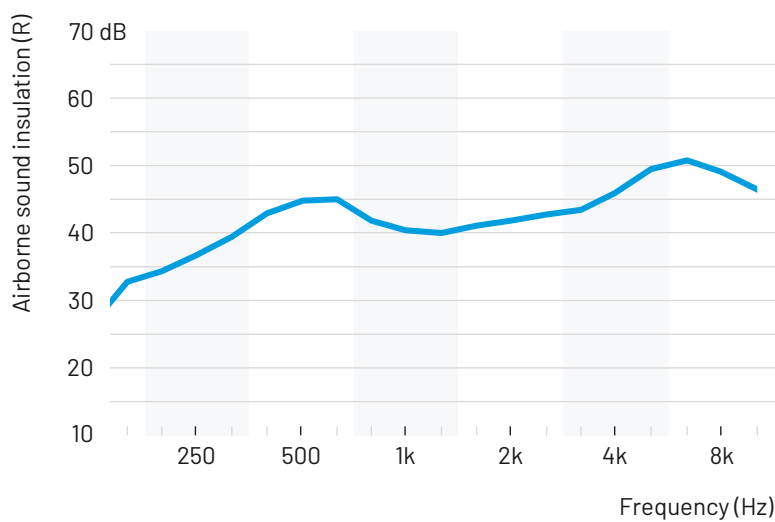


M41 door

Laboratory measurements of sound insulation of the Merford type M41 door

Laboratory: TNO Technisch Physische Dienst TU Delft
 Test element: door type M41
 Manufacturer: Merford Special Doors

Project nr.: 628041
 Area, S, of test element: 2,21 m²
 Mass per unit area: 25 kg/m²
 Receiving room volume: 100 m³



Frequency (Hz)	R 1/3 oct (dB)	R 1/1 oct (dB)
50	28,1	
63	13,1	15,4
80	14,4	
100	18,0	
125	24,7	21,8
160	32,7	
200	34,7	
250	36,3	36,4
315	39,7	
400	42,8	
500	44,9	44,1
630	45,0	
800	41,9	
1000	40,2	40,6
1250	40,0	
1600	40,8	
2000	41,7	41,8
2500	43,1	
3150	43,5	
4000	45,6	45,6
5000	49,8	
6300	50,6	
8000	49,1	48,5
10000	46,8	

Sound insulation measurements took place in a laboratory. Specimen door M41, single leaf, size 950 x 2100 mm, with treshold H=48 mm, 2 pcs compression type latches, no vision panel. Different leaf configuration, treshold, locks, vision panels, etc. will affect sound insulation values.

Rating in accordance with ISO 717-1: $R_w = 41$ dB
 C -1 dB
 Ctr -5 dB
 STC 43

Ra ambient noise	34,7 dB
Ra pop	33,9 dB
Ra house	25,9 dB
Ra traffic	34,7 dB
Ra rail traffic	40,8 dB
Ra air traffic	39,0 dB
Ra HES	23,9 dB
Ra metalworking	38,1 dB
Ra woodworking	33,7 dB
Ra voice	40,0 dB
Ra industry	32,5 dB
Ra cinema	27,9 dB
Ra ultra bass	20,3 dB
Ra background	38,1 dB