

Alubond
U.S.A
Fire Rated Metal Composites

Alubond U.S.A – a designer solution for modern buildings

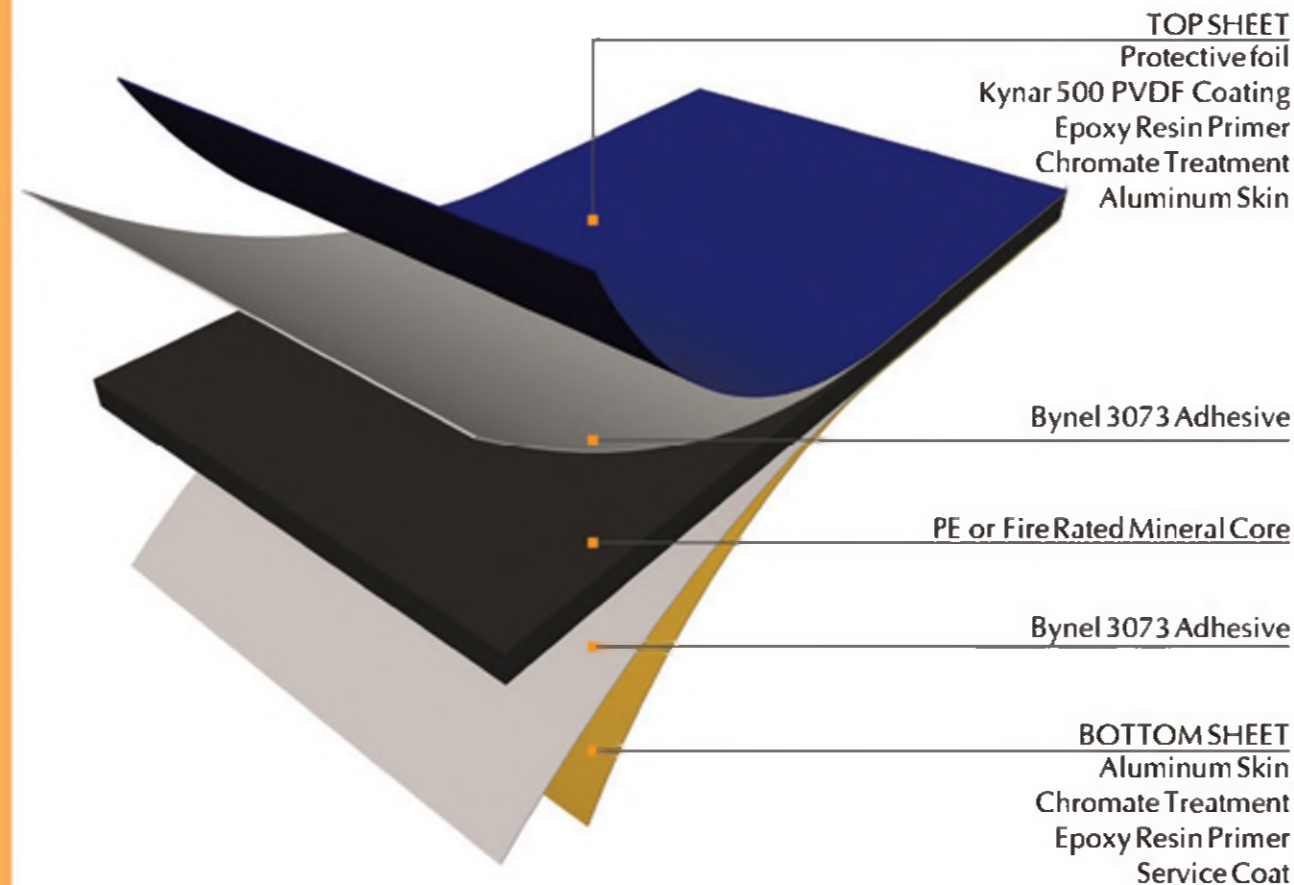
Alubond U.S.A is the worldwide famous brand name for the Aluminum Composite Panel designed by American Building Technologies, U.S.A and produced with main idea to be the new generation building material. The panel in its basic structure is a composite consisting of two layers of aluminum skin sandwiching a thermoplastic core in a continuous co-extrusion process. Using new technology of mechanical and chemical bonding Alubond U.S.A panel can offer exceptional performance and long lasting integrity with various applications. Alubond U.S.A panels are designed for both exterior and interior use in building industry, as well in transportation, signage and machine construction.

Top coil PVDF Kynar 500 fluorocarbon exterior coating, guaranties weather resistance combined with durable color performance. In addition, PE polyester coating is optional in case of interior and printing signage purpose. The bottom service aluminum skin is protected with chromate treatment and polyester coating. For the panel core PE - polyethylene or FR - fire rated mineral core classified as B or A2 (according to EN 13501 -1) can be used.

Standard color chart provides Solid, Metallic, Granite and Wood colors making Alubond U.S.A panels an architect's dream choice for interior and exterior facade's cladding treatment.

Alubond U.S.A panel dimensions

Widths : 1000mm, 1250mm, 1500mm
 Lengths : any length up to 6000mm
 Thickness : 2mm, 3mm, 4mm, 5mm, 6mm



Alubond U.S.A product advantages

- Lightweight, extreme rigidity and flatness, as economical option for high quality building facades and interior claddings
- Weather resistance combined with high acoustics, thermal and fire rated values
- Choice of Solid, Metallic, Granite, Wood and Chameleon colors
- Easy machine processing able to provide the flexibility of shapes and realization of complex designer solutions

Comparison chart between Alubond U.S.A, solid aluminum and steel

Alubond USA Aluminum Composite Panels have distinct advantages over other popular cladding materials like solid aluminum and steel with superior strength to weight ratio, as well as flatness, thermal and acoustic properties.

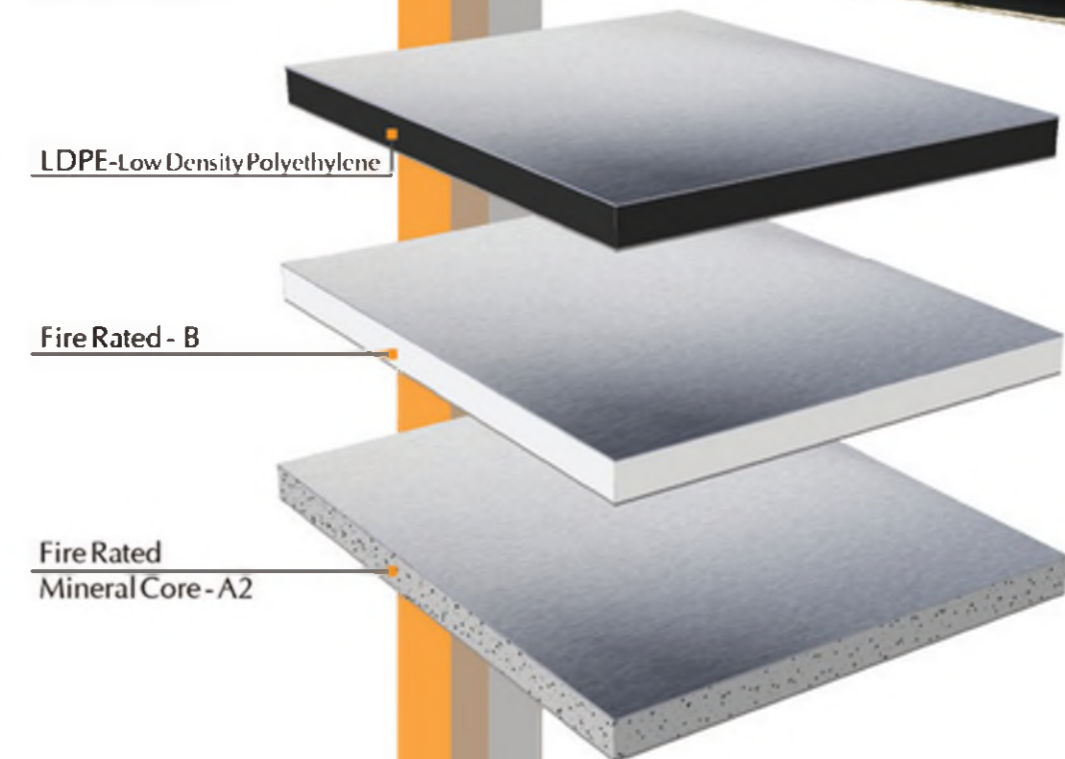
ITEM	ALUBOND	SOLID Aluminum	STEEL
Weight	4mm:5.48Kg/m ²	3mm:8.0Kg/m ²	1.5mm:11.47Kg/m ²
Flatness	Very flat	Uneven	Uneven
Heat Insulation	Best	Poor	Poor
Sound Insulation	25db	15db	5db
Echo Response	Low	Medium	High
Paint Consistency	Best	Inconsistent	Inconsistent
Paint Microns	Even	Uneven	Uneven
Weather Proof	Good	Good	Good
Fire Proof	Good	Good	Good
Fabrication	Easy	Difficult	Very Tough
Delivery	Quick	Slow	Slow
Total Cost	Economical	Medium cost	Expensive
Maintenance	Easy	Easy	Easy
Installation	Quick	Slow	Very slow

Alubond U.S.A applications

Alubond U.S.A various selection of colors and finishes combined with the inherent capability of forming into different shapes and contours with durability and weather resistance makes this panel a perfect choice for architectural design. Some of the commonly used Alubond U.S.A applications are:

- Building facades
- Wall Paneling Concepts
- Metal ceilings and partitions
- Exhibition and display stands
- Circular columns
- Soffits and beams
- Shop fronts and signage
- Window surrounds
- Door panels and frames

CORE TYPES





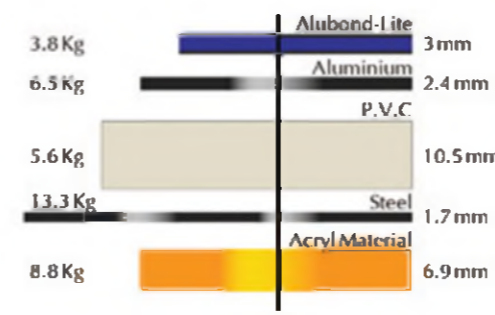
Alubond-Lite U.S.A modern signage solution

Alubond-Lite U.S.A is specially designed aluminum composite panel developed for corporate identity signage and display applications. Structure of the panel is the same like other ACPs, it consists of two layers aluminum skin sandwiching a polyethylene or fire rated core, with main difference in top coil finish which is polyester (PE) coating suitable for various printing applications. This final surface treatment is made in stove enameled structural lacquering system and can provide gloss levels from 30% to 80%. Service bottom sheet is mill finished or with polyester coating.

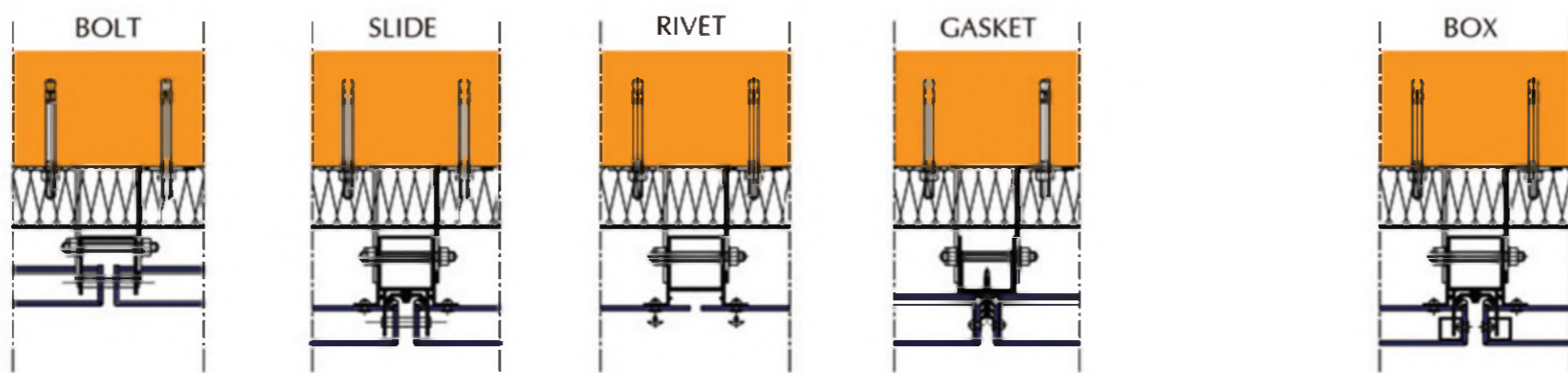
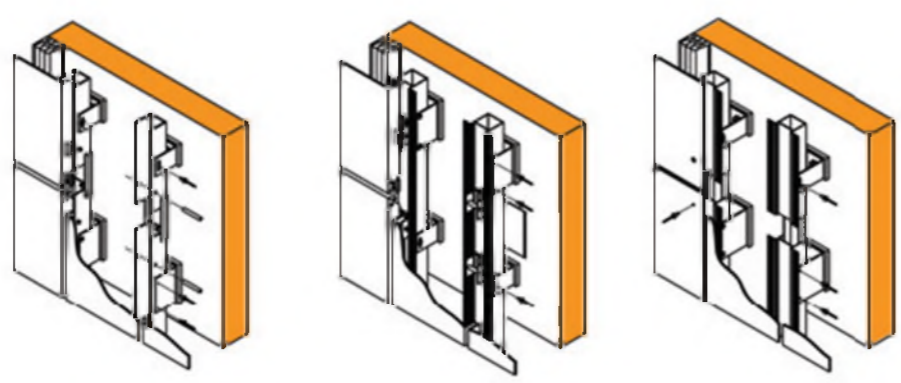
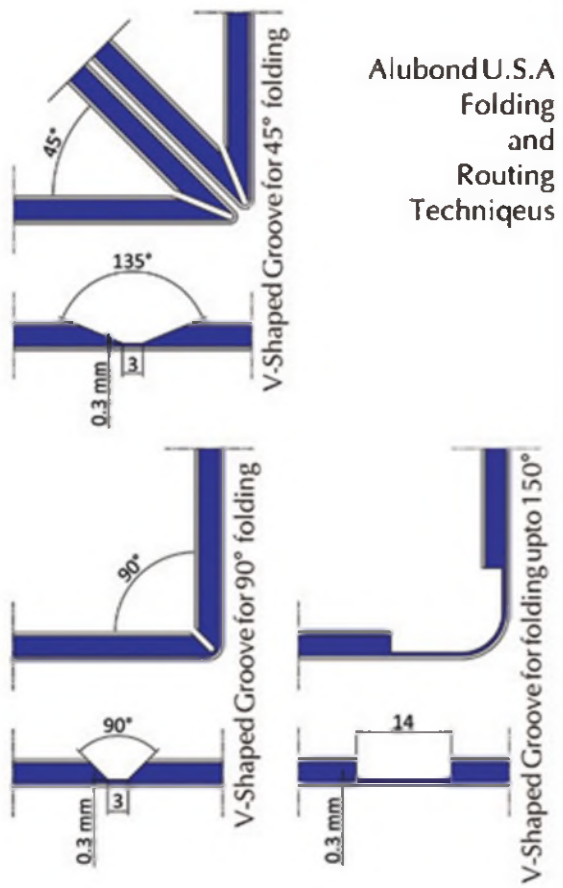
The unique feature of Alubond-Lite U.S.A is the Double Color Combo series. This product has a standard range of two sided paint finishes in Red - Yellow, Green - Blue and Ivory - Black color combination. Also, Alubond-Lite U.S.A easily provides custom ordered double sided colored panels made for special project requests.

Alubond-Lite U.S.A Comparison Table

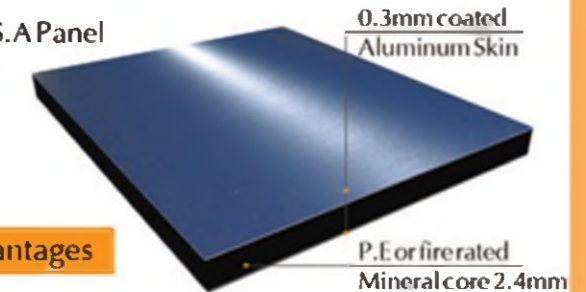
ITEM	Alubond-lite	SOLID Aluminum	STEEL
Weight	3mm: 3.8Kg/m ²	2.4mm: 6.5Kg/m ²	1.7mm: 13.3Kg/m ²
Flatness	Very flat	Uneven	Uneven
Heat Insulation	Best	Poor	Poor
Sound Insulation	25db	15db	5db
Echo Response	Low	Medium	High
Paint Microns	Even	Uneven	Uneven
Weather Proof	Good	Good	Good
Fire Proof	Good	Good	Good
Fabrication	Easy	Difficult	Very Tough
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ALUBOND U.S.A - ALUMINIUM SUBSTRUCTURE SYSTEMS



Typical Alubond-Lite U.S.A Panel



Alubond-Lite U.S.A Product Advantages

- Light Weight - weights only 3.8 kg/m² for the 3mm panel
- Flatness and Rigidity - highly rigid and optically flat
- Color Range - vivid range of colors with gloss levels from 30% up to 80%
- Flexibility - easy formability features for flexibility in design
- Durability - warranty for over 10 years
- Economy - economical option that offers great value for money
- Maintenance - easy to clean and maintain
- Surface Finishing - suitable for any graphic design work
- Color Combo Series - double colored panels of Red-Yellow, Green-Blue and Ivory-Black

Alubond-Lite panel dimensions

- Widths : 1000mm, 1250mm, 1500mm
- Lengths : any length up to 6000mm
- Thickness : 2mm, 3mm, 4mm, 5mm, 6mm



Alubond U.S.A Stainless Steel Composite Panels

Within wide product range, Alubond U.S.A offers an option for Stainless Steel Composite Panels (SCP) using two types of top coil finishes: Brushed Hairline and High Mirror. Both selections are designed to provide sophisticated look to exterior and interior claddings, accenting natural beauty and metal shade of stainless steel. This composite in the same time keeps flatness and rigidity combined with lightweight and easy fabrication, as necessary features for advanced architectural and technical design.

Material composition

Stainless Steel Composite Panel is made of polyethylene (LDPE) or fire rated mineral core, sandwiched between stainless steel sheets in grade 304 or 316 in thickness 0,3mm for Mirror and 0,4mm for Brushed surface. For the exterior usage top and bottom coils are both in stainless steel materialization. For interior option more economical panel version is made in combination of stainless steel on the top and aluminium on the bottom side.

Material Specification

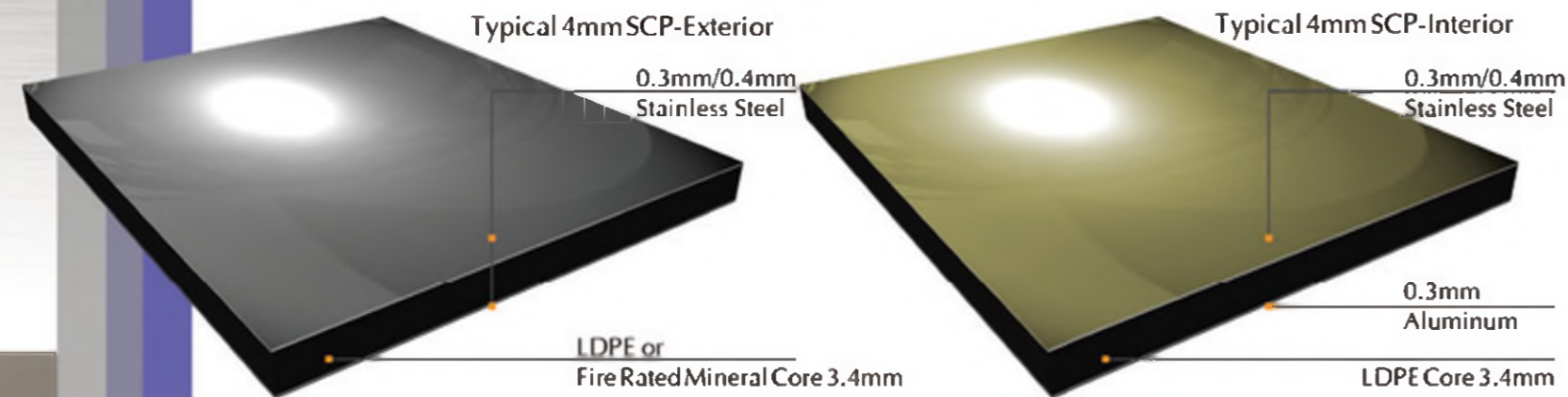
core : PE or FR core
 skin finishes : High Mirror, Brushed Hairline
 steel alloy : 304, optional 316

Stainless Steel panel dimensions

Widths : 980mm, 1200mm
 Lengths : any length up to 6000mm
 Skin Thickness : 0.3mm for High Mirror
 0.4mm for Brushed Hairline

Applications

- Entrance holes
- Corridors
- Canopies
- Escalator and lift claddings
- Soffit ceiling
- Columns and beams
- Signage
- Door frames
- Interior details



PCR - Post Consumer Recycle Content - ALUMINUM

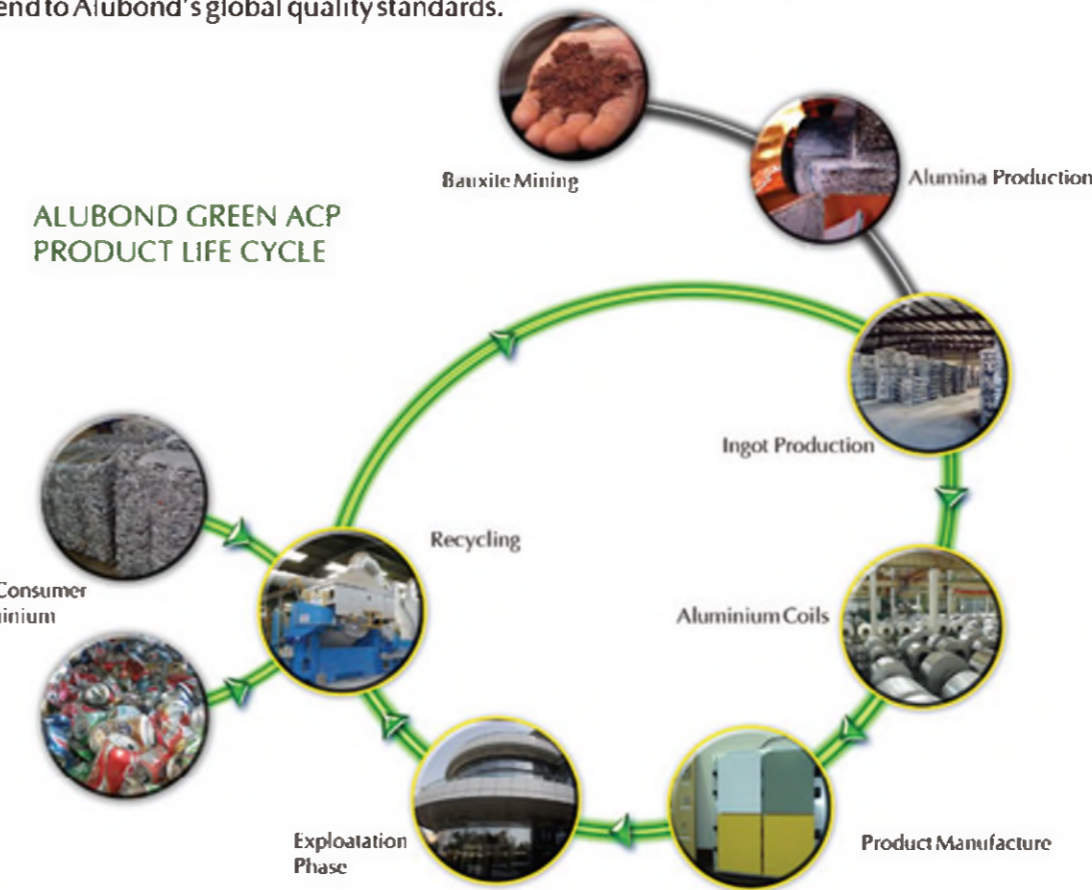
The Aluminium used in the Alubond Green façade panel consists of up to 75% post consumer recycle content. Sources of the PCR content vary from used beverage cans to recycled aluminum bales.

During the production of raw material maximum PCR percentage is targeted with a strict focus on quality control of the final product to ensure sustainability and quality.

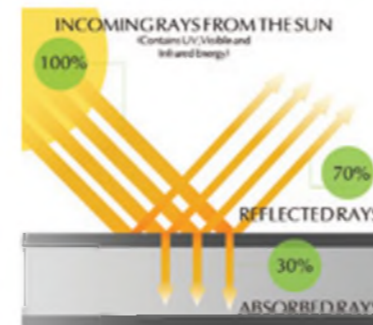
PCR - Post Consumer Recycle Content - LDPE

The source of the core in the Alubond Green panel is an in-house recycling plastics production facility of annual capacity of 15.000 tons production to cater to Alubond Green's core raw material requirements. A state of the art head facility and independent on-site recycling units at Alubond's production factories convert used plastic to sustainable building panels.

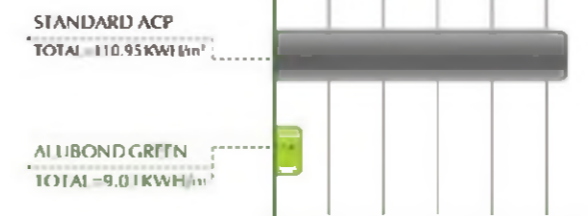
The core formula is perfected to maximize quality while using recycled plastic content. The final product is adherent to Alubond's global quality standards.



TOTAL SOLAR RADIATION (TSR)



ENERGY CONSUMPTION ANALYSIS



LDPE

ALUMINUM



ALUBONDEUROPE doo
Nemanjina 130
26320 Banatski Karlovac
SERBIA
TIF +381 13 652 852
info@alubondeurope.com
www.alubond.com

MULK HOLDINGS F.Z.C.
Sharjah, U.A.E.
T +971 6 526 22 02
sales@alubond.com

AMERICAN BUILDING TECHNOLOGIES Inc.
Rockford, Illinois, USA
T +1 815 331 41 21
info@alubond.com

ALUBOND – DACS INDIA Pvt. Ltd.
Mumbai, India
T +91 22 4321 1400
alubonddacs@alubond.com

