

Air sound insulation from door elements to DIN 4109

in () indicated values correspond for increased sound protection in accordance with sheet 2 to the DIN 4109 to proposals

Requests					Reinaerdt	
					Type	
building type	areas and rooms between which a door is used		Rw,r in dB	Rw,p in dB	Rw,p in dB	requests
story houses with working room	hallway and stairways room	halls	27	32	SH40-33 dB SH43-33 dB	entrance door element type WE*
	hallway and stairways room	rooms/spaces immediately at the living room bordering	(37) 37	(42) 42	SH43-42dB SH52-42dB	
education buildings	halls	instruction room and similar rooms	32	37	SH43-37dB	soundproofing elements type SH
accommodation sites	halls	overnight stay room	32 (37)	37 (42)	SH43-37dB SH43-38dB SH43-42dB SH52-42dB	
hospitals institutes, sanatoria	attending room, consultation room	attending room, consultation room	37	42	SH43-42dB SH52-42dB	
	halls	attending room, consultation room	37	42	SH43-42dB SH52-42dB	
	halls	sick room	32 (37)	37 (42)	SH43-37dB bis SH52-42dB	
	attending room, consultation room	operation room and/or treatment room	32	37	SH43-37dB	
	halls	operation room and/or treatment room	32	37	SH43-37dB	

The rake values (Rw, r,) for door elements results from the obtained soundproof values (Rw, p) in fitness tests in the test bed after DIN 52 210, parts 2, less 5 dBS

$$R_{w,r} = R_{w,p} - 5 \text{ dB}$$

* Soundproof elements are not a rule suited as dwelling entrance elements because of different climate ratios and missing break-in protection (see R5 WE-elements)