

Sound absorption measurements in reverberation rooms

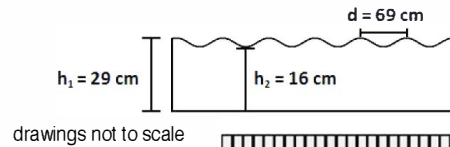
Sound absorption coefficient to DIN EN ISO 354 : 2003 - 12

Attachment

Client: PLYPROJECT

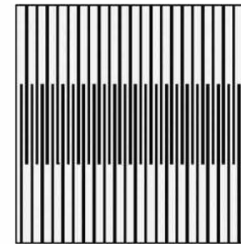
Test specimen: **WAVY (radius 200 mm) in front of a cavity of 160-290 mm**
 with 100-150 mm mineral wool insulation (more mineral wool in the larger cavity),
 curved surface acoustic panel consisting of two planes of slotted plywood (open area 16%,
 slot width 1.6 mm without curving) filled with polyurethane foam as sandwich construction,
 total thickness 19 mm

Acoustically effective surface:
 Height (individual): 3,00 m
 Width (individual): 4,00 m



Specimens in reverberation room: 1 pc.
 Area of the test specimen: 12,00 m²

Test room: Reverberation room Einsteinufer 31, 10587 Berlin
 Volume: 200 m³
 Total surface: 207 m²

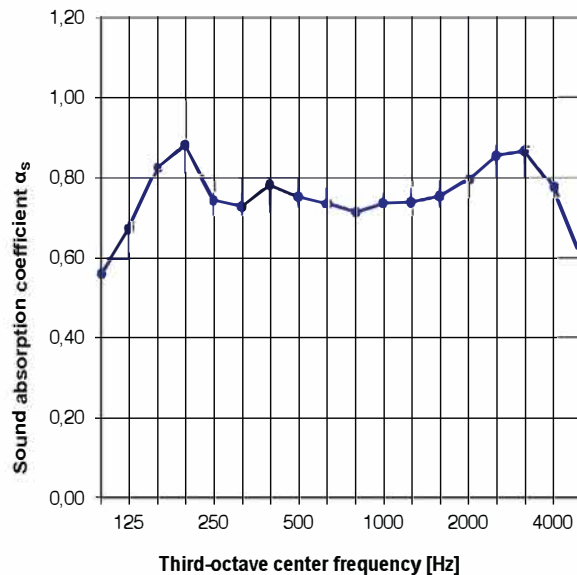


Test method: Method using interrupted noise according to DIN EN ISO 354:2003
 Test signal: Pink Noise
 Receive filter: third octave
 Setup of specimen in reverberation room: type E-290
 in accordance with DIN EN ISO 354, no. B.4

Date of test: 11 May 2016

	empty / with specimen	
Temperature:	21,4 / 22,0	°C
Air humidity:	49,5 / 45,5	%
Air pressure:	100,6 / 100,8	kPa
Speed of sound:	344,18	m/s

ISO 9613



Averaging in octaves:

f in Hz	α_s
125	0,69
250	0,78
500	0,76
1000	0,73
2000	0,80
4000	0,75

Weighted sound absorption coefficient α_w **0,80**
 Classification **B**
 Shape indicators

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 Date: 28. September 2016
 Signature: