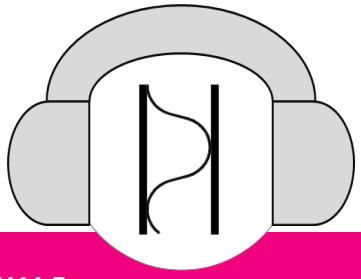
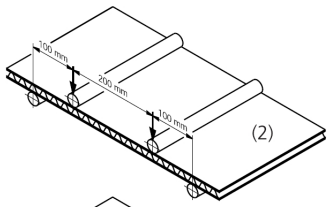
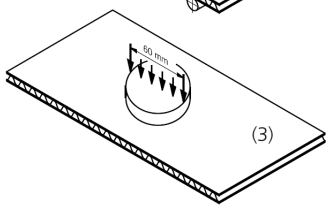
Huge sound reduction
Strong floor panel



Panel type	Alu-Silent hl 10-03-10 hl / H11.5
Top cover sheet	
Thickness of sheet	1.0 mm
Surface	primered
Alloy / Condition	EN AW-5754 H48
Proof stress $R_{p0,2}$ [N/mm²]	≥ 220
Tensile stress R_m [N/mm²]	≥ 280
Back cover sheet	
Thickness of sheet	1.0 mm
Surface	primered
Alloy / Condition	EN AW-5754 H48
Proof stress $R_{p0,2}$ [N/mm²]	≥ 220
Tensile stress R_m [N/mm²]	≥ 280
Dimensions	
Overall thickness [mm]*	11.5 ± 0.2
Max. width [mm]*	1,500 -0/+2
Length [mm]	on request
* other dimensions on request	
Mechanical and physical properties (7)	
Sound reduction index R_w [dB]	38
Weight [kg/m²]	20
Rigidity [Nmm²/mm] (2)	
E·I/b, longitudinal / transverse	5.1 E+6 / 3.5 E+6
Bending moment [Nmm/mm] (2)	
Limit of elasticity M_{el}, longitudinal / transverse	≥ 2,200 / ≥ 1,000
Max. bending moment M_{max}, longitudinal / transverse	≥ 3,000 / ≥ 1,000
Compressive strength [N/mm²] punch ø 60,0 mm (3)	≥ 6
punch ø 6,0 mm	≥ 40
Temperature stability (6)	-40 to 100 °C

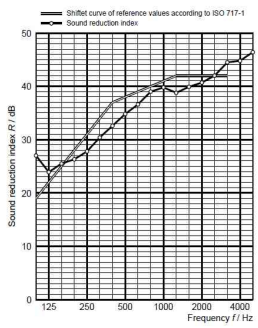




(1) High Durable Polyester (HDP) coilcoated
Other colours and paint-systems on request
(2) Bending test at room temperature following DIN 53293
Since the panel core is a corrugated sheet,
two different load cases have to be considered:
longitudinal: bending axis perpendicular to the corrugation
transverse: bending axis parallel to the corrugation
(3) Pressure test at room temperature following DIN 53291
(4) Border margin max. 5 mm
(5) Cut by hammer shears
(6) Others on request
(7) Further characteristics can be supplied on demand

Date of test: 2014-05-26
Size: 1.67 m²
Source room: Prüfstand F/G
Vol.: V = 147.60 m³
Receiving room: Prüfstand H
Vol.: V = 57.90 m³
θ = 21°C r.h. = 31 %

Frequency [Hz]	R 1/3 octave [dB]
100	27.0
125	23.9
160	25.5
200	26.3
250	27.8
315	30.4
400	32.6
500	34.8
630	36.6
800	39.0
1000	39.8
1250	38.8
1600	39.9
2000	40.7
2500	42.0
3150	44.5
4000	44.8
5000	46.4



Weighted sound reduction index $R_w(C; C_{tr})$ = 38 (-1; -4) dB

Rating according to ISO 717-1
Evaluation based on laboratory measurement results obtained by an engineering method.

	100 - 3150 Hz	100 - 5000 Hz
C	-1 dB	0 dB
Ctr	-4 dB	-4 dB