

3.4 Testing

Date March 5th and 6th, 2007

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4 Detailed results

The values referring to the measured sound reduction index, sound transmission loss or normalized level difference of the tested specimens are plotted against frequency in the enclosed data sheets and are tabled.

As per EN ISO 717-1: 1996-12 + A1:2006 for the frequency range 100 Hz to 3150 Hz the weighted sound reduction index R_w (related to test surface $S=1,88~m^2$), the weighted normalized level difference $D_{n,e,w}$ for the opening and the spectrum adaptation terms C and C_{tr} as well acc. to ASTM E 413 – 04 for the frequency range 125 Hz to 4000 Hz, the Sound Transmission Class STC are calculated according to Table 1.

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Table 1 Measured results

Data	Record	Penetration in stud	Filling of penetration	Results in dB
Sheet	No.	partition		
No.				
				$R_w(C; C_{tr}) D_{n,e,w}(C; C_{tr}) STC$
1/2	Z01	None	None	62 (-2; -8) 63
3 / 4	Z02	400 mm x 400 mm	None	10 (0; 0) 10
5/6/7	Z07	400 mm x 400 mm	Firestop foam	47 (-1; -6) 54 (0; -5) 47
	Z05	400 mm x 400 mm	Firestop foam and	47 (-1; -6) 54 (-1; -6) 48
			cables	