



Consulting engineers in:

- Acoustics
- Noise control
- Building physics

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## Sound insulation

### Legioblock construction system



Based on sound reduction measurements in field situations (report 171402 of 24 March 2017), the following sound insulation values have been determined for the Legioblock wall system.

Frequency	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz
Sound insulation R	21.0 dB	21.2 dB	23.5 dB	23.4 dB	27.2 dB

The weighted sound insulation value  $R_w(C;C_{tr})$  amounts to 25(-1;-2) dB, with the weighting in accordance with the EN ISO 717-1 standard. The A-weighted sound insulation value  $R_A$  is 23.1 dB(A). This value is based on the standard spectrum for outdoor noise and road traffic noise.

For most open air situations, the Legioblock wall can be regarded as a perfect sound insulating noise barrier, where only the noise transmission over the top of the wall and around the wall is relevant.

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