

Technical Data

Panel thickness	Standard	Units	3 mm
Thickness of Aluminium Layers		[mm]	0.30
Weight		[kg/m ²]	3.80
Technical Properties:			
Section Modulus	W	DIN 53293	[cm ³ /m] 0.81
Rigidity (Poisson's ratio $\mu = 0.3$)	E-I	DIN 53293	[kNcm ² /m] 865
Alloy of Aluminium Layers		EN 573-3	AIMg 1 (EN AW-5005)
Temper		EN 515	H44
Modulus of Elasticity		EN 1999 1-1	70'000
Tensile Strength of Aluminium		EN 485-2	R _m 145 – 185
0.2% Proof Stress		EN 485-2	R _{p0.2} 110 – 175
Elongation		EN 485-2	A ₅₀ ≥ 3
Linear Thermal Expansion		EN 1999 1-1	2.4 mm / m at 100°C temperature difference
Core:			
Polyethylene, Typ LDPE		[g/cm ³]	0.92
Composition:			
			Advanced durability
Surface:			
Lacquering			Coil Coating Mod. Polyester-System adapted for the lamination of reflective sheeting
Gloss grade (according to Gardner)	EN 13523-2		30 – 35
Pencil Hardness	EN 13523-4		HB – F
Corrosion and Impact (according to clauses 5.3.5 and 5.3.7)	EN 12899-1		passed
Temperature resistance:			
		[°C]	-50... +80
Quality:			
	Quality management according to ISO TS 16949, ISO 9001, EN 14001 Inspection certificate 3.1 according to EN 10204 is available with this product		
Warranty:			
	12 years manufacturers warranty		

A new direction for traffic signs

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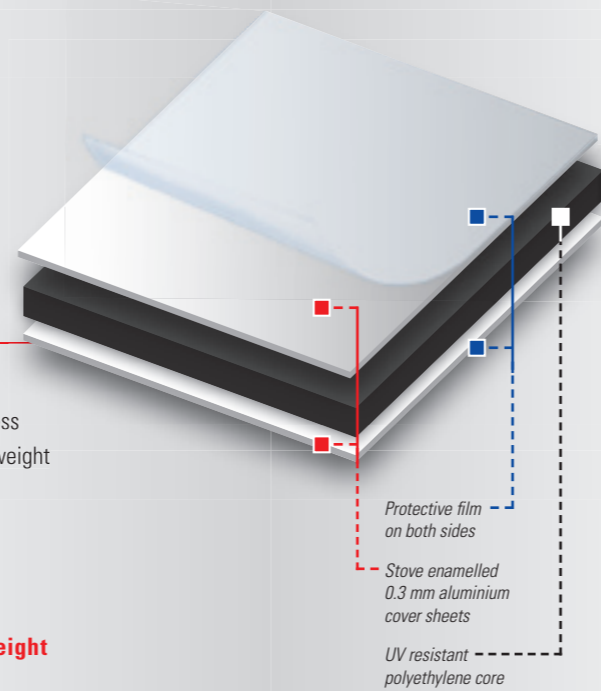
Product specification

- High grade aluminium composite from Alcan Composites – MADE IN GERMANY
- 40 years of experience in ACM business - highly experienced technical service, constantly high quality
- Optimised bonding system ensuring no delamination
 - Tested for a minimum of 2000 hours in salt water
 - Corrosion resistance → no change in appearance
 - Impact resistance → no cracking or delamination
- DIBOND® is the only ACM with AlMg1 alloy - quality of alloy according to EN 485
 - Optimised processing possibilities and corrosion resistance
 - Weather resistant material and coating
- Available in traffic grey or black
- Wide range of sheet sizes and shapes
- Excellent surface for lamination of reflective road vinyls, screen printing and digital printing

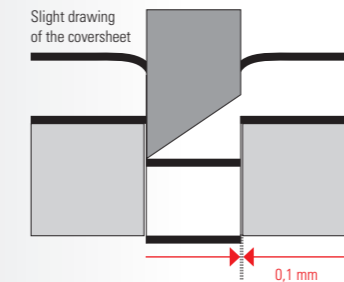
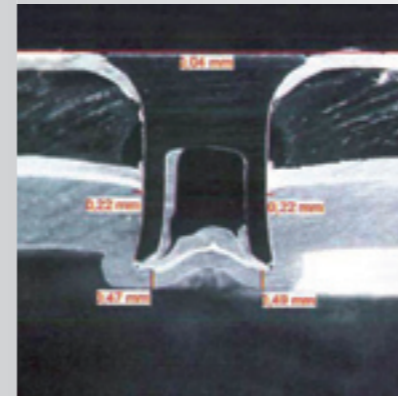
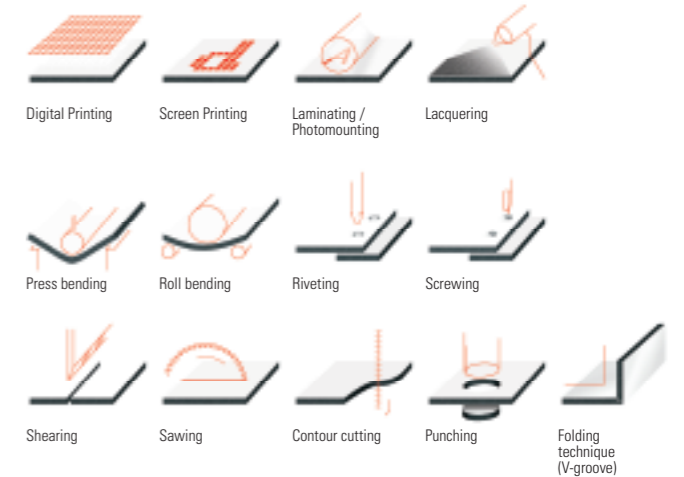
- Perfect flatness and flexural stiffness
- High rigidity compared to the low weight
 - Easy handling and installation
 - Easy fixing
- Available nationwide

Comparison of thickness and weight at equal flexural stiffness

Thickness	Material	Weight
3 mm	DIBOND®	3,8 kg/m ²
2,4 mm	Aluminium	6,5 kg/m ²
11,1 mm	PVC	5,6 kg/m ²
1,7 mm	Stahl	13,3 kg/m ²
6,8 mm	Acryl	8,2 kg/m ²



Processing and installation

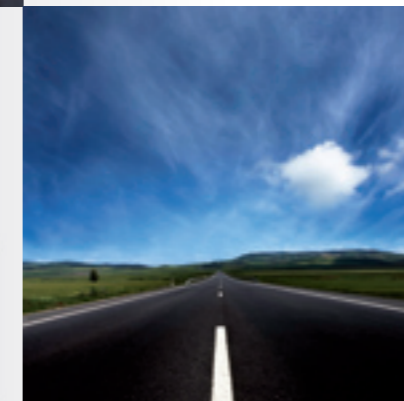


Quality and Compliance

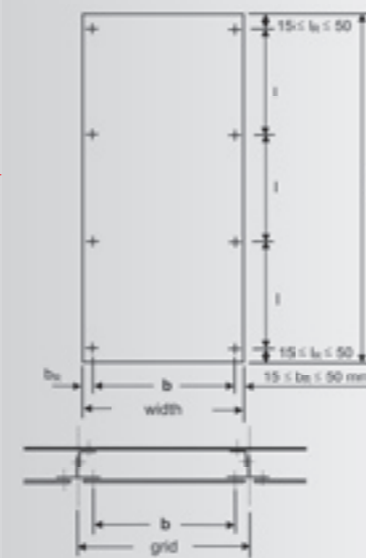
- DIBOND®traffic comes with a full 12 year manufacturers warranty
- BSI tested according to EN 12899-1
- Compliance to WEE and REACH
- Manufactured according to ISO 9001, EN 14001, ISO TS 14969, OHSAS 18001
- Quality inspection certificate - according to DIN EN 10204
- Supported by the leading reflective film manufacturers
- Member of LASMA

Safety and sustainability

- Alcan Singen is a member of the ECCA (European Coil Coating Association) – DIBOND® surfaces are lacquered at the Singen site. All lacquers come from a German source and are free of any hazardous substances such as heavy metals.
- This is proven and tested through an independent institute – an according certificate is available for the whole program
- CO₂ emission for the production of Aluminium are clearly lower for composite materials than for solid sheets
- Alcan Composites is the only ACM manufacturer offering a closed recycling system for all scrap and future replacement signs
- DIBOND®traffic is passively safe – see our MIRA crash test results
- No scrap value - no theft value
 - Escalating costs of aluminium → Disproportionate rising costs of full aluminium traffic signs
 - Rising costs of scrap → Increased thefts
 - Alternative sign solution DIBOND®traffic
 - Low aluminium share → Lower price increase
 - No scrap value → No thefts



- Easy cutting with vertical panel saw or jig saw – aluminium cover layers are only 0,3 mm thick
- When shearing - use evenly ground tools and narrow cutting gap of 0,1 mm for clean cuts
- Processable with CNC standard machines and suitable cutters
- Punching to standard road sign shapes
- Load tables for safe installation available
 - Single Span
- Approved for use with the Henrob and the Böllhoff RIVSET® fixing system
 - Pullout testing - the measured values are well below solid material
 - Distance between fixings should be ≤ 100 mm
 - Distance to the edge should be 25 mm



Wind Load [kN/m ²]		0,3	0,4	0,5	0,6	0,7	0,8	1	1,2	1,4	1,6	1,8
Thickness 3 mm [mm]	max. b	853	775	720	677	643	615	571	538	511	488	470