

Reynobond® Architecture with A2 core

References*

STANDARD: Plain colours, Metallic	EFFECTS: Anodized...	NATURALS Design: Terracotta, Aciero Corten, Granite...
WOOD Design: Mahogany, Oak, Zebrano...	METALS: Natural Aluminium Brushed, Inox, Zinc...**	MINERALS Design: Concrete, Lime, Stone, Slate
BRUSHED Look	CRINKLE	

*Other references: under development
** Please contact us.



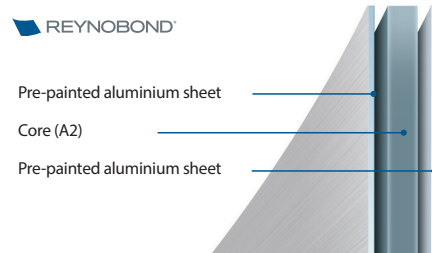
Main features

Reynobond® Architecture with A2 core: a composite panel consisting of two coated aluminium sheets that are laminated on both sides of a non-combustible core. It meets the stringent fire-reaction requirements of the European fire certification EN 13501-1, class A2 while offering an unlimited creative freedom in terms of transformations, applications and designs.

Application

Reynobond® Architecture with A2 core has been especially developed for outdoor applications such as ventilated facades, facade designing and wall cladding, both for new buildings and refurbishments. This material is specifically adapted for high-rise towers and public buildings (schools, hospitals) with high fire resistance requirements. Reynobond® Architecture aluminium composite panels with A2 core can be installed flat (screwed, riveted) or in cassette systems.

Learn more at www.reynobond.eu.



Qualification of manufacturers and installers

For the transformation of Reynobond® Architecture aluminium composite panels with A2 core, please refer to dedicated fabrication guidelines.

Cladding manufacturer should be qualified by Arconic Architectural Products. Aluminium composite cladding should be installed by a fabricator/installer authorized by the principal manufacturer. The fabricator/installer shall have a minimum experience of 5 years in successful installation of composite cladding. The installation team should have sufficient experience in cladding installation. Contractor shall submit 10 years work guarantee from date of handing over.

Cleaning

Cleaning, at least once a year, with a neutral, non-abrasive cleaning agent, is strongly recommended. Regular cleaning of organic coatings will maintain the surface in a satisfactory state.

- Washing operations have to be carried out progressively from top to bottom in overlapping strokes.
- Clean with neutral detergent and fiber-free, soft cotton. The cotton cloth should be changed regularly. To remove adhesive residues: use a mixture of alcohol and water (1:1), e.g. methylated spirit with fiber-free, soft cotton. Do not use cleaning benzene.
- Harsh scrubbing or the use of abrasive or solvent cleaners, which will damage the finish, should be avoided. Do not use brushes, wire wool or hand objects to remove stubborn stains.
- Rinse away cleaning chemicals with liberal amounts of clear water.



Composition Reynobond® Architecture aluminium composite panel with A2 core

Thickness composite panel	4 mm (±0.2 mm)
Thickness aluminium sheet	0.5 mm (±0.1 mm)
Alloy & temper	Series 3000
Core	A2 - approx. 90% mineral

Characteristics Reynobond® Architecture aluminium composite panel with A2 core

Width	1,000 mm / 1,250 mm / 1,500 mm / 1,575 mm (- 0 / + 3 mm)
Length	2,000 mm up to 6,050 mm
Weight	8.2 kg / m ²
Tolerance in squareness	≤ 3 mm
Tolerance in bow	≤ 2 mm / 500 mm on the width and length

Performance Reynobond® Architecture aluminium composite panel with A2 core

Bond integrity	ASTM D903	6.99 N / mm (mini) or 40 pli (mini)
Tensile strength		165 - 240 MPa according to alloy and width
Yield strength		140 - 160 MPa according to alloy and width
Stiffness	CSTB	0.242 kN.m ² / m
Thermal expansion		2.4 mm / m for a temperature variation of 100°C
Temperature resistance		- 40°C / + 80°C
Maximum allowable deflection		L/30 (allows higher wind pressure or bigger sized elements)

Performance and durability Reynolux® pre-painted aluminium sheet

Specular gloss	EN 13523 - 2 ASTM D 523	DURAGLOSS® 5000: from MattXtrem to satin* PVDF 70/30: satin
Durability class	NF EN 1396	Class 4: severe industrial - extreme conditions / very severe coastal marine (less than 3.000m from the sea) / high UV plus severe conditions
Pencil hardness	EN 13523 - 4	HB - F
Resistance to cracking on rapid deformation	EN 13523 - 5	No cracking, no loss of adhesion
Adhesion after indentation	EN 13523 - 6	100% of adhesion
Resistance to cracking on bending	EN 13523 - 7	Very good flexibility: 0.5 T
Acetic salt spray fog resistance	EN 13523 - 8	1,000 h
Water immersion resistance	EN 13523 - 9 AAMA 620	3,000 h
Humidity resistance	ASTM D 224 AAMA 620	3,000 h
Mortar test	AAMA 620	No effect
Acid resistance	AAMA 620 ASTM D 1308	Nitric acid: ΔE < 5 units except some blue and metallic colours; hydrochloric acid: no effect
Detergent resistance	AAMA 620	No effect
Colour fastness on natural weathering	5 years 45° South Florida	Colour variation: 5 to 10 units (ΔE) depending on colour
Resistance to chalking on natural weathering	5 years 45° South Florida	Rating ≥ 8

Fire certificates Reynobond® Architecture aluminium composite panel with A2 core

Europe	EN 13501 - 1	A2-s1, d0
--------	--------------	-----------

Performance Reynolux® pre-painted aluminium sheet

Tensile strength R _m	165 - 240 MPa according to alloy, temper and width
Yield strength R _{p0.2}	140 - 160 MPa according to alloy, temper and width
Elongation A _{50mm}	2% (mini)

* Other on request

The technical data refer to currently available products. Please note that the specific characteristics for each project have to be taken into account (country, delivery time, size of transport containers, etc.).

Technical service:
Our service is at your disposal to help with static wind resistance calculations, panel cutting optimisation and advice in the details of installation on specific parts of the building.

CAD files and BIM objects:
You can find all the CAD system files for riveted and screwed installation as BIM objects in electronic form on our website. Scan the QR code below!

