

Air-tight-metal acoustic ceiling



The airtight acoustic ceiling from HT is a special ceiling used to control optimal room acoustics and can be used when rooms are only allowed to have low air permeability. To prevent large amounts of air from being lost through the joints, they must be sealed after installation. This airtight acoustic ceiling achieves very good acoustic values in a frequency range between 500 Hz and 2000 Hz due to the acoustic fleece applied, the steel cassette glued tightly to the back and acoustic insulation welded in on the inside. Due to this, the reverberation time is mini-

mised, speech intelligibility is promoted and thus concentration is increased. The HT acoustic ceiling is very highly sound absorbent. The sound absorption coefficient is 0.8 α_w . The perforated acoustic ceiling is made of galvanized sheet steel coated in white similar to RAL 9016 and is matched to the axial dimension of the wall system and ceiling fixtures. The ceiling system provides quick access to installations such as air conditioning, electrical and medical gases.

Dimensions

Module size (L x W)	max. 1550 1250 x 625 mm
Clamping sides	circumferential 12 - 15 mm unperforated edge unperforated chamfer

Acoustic ceiling panels

Material	1 mm galvanised sheet steel DX52D + ZM (mat. no. 1.0350)
Surface	coated in white like RAL 9016
Clamping sides	standard panels with raised edges on four sides wall connection panels with raised edges on two and three sides
Perforation pattern	according to DIN 24041 - Rg 2,5 - 5,0 $A_0 = 19,7\%$
Acoustic fleece	fixed on the back side
Insert	20 mm mineral fibre welded into acoustic foil with glued-on airtight steel cassette

Ceiling suspension

Substructure	0.5 mm galvanised steel support and cross profiles
Vernier hangers	height-adjustable

Technical data

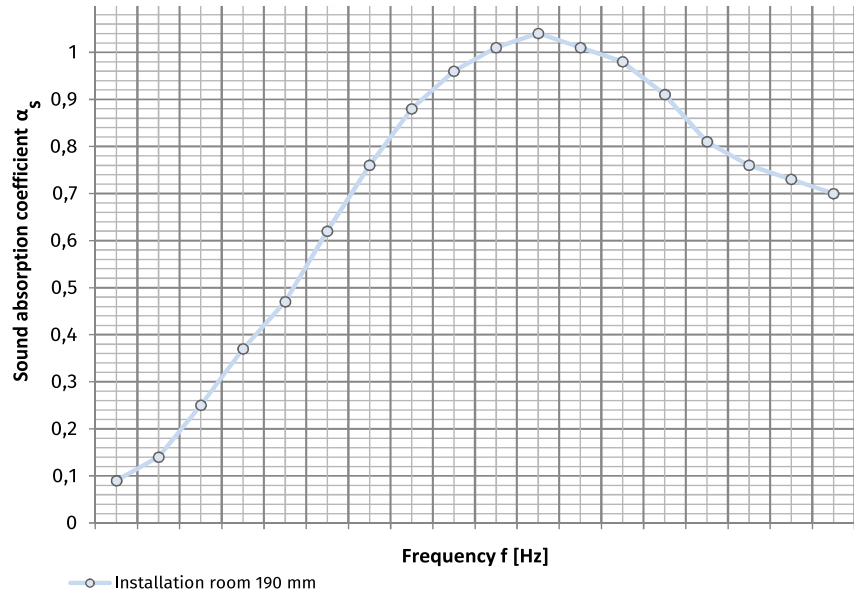
Clamping profiles	40 mm x 19 mm in longitudinal direction, center distance 625 mm
Support profile	40 mm x 19 mm in cross direction, center distance 1250 - 1550 mm

Others

Evaluation acc. to ISO 11654	weighted sound absorption coefficient $\alpha_w = 0,80$; Sound Absorption Class: B
Evaluation acc. to ASTM C423	Noise Reduction Coefficient NRC = 0,85 Sound Absorption Average SAA = 0,82

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Frequency [Hz]	α_s Terz	α_p Oktave
100	0,09	
125	0,14	0,15
160	0,25	
200	0,37	
250	0,47	0,50
315	0,62	
400	0,76	
500	0,88	0,85
630	0,96	
800	1,01	
1000	1,04	1,00
1250	1,01	
1600	0,98	
2000	0,91	0,90
2500	0,81	
3150	0,76	
4000	0,73	0,75
5000	0,70	



α_s Sound absorption coefficient according to ISO 354

α_p Practical sound absorption coefficient according to ISO 11654

