

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

No. of test report: 21-407-M4  
 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

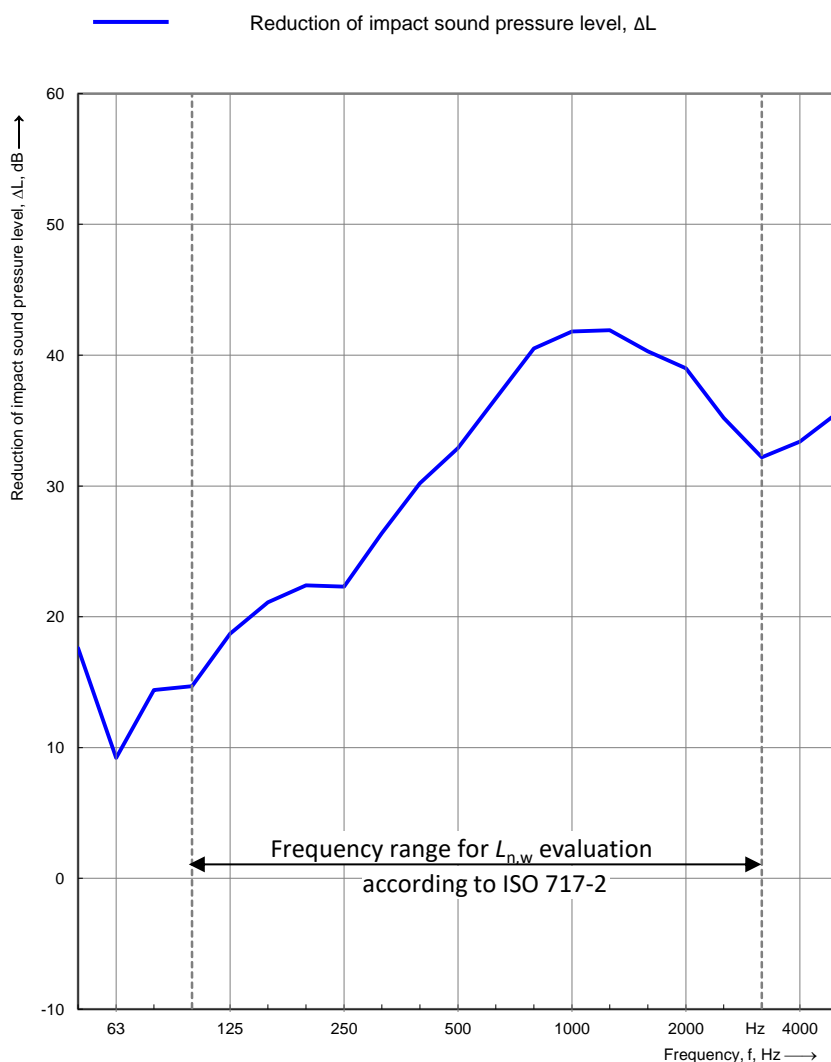
**Client:** Prästängen Sverige AB  
**Manufacturer:** Prästängen Sverige AB  
**Test specimen mounted by:** Prästängen Sverige AB  
**Test room identification:**  
 Acoustic workshop CLT-wooden rig (not lab)  
**Product identification:**

### Description of the specimen:

Top down: 14 mm parquet with foam, 13 mm plaster, 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<br>f<br>[Hz] | L <sub>n,0</sub><br>1/3 octave<br>[dB] | ΔL<br>1/3 octave<br>[dB] |
|------------------------|----------------------------------------|--------------------------|
| 50                     | 82,9                                   | 17,6                     |
| 63                     | 73,1                                   | 9,2                      |
| 80                     | 70,7                                   | 14,4                     |
| 100                    | 74,6                                   | 14,7                     |
| 125                    | 75,4                                   | 18,7                     |
| 160                    | 77,8                                   | 21,1                     |
| 200                    | 82,8                                   | 22,4                     |
| 250                    | 82,3                                   | 22,3                     |
| 315                    | 84,2                                   | 26,4                     |
| 400                    | 85,8                                   | 30,2                     |
| 500                    | 87,5                                   | 32,9                     |
| 630                    | 87,7                                   | 36,7                     |
| 800                    | 88,7                                   | 40,5                     |
| 1000                   | 88,3                                   | 41,8                     |
| 1250                   | 87,3                                   | 41,9                     |
| 1600                   | 85,2                                   | 40,3                     |
| 2000                   | 81,6                                   | 39,0                     |
| 2500                   | 75,8                                   | 35,2                     |
| 3150                   | 68,7                                   | 32,2                     |
| 4000                   | 65,8                                   | 33,4                     |
| 5000                   | 62,7                                   | 35,6                     |



Rating according to ISO 717-2

$\Delta L_w = 33$  dB

$C_{i,\Delta} = -7$  dB

$C_{i,r} = -4$  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.