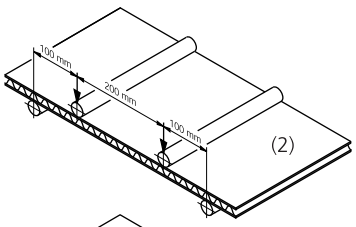
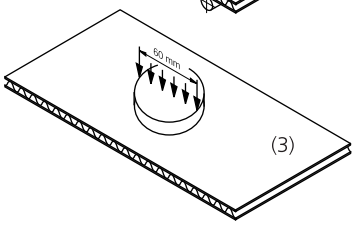
Metawell
metal sandwich technology

Data sheet

Very rigid panel with high load-bearing capacity

Panel type	Alu hl 10-03-10 hl / H15	
Top cover sheet		
Thickness of sheet	1.0 mm	(US: 0.039 in)
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	(US: 0.039 in)
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]*	15 ± 0.2	(US: 0.591 in ± 0.008 in)
Standard width [mm]*	1,500 -0/+6 (4)	(US: 4.92 ft -0/+0.236 in) (4)
Standard length [mm]*	3,000 -0/+6	(US. 9.84 ft -0/+0.236 in)
* other dimensions on request		
Mechanical and physical properties (7)		
Weight [kg/m²]	7.3	
Rigidity [Nmm²/mm] (2)		
E·I/b, longitudinal / transverse	8.0 E+6 / 6.8 E+6	
Bending moment [Nmm/mm] (2)		
Limit of elasticity M_{el}, longitudinal / transverse	≥ 3,200 / 2,650*	
Max. bending moment M_{max}, longitudinal / transverse	≥ 4,200 / 2,650*	
Compressive strength [N/mm²] punch-ø 60.0 mm (3)	≥ 2.2	
punch-ø 6.0 mm	≥ 25	
Temperature stability (6)	-40 to 100 °C (US: -40 to 212 °F)	
Approvals / Certificates	on request	





(1) High Durable Polyester (HDP) coilcoated
Other colours and paint-systems on request
(2) Bending test at room temperature
Depending on the direction of the corrugated core the bending tests are done:
longitudinal: bending axis perpendicular to the corrugation
4-point bending test following DIN 53293
transverse: bending axis parallel to the corrugation
* values for shear-resistant fixing or large span (Euler's – buckling)
by a short and flexible shear fixing bending values are lower,
limited by a shear of the core material
(3) Pressure test at room temperature following DIN 53291
(4) Border margin max. 5 mm (US: max. 0.197 in)
(6) Others on request
(7) Further characteristics can be supplied on demand

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