

ELVAL COLOUR

Elval Colour is a leading European manufacturer in the architectural coated metal products field. Established in 1981 as subsidiary of ELVAL S.A., which is a division of the VIOHALCO Group, it operates 4 liquid coating lines and a powder coating line with capacity to paint in excess of 30 million m² per year.

Besides the coating facilities, Elval Colour also produces metal composite materials, perforated and corrugated sheets to fulfill all building envelope market requirements.



100%
Recyclable material
Respects
the environment

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Power to imagine

CUSTOMERS LINE:
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bond with excellence

creativity

DESIGN
SIGNAGE
DECORATION
MATERIAL
IMAGINATION

COMMUNICATE YOUR IDEAS

etalbond® light consists of a non toxic polyethylene core, contained between two aluminium skins.

Elval Colour belongs to one of the biggest European metal producers and can offer the highest quality standards.

The manufacturing process ensures the adequacy of all necessary quality control measures and guarantees the high quality and longevity of the product.

etalbond® light is the ideal material for the following applications:

- Indoor and outdoor sign making
- Digital and Silk-screen printing
- Road Signs
- Corporate identity
- Exhibition stands
- Furniture
- Displays
- Elevator/stair wall facings
- Light boxes
- Gas and toll stations
- Machine cladding
- Points of purchase
- Partitions
- Shopfitting
- 3-dimension displays
- Suspended ceilings

Composition

Protective plastic film

High Quality Coating System

Aluminium (Alloy EN 3105, Temper H44)

Adhesive layer

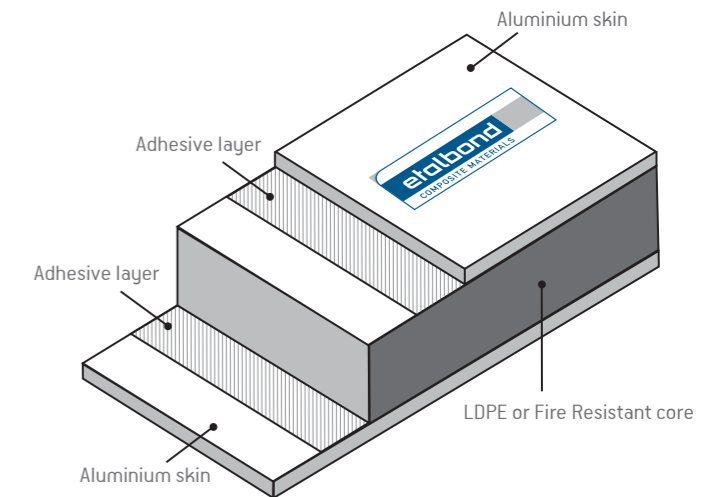
Polyethylene / fire retardant*

Adhesive layer

Aluminium (Alloy EN 3105, Temper H44)

High Quality Coating System or Primer coating

*according to SBI-EN 13823 CLASS.EN 13501 B₁, S₁, d₀





etalbond® light incorporates a number of excellent properties for processing and installation while it is easy for handling and transportation.

- Superior flatness allows highest quality images
- Lightweight material with high stiffness and dimensional stability
- Ideal for large format installations by utilising well known processing techniques
- Highly resistant to outdoor usage
- Has an operational working temperature ranging from -50°C to + 80°C



Material performance

A multitude of worldwide projects where etalbond® light has been used can attest for its superb quality, good durability and ease of formability.

etalbond® light is used extensively in the signage and display market where imagination, ingenuity, innovation and aesthetics play a major role.

Excellent results can be achieved using conventional plastic and wood working tools.



etalbond® slim

etalbond® slim consists of 0,2mm aluminium skins instead of 0,3mm aluminium skins which are used for etalbond® light.

It is positioned to fulfil the digital market needs for applications where routing and bending are not necessary.

etalbond® slim due to it's favourable ratio of material capabilities versus price substitutes materials like foam pvc, solid polyester panels and is a worldwide success.

TABLE OF COLOURS FOR etalbond® light & slim





PROCESSING - ROUTING - FOLDING

*also applicable for etalbond® slim

Due to its adaptability **etalbond® light** can be shaped by means of simple processing techniques. This procedure, the routing and folding technique, enables a variety of shapes and sizes to be manufactured. After having routed the material (one side) the untouched outer cover sheet can be bent manually giving an exact folding and clean folding line which follows the routed groove.

All standard machinery devices can be used for the following pictogram below.



CUTTING & SAWING



DRILLING



PUNCHING



CONTOUR MILLING

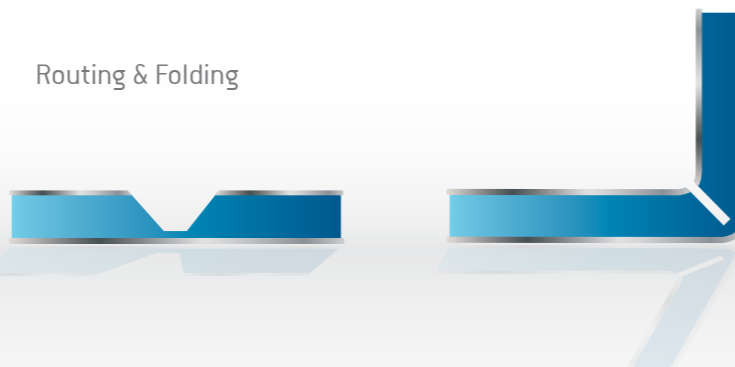


JOINING & FIXING TECHNIQUES



BENDING - FORMING

Routing & Folding



Technical data sheet etalbond® light

PANEL THICKNESS	2mm	3mm	4mm	6mm
Dimensions				
Aluminium Thickness	0.30	0.30	0.30	0.30
Panel Weight (kg/m ²)	2,90	3,80	4,80	6,6
Standard Width	1250, 1500, 2000* (*minimum quantity)			
Standard Length	2050, 2500, 3050, 4050			
Non Standard Dimensions	Upon Request			

TECHNICAL PROPERTIES						
Moment of Inertia	I	[cm ⁴ /m]	0.049	0.123	0.231	0.548
Section Modulus	W	[cm ³ /m]	0.51	0.81	1.11	1.71
Rigidity	EJ	[kNcm ² /m]	345	865	1620	3840
Alloy / Temper of Aluminium cover sheet			EN AW - 3105, H44			
Modulus of Elasticity	E	[N/mm ²]	70.000			
Tensile strength of Aluminium cover sheet	Rm	[N/mm ²]	150-200			
0.2% Proof stress	Rp 0.2	[N/mm ²]	120 min			
Elongation	A50	%	A50 ≥3%			
Linear Thermal Expansion			2,4mm/m for 100°C temperature difference			

SURFACE PREPARATION AND PAINT CHARACTERISTICS

SURFACE PREPARATION	PRE-TREATMENT OF ALUMINIUM
	1st Degreasing
	2nd Passivation (based on Chrome vi)

Visible Surface Paint Characteristics	Polyester/high Durable Polyester Coating Roller Applied:
• TOTAL PAINT THICKNESS	20 microns
• GLOSS (initial)	30 - 60%
Low	≤ 20%
Semi	40 - 60%
High	≥ 80%
• PENCIL HARDNESS [ECCA-T4]	H
Reverse Surface Either: Primer (Polyester) or COATED	Polyester Coating 4 Microns: Polyester/high Durable Polyester Coating, Roller applied
• TOTAL PAINT THICKNESS	20 microns
• GLOSS (initial)	30 - 60%
Low	≤ 20%
Semi	40 - 60%
High	≥ 80%
• PENCIL HARDNESS [ECCA-T4]	H

TEMPERATURE RANGE:

Operational temperature range	From -50°C to +80°C
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