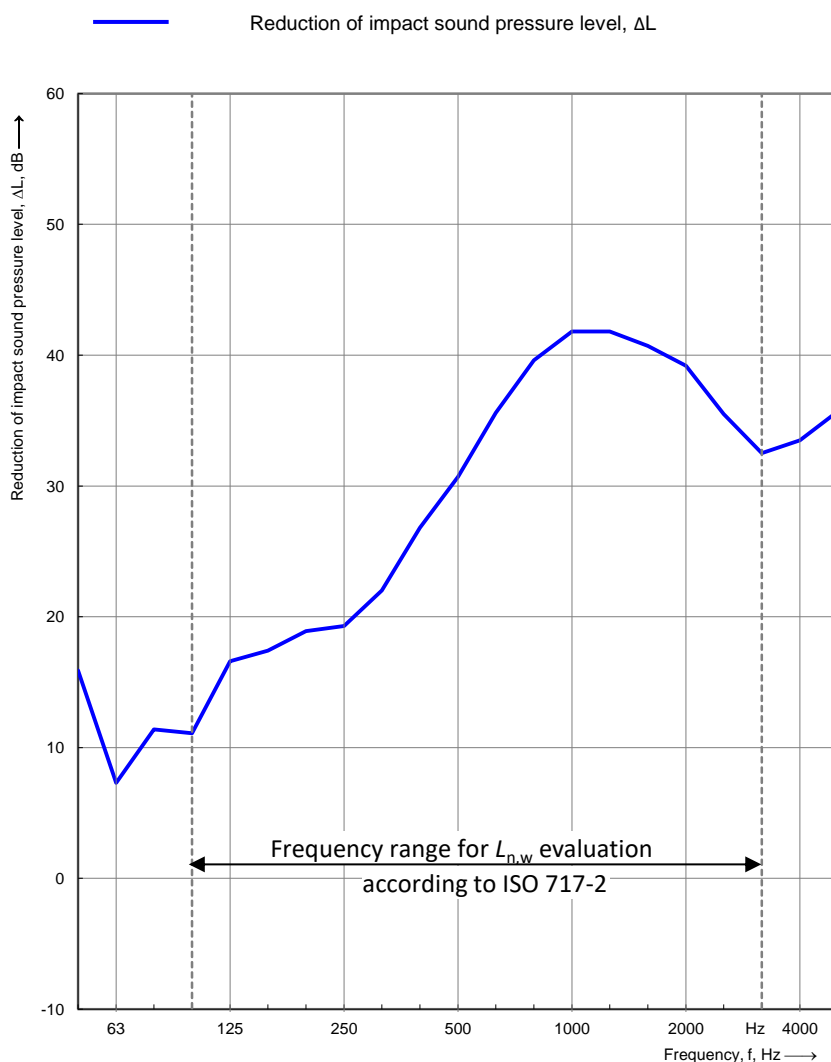
**Client:** Prästängen Sverige AB  
**Manufacturer:** Prästängen Sverige AB  
**Test specimen mounted by:** Prästängen Sverige AB  
**Test room identification:**  
 Acoustic workshop CLT-wooden rig (not lab)  
**Product identification:**

### Description of the specimen:

Top down: 14 mm parquet with foam, 22 mm chipboard, 45 mm wooden joist c/c 600 mm, 200 mm air gap filled with insulation, Acoustic foot 25. Assembled on reference floor of 145 mm CLT-wood, 5 layers.

**Mass per unit area:** kg/m<sup>2</sup>  
**Curing time:** - s  
**Barometric pressure:** 99,4 kPa  
**Temperature - source room:** 2 °C  
 - receiving room: 9 °C  
**Air humidity - source room:** 78 %  
 - receiving room: 56 %  
**Source room volume:** - m<sup>3</sup>  
**Receiving room volume:** 25,8 m<sup>3</sup>

Frequency f [Hz]	L <sub>n,0</sub> 1/3 octave [dB]	ΔL 1/3 octave [dB]
50	82,9	15,9
63	73,1	7,3
80	70,7	11,4
100	74,6	11,1
125	75,4	16,6
160	77,8	17,4
200	82,8	18,9
250	82,3	19,3
315	84,2	22,0
400	85,8	26,8
500	87,5	30,7
630	87,7	35,6
800	88,7	39,6
1000	88,3	41,8
1250	87,3	41,8
1600	85,2	40,7
2000	81,6	39,2
2500	75,8	35,5
3150	68,7	32,5
4000	65,8	33,5
5000	62,7	35,7



Rating according to ISO 717-2

$\Delta L_w = 31$  dB

$C_{i,\Delta} = -9$  dB

$C_{i,r} = -2$  dB

These results are based on test made with an artificial source under laboratory conditions obtained in one-third-octave bands by an engineering method.