

ALUMIL
ALUMINIUM SYSTEMS



ALUMIL  **J. Bond**
ALUMINIUM COMPOSITE PANELS

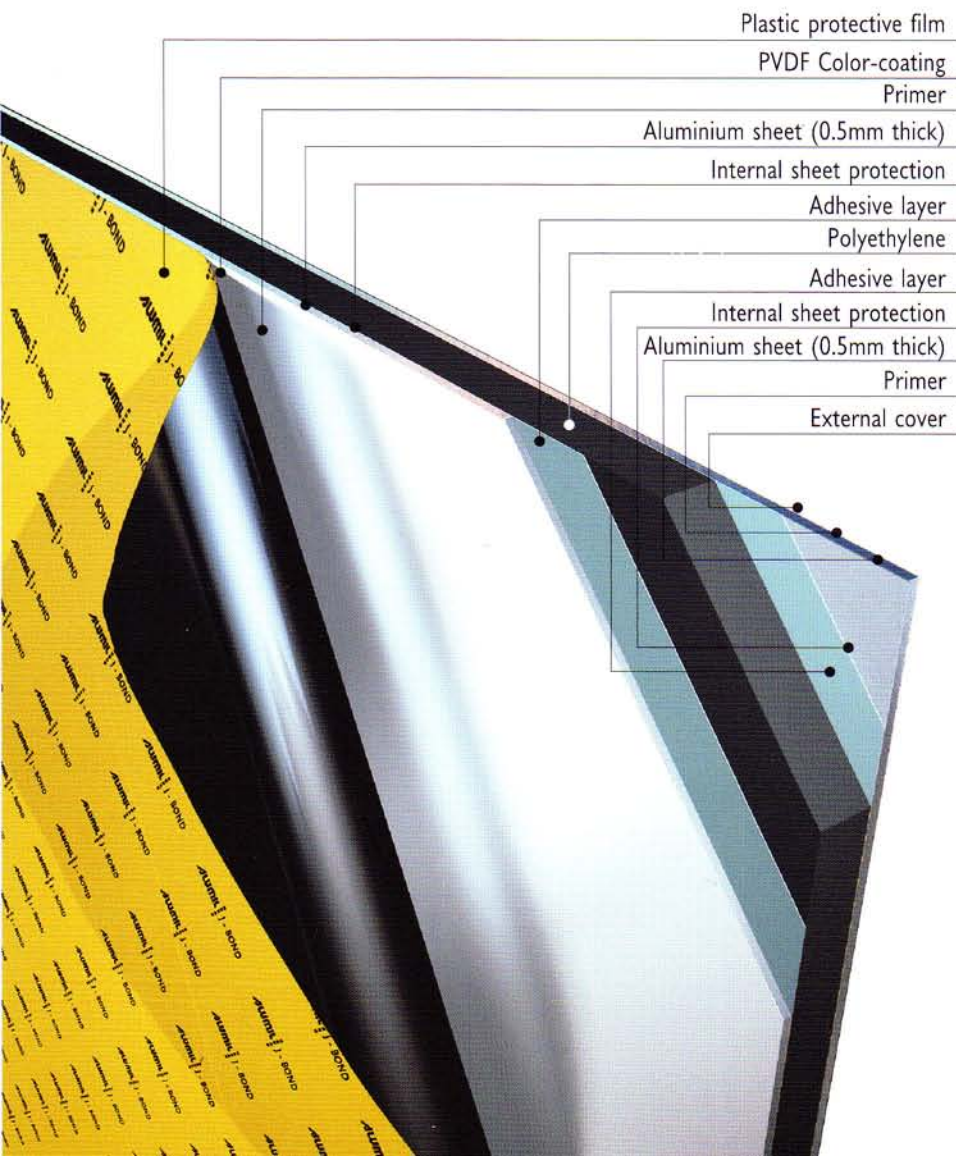
Characteristics

Contemporary structural material, which is:

- ☐☐☐☐ ■ inflexible, lightweight, and flat in surface
- ☐☐☐☐ ■ durable against weather conditions, corrosion, deterioration, discoloration, impact shocks, fire and water
- ☐☐☐☐ ■ Suitable for a wide temperature range (-50°C to 80°C)
- ☐☐☐☐ ■ Inert against chemical reactions with acids and alkaline-based substances
- ☐☐☐☐ ■ Highly sound-proof and heat-insulating
- ☐☐☐☐ ■ Shock absorbent
- ☐☐☐☐ ■ Environmental-friendly, consisting of separately recyclable materials
- ☐☐☐☐ ■ Easy to process and install
- ☐☐☐☐ ■ Simplifies construction and cuts down costs
- ☐☐☐☐ ■ Requires minimal maintenance
- ☐☐☐☐ ■ Suitable for various imprinting
- ☐☐☐☐ ■ Available in various colors

Composition

J-Bond is an excellent-quality composite material, in a form of a sandwich. It consists of a polyethylene core, situated between 2 sheets of aluminum, coated with PVDF (highly-resistant fluoride resin)



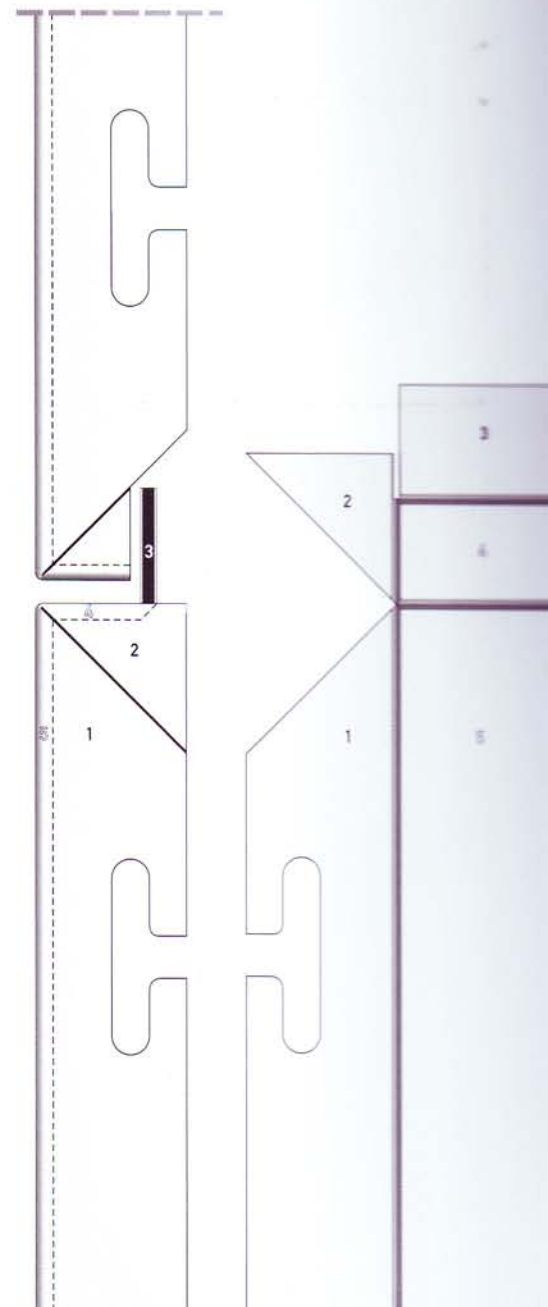
Process

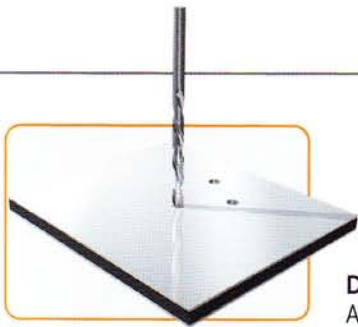
General instructions

- ☐☐☐☐ ■ Carve parametrically the sheet, which is already cut in the desired dimensions, on a distance of 20 mm from the edge. The maximum carving depth should be 3, 2 mm.
- ☐☐☐☐ ■ Remove all four corners and fold the carved surfaces, creating a box. The corners of the box are reinforced with aluminum corner joints to stabilize the connection.

Required equipment

Simple, lightweight hand-held tools





Drilling
Any kind of drill



Cutting
Hand-held tools or special cutting machinery



Forming or Roll-Forming
Easily acquires a roll-form using bending machinery



Carving
With hand-held tools or special machinery (router)



Cutting-out
With special punching machines



Connecting
With screws or pins



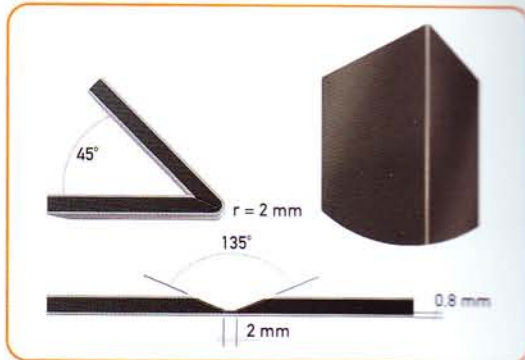
Gluing
Using polyurethane or two-element glue

Application Alternatives

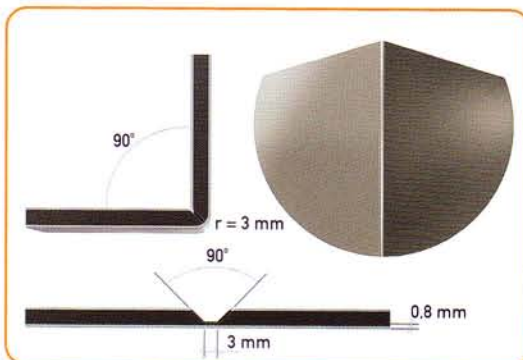
Installation of folded panels hanging on a fixed accessory
With a column scotia of 17 mm



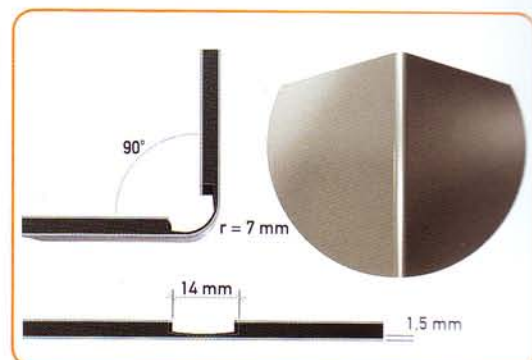
Carving to construct a 45° angle



Carving to construct a 90° angle



Carving to construct a 90° angle with a curved acme



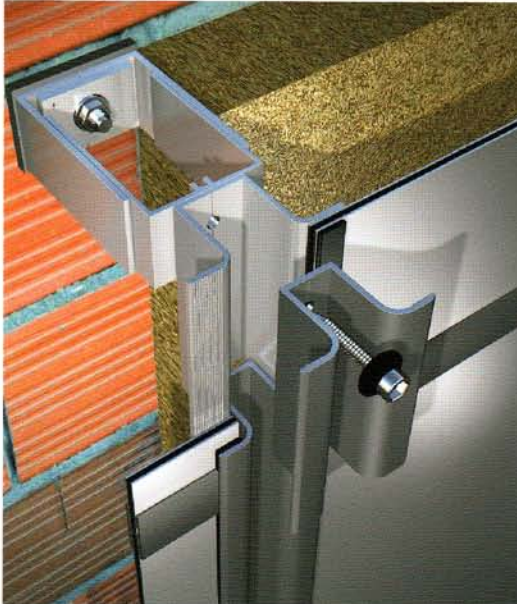
Installation of folded panels hanging on a height-adjustable accessory
With a column scotia of 17 mm



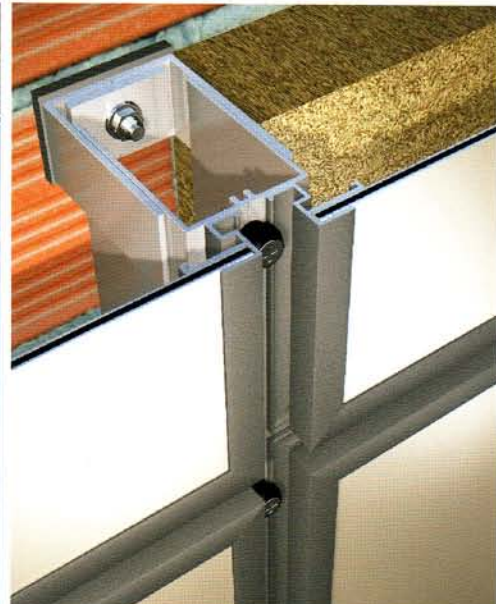
Installation of folded panels hanging on a height-adjustable accessory
With a column scotia of 17 mm



Fully waterproof installation
Using J-Bond in flat (not folded) panels



Installation of panels in aluminium frames
Using J-Bond in flat (not folded) panels secured by an aluminium framing



Technical Characteristics

Alloy	AA 3003
Drawing Tolerance	Rm > 130 N/mm ²
Leakage Limit	Rp 0,2 > 90 N/mm ²
Elongation	A5 > 5%
Elasticity Indicator	E = 70.000 N/mm ²
Thermal Dilation Coefficient	1,66 mm/m/1000°C
Temperature Range	-50°C έως 80°C
Weight (4mm)	5,6 Kg/m ²
Rigidity (4mm)	2400 kN/cm ² /m
Tolerance	Width tolerance: 4 mm ± 0,2 mm Width: ± 2mm Length tolerance: ± 3mm diagonal tolerance: max 5 mm

Laboratory Testing Reports

Institution	Test	Test Control Method	Result and Classification
SIEMENS	Fire Conduct	SBI-Test DIN 13823	EU building classes B or better
SGS	Film Agglutination	ASTM D3359	5B
	Film Hardness	ASTM D3363	3H
	Impact Resistance	ASTM D2794	No cracking or peeling
	Abrasion Resistance	ASTM D968	44
	Chemical Reaction Resistance	ASTM D1308	No material alteration
APIΘ	Puncture Resistance	ASTM D732-99	4287 N/ 17,9 Mpa
	Detachment Resistance	ASTM D903-98	0,875 Kg/mm

Production Capacity

Aluminium Sheet Thickness	Composite Panel Thickness	Width x Length
0.5 mm	4.0 mm	1000 mm x 3200 mm 1250 mm x 3200 mm

Colour Guide



SILVER METALLIC



CHAMPAGNE METALLIC



BRONZE METALLIC



GREY METALLIC



SILVER EXOTIC



SMOKEY SILVER



BEIGE CHIARO RAL 1015



WHITE RAL 9016



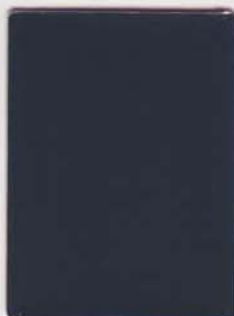
GREY RAL 7044



BORDEAUX RAL 3004



YELLOW RAL 1023



GREEN RAL 6004



BLUE RAL 5019



RAL 5010



RAL 3020

Architectural Applications

- External and internal building decoration
- Signage, exhibition stands, advertising signposts
- Tunnels, underground railway stations, bus-stops, petrol stations
- Sheds, interior or exterior partitions
- Elevators, phone-booths, moving staircases
- Residential furnishing



ALUMIL

Building excellence every day

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