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 m^2 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

ENERGY LINE P.05.12

CUSTOMERS LINE:
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ELVAL COLOUR

etalbond
COMPOSITE MATERIALS

bond with excellence

ELVAL COLOUR
Power to imagine

A cladding creative material

etalbond® consists of a non toxic polyethylene/fire retardant core, contained between two aluminium skins. For more than 20 years etalbond offers excellent solutions in the field of architecture applications.

etalbond® has outstanding product properties such as flatness, durability, formability and can be offered in a wide variety of colours and dimensions.

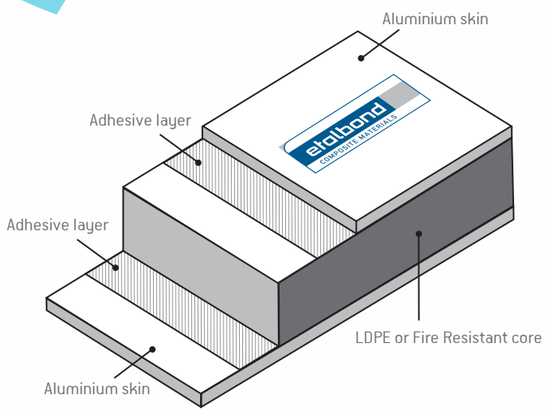
etalbond COMPOSITE MATERIALS

bond with excellence

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 B_1, S_1, d_0



Colour appearance and design

Being one of the leading coating companies in Europe with an output of more than 30 million m^2 produced in 4 coating lines, with over 30 years experience, Elval Colour is able to create many opportunities for all fields in architectural engineering. **etalbond®** products are available in various colours presenting a wide selection for the realisation of your ideas. **etalbond®** multilayer paint systems, offer advanced resistance to aggressive weather conditions, polluted environments and UV-radiation. Combining surface endurance with workability, **etalbond®** can adapt to any desired shape, independent of its complexity, using standard techniques (including roll bending, routing, folding) and others.

AREAS OF ARCHITECTURAL ENGINEERING:

- Ventilated claddings
- Corporate identity
- Roofing applications and edgings
- Ceilings
- Signage and advertising
- Exhibition stands
- Industrial applications

bond with excellence

etalbond® characteristics

ELVAL COLOUR SUPPORT SYSTEMS

Elval Colour provides specially designed support systems for the easy installation of etalbond panels on the various building facades applications.

etalbond® composite panel is the ideal material for projects exposed to highly demanding environments, offering the flexibility to be used in various architectural and printing applications.

Flatness: superior flatness in respect to other solid aluminium sheets.

Rigidity – light weight: Due to our sandwich technology our composite panels out performs other materials with regards to needed substructure and design capabilities.

Formability: Due to its excellent formability etalbond® can easily be shaped in many forms, always retaining its high durability and flatness.

ECO – Friendly: Both aluminium skins and the core are 100% recyclable.

Dimensions: Thickness between 3-6mm
Width between 1000mm-2000mm
Length maximum 13000mm

PROCESSING - ROUTING - FOLDING

Due to its adaptability etalbond® 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

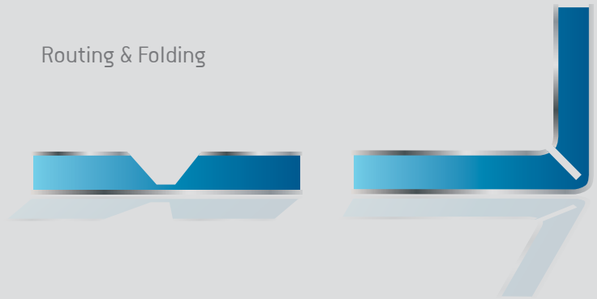
PUNCHING

CONTOUR MILLING

JOINING & FIXING TECHNIQUES

BENDING - FORMING

Routing & Folding



bond with excellence

A quality composition

Whether a project is taking place in a town centre, with high smog exposure, or close to coastal areas, with high levels of salt and humidity, the surface of the material is subject to the risk of rapid fading or oxidisation.

etalbond® surface is available in high quality coatings such as Very high durability polyesters (VHDPE), PVDF-2, 3 and 4 Layers and Lumiflon. In each case the coating process follows the most appropriate specification according to ECCA (European Coil Coating Association) and AAMA (American Association of Manufacturers) Standards. Paint coating tests meet the ECCA testing requirements and the entire production process is ISO 9001 - 2008 and ISO 14001 certified.

Technical data sheet etalbond-PE

Panel etalbond-PE thickness	mm	3	4	6
PANEL DIMENSIONS				
Aluminium Thickness	mm	0.5	0.5	0.5
Panel Weight	Kg/m^2	4.6	5.5	7.3
Panel Width	mm	(MIN 1000 - MAX 2000) std 1250, 1500		
Panel Length	mm	1000 - 11000		
ALUMINIUM MECHANICAL PROPERTIES				
Elongation A50	≥ 4%			
PANEL CHARACTERISTICS				
Rigidity (EJ)	KNcm^2/m	1250	2400	5900
ALUMINIUM ALLOY		AL 3105 / H44 (Painted)		
TEMPERATURE RANGE				
Operational Temperature Range		From -50°C to +80°C		
ACOUSTICAL PROPERTIES				
Sound Transmission Loss (Rw)	dB	25	26	27

Technical data sheet etalbond-fire retardant

Panel etalbond-FR thickness	mm	4	6
PANEL DIMENSIONS			
Aluminium Thickness	mm	0.5	0.5
Panel Weight	Kg/m^2	7.6	11.0
Panel Width	mm	(MIN 1000 - MAX 2000) std 1250, 1500	
Panel Length	mm	std 3200 MAX 13000	
ALUMINIUM MECHANICAL PROPERTIES			
Elongation A50	≥ 4%		
PANEL CHARACTERISTICS			
Rigidity (EJ)	KNcm^2/m	2400	5900
ALUMINIUM ALLOY		AL 3105 / H44 (Painted)	
TEMPERATURE RANGE			
Operational Temperature Range		From -50°C to +80°C	
MECHANICAL PROPERTIES			
Tensile Strength (Rm)	N/mm^2	≥ 150	
Yield Strength (RP0.2)	N/mm^2	≥ 120	
Elongation	%	A50 ≥ 3	
Linear Thermal Expansion:		2,4mm/m for a 100°C temperature difference