



REYNOBOND®
REYNOLUX®

Riverside Hotel Radisson Blu | Göteborg | Sweden | Reflex Arkitektur AB | Statcus

Fire retardant products for Architectural applications: our portfolio

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Fire is a key topic when it comes to buildings

When conceiving a building, it is crucial to choose the appropriate products to minimise the fire spread to the whole building.

It is important to take the fire characteristic into account when starting the construction or refurbishment of a building in order to protect people and assets by limiting fire propagation.



In order to develop and spread, fire needs three elements: heat source, combustion agent (usually oxygen) and fuel.

The use and location of buildings is relevant to which materials are appropriate for use.

Arconic SAS provides different products: Reynolux® pre-painted aluminium sheets, Reynodual® double sheet aluminium panels and Reynobond® aluminium composite panels, which are supplied with FR (fire-retardant) and A2 core. All products provide different fire retardant options.

Laws and building and safety codes governing the design and use of AAP's products, and specifically aluminium composite materials, vary widely. It is the responsibility of the owner, the architect, the general contractor, the installer and the fabricator/transformer, consistent with their roles, to determine the appropriate materials for a project in strict conformity to all applicable national, regional and local building codes and regulations.



Advantages of our products

Reynobond® Architecture with FR (fire-retardant) or A2 cores, Reynodual® and Reynolux® aluminium composite panels and sheets represent several advantages.

- **Limit fire propagation**

Based on the mineral content contained in the core, Reynobond FR (fire-retardant) has received a B classification for reaction to fire on the EN 13501-1 test and Reynobond A2 has received a A2 rating on that same test.

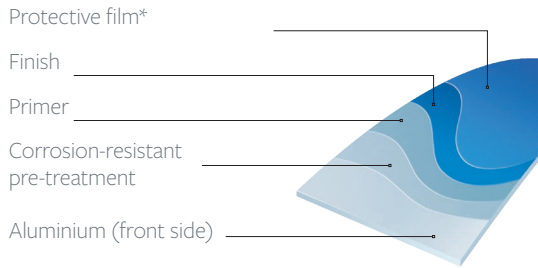
Reynolux® pre-painted aluminium sheets have received a A1 classification for reaction to fire on the EN 13501-1 test and Reynodual® pre-painted double sheet aluminium panels a A2 rating on that same test.

- **Limit propagation of smoke**

Reynobond® Architecture with FR (fire-retardant) or A2 cores, Reynodual® and Reynolux® aluminium composite panels and sheets received a S1 classification according to the European fire classification EN 13501-1.

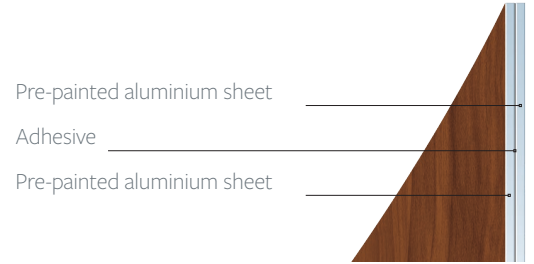
- **Limit flaming droplets falling**

Which limits further propagation and harm to people, with a do classification according to the European fire classification EN 13501-1.



* Remove the protective film immediately after the installation of the panels

Reynolux® is a pre-painted aluminium sheet manufactured through coil-coating. It can be painted with a variety of unique colour coatings. The benefits of Reynolux® pre-painted aluminium are numerous: in addition to its hardly combustible properties, its UV and weather resistance, it is also easy to transform and shape. Reynolux® meets the fire-reaction requirements of the European fire classification EN 13501-1, class A1.



Reynodual® is a coil-coated double sheet aluminium panel for facades with high technical, visual and environmentally-friendly requirements. It offers the possibility of creating complex shapes for an attractive and creative appearance, with the availability of XXL width – up to 2m. Reynodual® guarantees good wind resistance and meets the fire-reaction requirements of the European fire classification EN 13501-1, class A2.

Fire class
A1
EN 13501-1: A1

Fire class
A2
EN 13501-1: A2-s1, do

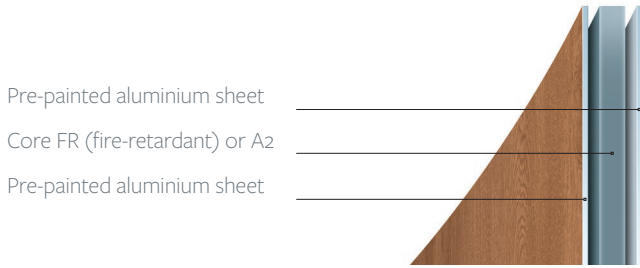
Thickness composite panel
Thickness aluminium sheet
Alloy & Temper
Core
Width
Length
Weight
Tolerance in squareness
Tolerance in bow
Tensile strength
Yield strength
Stiffness
Thermal expansion
Temperature resistance
Max. allowable deflection

-
1 mm – 1.5 mm – 2 mm
Series 3000 or 5000 (others possible)
-
1,000 mm / 1,250 mm / 1,500 mm / 2,000 mm Other widths, please consult us. If above 1,500 mm, please contact us.
Available in coils and sheets: 250 mm – 6,000 mm If above requested, contact us.
To be defined according to thickness
< 3 mm
< 2 mm / 500 mm over lengths and widths
According to alloy & temper
According to alloy & temper
-
2.4 mm/m for a temperature variation of 100 °C
-
-

3 mm
1.5 mm
Series 3000
-
1,000 mm / 1,250 mm / 1,500 mm If 2,000 mm requested, contact us.
2,000 mm up to 6,050 mm
8.2 kg/m ²
< 3 mm
< 2 mm / 500 mm over lengths and widths
140 – 185 MPa
≥ 110 MPa
0.166 kN m ² /m
2.4 mm/m for a temperature variation of 100 °C
-40 °C / +80 °C
L/90

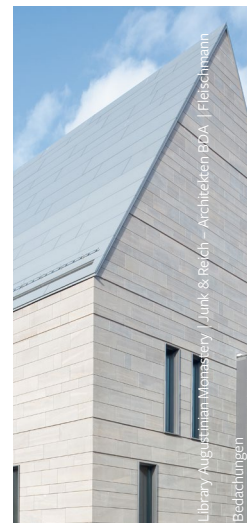
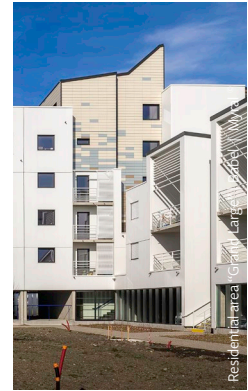
For more information, ask for the Reynolux® technical datasheet

For more information, ask for the Reynodual® technical datasheet



Reynobond® Architecture with FR (fire-retardant) core is a composite panel consisting of two coated aluminium sheets that are laminated to both sides of a fire-retardant core. It meets the fire-reaction requirements of the European fire classification EN 13501-1, class B. It offers numerous advantages: its low weight, small extension, high corrosion and weather resistance make it an outstanding product.

Reynobond® Architecture with A2 core is a composite panel consisting of two coated aluminium sheets that are laminated to both sides of a core with limited combustibility. It meets the fire-reaction requirements of the European fire classification EN 13501-1, class A2 while offering an unlimited creative freedom in terms of transformations, applications, designs and colours.



Fire class
B
EN 13501-1: B-s1,do

Fire class
A2
EN 13501-1: A2-s1, do

4 mm
0.5 mm (± 0.1 mm)
Series 3000
FR
1.000 mm / 1.250 mm / 1.500 mm / 1.750 mm / 2.000 mm
2.000 mm up to 6.050 mm
7.6 kg/m ²
≤ 3 mm
≤ 2 mm / 500 mm on the width and length
According to alloy & temper
According to alloy & temper
0.242 kN.m ² /m
2.4 mm/m for a temperature variation of 100 °C
-40 °C / +80 °C
L/30

4 mm
0.5 mm (± 0.1 mm)
Series 3000
A2
1.000mm / 1.250mm / 1.500mm / 1.575mm
2.000 mm up to 6.050 mm
8.2 kg/m ²
≤ 3 mm
≤ 2 mm / 500 mm on the width and length
According to alloy & temper
According to alloy & temper
0.242 kN.m ² /m
2.4 mm/m for a temperature variation of 100 °C
-40 °C / +80 °C
L/30

For more information, ask for the Reynobond® Architecture with FR core technical datasheet

For more information, ask for the Reynobond® Architecture with A2 core technical datasheet

Test methods, certifications and classifications

Test EN 13501-1 (Europe)

The EN 13501-1 test measures the reaction to fire of construction and building materials. Three main characteristics are measured: fire behaviour, smoke production and flaming droplets. Please note that Reynobond®, Reynolux® and Reynodual® aluminium composite panels and sheets are used for cladding and finishing elements as part of a system. A test of the whole system is needed to understand how a system incorporating aluminium composite materials is likely to react to fire



Classification standards

Reactions to fire according to the European fire classification EN 13501-1 are based on 3 criteria: fire rate with results ranging from A to F, smoke opacity from s1 to s3 and flaming droplet from do to d1.

Fire rate	Smoke opacity	Flaming droplet
A1	-	-
A2	s1/s2/s3	do/d1
B	s1/s2/s3	do/d1

s1: Very weak smoke production

s2: Limited smoke production

s3: Heavy smoke production

do: Nonexistent ignited droplets

d1: Continued ignited droplets after 10s

Certifications and classifications

Reynobond® Architecture aluminium composite panels with FR (fire-retardant) or A2 core, Reynolux® aluminium sheets and Reynodual® double sheet aluminium panels are fire retardant products.

Reynobond® Architecture certifications in Europe

France	Composite aluminium	FR & A2:
	Composite zinc	FR:
Germany	Composite aluminium	FR:
Poland	Composite aluminium	FR: ITB - 2508/W A2: o2o-UWB-2593/W
Slovakia	Composite aluminium	FR & A2: SK TP 18/0007
Ukraine	Composite aluminium	A2: UA 1.052.0019562-17

Fire classification for Reynobond® Architecture

Europe	EN 13501-1	FR: B-s1,do A2: A2-s1, do
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Fire classification for Reynolux® Building

Europe	EN 13501-1	A1
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Fire classification for Reynodual® Building

Europe	EN 13501-1	A2-s1,do
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Mechanical certifications for Reynobond® Architecture systems in Europe

France	Reynobond® Système Cassette Composite aluminium	FR & A2: 2.2/11-144o_V1
	Reynobond® Système Riveté / Système Vissé Composite aluminium	FR & A2: 2.2/16-1733_V1
	Reynobond® Système Vissé Ossature Bois Composite aluminium	FR: 2.2/16-1734_V1
	Reynobond® Zinc Système Riveté / Système Vissé Composite zinc	FR: 2/16-1758
Germany	Composite aluminium	Z-10.3-722
Poland	Composite aluminium	FR: AT-15-3524/2012 A2: AT-15-9813/2016
Romania	Composite aluminium	FR, A2 & Reynodual®: 003-04/456-2018
UK	Agrément Certificate Composite aluminium	FR:

A wide range of designs and colours according to the availability

Colour chart

- Standard
- Wood Design
- Natural Design
- Effects
- Brushed Look
- Minerals Design
- Metals
- Crinkle

Paint quality

- Polyester
- Duragloss
- PVDF 70/30

Technical coating

- GreenShield
- EcoClean™
- Anti-Graffiti
- Anti-Bacterial
- StrongProtect

Gloss

- High gloss
- Satin
- Matt
- MattXtrem

About Reynobond® Architecture, Reynolux® Building and Reynodual® Building

With Reynobond® aluminium composite panels, Reynolux® coil-coated aluminium and Reynodual® double sheet aluminium panels Arconic Architectural Products SAS based in Merxheim/France, a subsidiary of Arconic Inc., an internationally leading company for technologies, engineering and manufacturing processes, offers a wide range of products for architecture and construction.

As you can expect from a global company, Arconic Architectural Products SAS is certified according to the international standards ISO 9001 and 50001 as well as OHSAS 18001. Reynobond® Architecture, Reynolux® Building and Reynodual® Building panels and sheets are coated and bonded in France. Arconic Architectural Products SAS have ISO 14001 certification, indicating their voluntary engagement in reducing the impact of their activity on the environment at all levels: water, energy or waste.



CAD files and BIM objects



BIM objects library: You can now import our 5 facade systems with our composite panels and pre-painted sheets, as well as our 140 textures in your projects to get the most realistic renderings.

Scan the QR-code now!

Disclaimer

As our customer, you are solely responsible for selecting the proper materials (Arconic Architectural Products SAS's (AAP) products) based on your customer's demand, the intended utilization, the technical characteristics of the product integration in the project, the compatibility with other utilized material, and if applicable, how these products are incorporated into other products. Laws and building and safety codes governing the design and use of AAP's products, and specifically aluminium composite materials, vary widely. AAP does not control how AAP products are transformed or otherwise configured or used, nor how AAP's products are combined with other materials. AAP assumes no responsibility for any of the foregoing. It is the responsibility of the owner, the architect, the general contractor, the installer and the fabricator/transformer, consistent with their roles, to determine the appropriate materials for a project in strict conformity to all applicable national, regional and local building codes and regulations. AAP is dependent upon Customer to provide true, accurate and complete information relating to product purchases. Reynobond is combustible; it could catch fire and burn. Any laboratory testing information provided by AAP applies only to the particular product or assembly tested and does not necessarily represent how products will actually perform in use. Reports and test data corresponding to a particular tested product sample or assembly are not a guarantee that the same product or assembly would always achieve the same test result. As Reynobond's reaction to fire varies according to its core, please ensure the product is used in a system that complies with applicable fire safety regulation.

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