

SOUND

E 5.0	General information
E 5.1	Specifier's Information

Fig. 1

STATUTORY REQUIREMENTS

In multi storey residential buildings, hotels, student hostels, residential care homes, etc. national building regulations normally require a certain step-sound level between dividing floors in two units.

Reference is made to national building regulations.

For recommended step-sound reduction values for selected Junckers floor systems: **See Table 1**

Fig. 2

INTRODUCTION

The Specifier's Information describes recommended values for step sound reduction and absorption coefficients for a wide range of Junckers flooring systems.

For general information on sound and practical guidelines on acoustics in floor constructions with Junckers solid hardwood flooring **see E 5.0**.

Furthermore, reference made to Junckers floor systems **see C 1.0 and D 1.0**.

STEP-SOUND REDUCTION - RECOMMENDED VALUES

Floor systems for residential and commercial applications

22 / 20.5 mm clip system on JunckersFoam or PolyFoam: **16 dB**

22 / 20.5 mm clip system on cardboard wool felt, 500 g/m²: **15 dB**

14 / 15 mm clip system on JunckersFoam or PolyFoam: **17 dB**

14 / 15 mm clip system on cardboard wool felt, 500 g/m²: **16 dB**

22 / 20.5 mm batten system on 39 x 40 mm battens with Junckers DuoWedges and Step Sound Reduction Pad: **19 dB**

22 / 20.5 mm batten system on 63 x 40 mm battens with Junckers DuoWedges and Step Sound Reduction Pad: **20 dB**

14 / 15 / 20.5 / 22 mm Glue Down System: **9 dB**

Sports floors

22 mm clip sports system on 10 mm SportsFoam underlay: **17 dB**

22 mm clip sports system on 5 mm SportsFoam underlay: **15 dB**

22 mm DuoBat 120+ double layer sports batten system and 50 mm insulation: **25 dB**

22 mm DuoBat 120+ double layer sports batten system: **25 dB**

22 mm UnoBat 62+ single layer sports batten system: **21 dB**

22 mm UnoBat 50 single layer sports batten system: **18 dB**

REVERBERATION TIME

Table 2 shows recommended absorption coefficients in the frequency range 125-4,000 Hz for selected floor systems. For calculation of reverberation time.

Fig. 3

ABSORPTION COEFFICIENTS

Absorption coefficients for selected floor systems	Frequency, Hz					
	125	250	500	1,000	2,000	4,000
22/20.5 mm batten systems with soft packing on concrete	0.15	0.11	0.10	0.07	0.06	0.07
22/20,5 mm clip systems with ProFelt or PolyFoam on concrete	0.02	0.19	0.04	0.02	0.04	0.05
14 mm clip systems with ProFelt or PolyFoam on concrete	0.01	0.13	0.07	0.02	0.03	0.01

Table 2