

# Coil-coated aluminium double sheet aluminium panel

Reynodual®

## References

### STANDARD:

Metallic,  
Plain red,  
Black, white ...

### EFFECTS:

Sparkling,  
Matt anodised,  
Chameleon ...

### DESIGN Natural Design:

Terracotta,  
Riyadh,  
Granite ...

### DESIGN Wood Design:

Mahogany,  
Oak,  
Zebrano ...

**4 gloss levels:** high gloss, satin, matt, MattXtrem

**4 special coatings:** Anti-Graffiti, StrongProtect, Anti-Bacterial and GreenShield



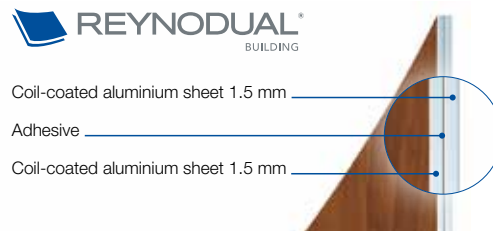
## Main features

Reynodual® is a new pre-painted double sheet aluminium panel for facades with high technical, visual and environmentally-friendly requirements. Consisting of two aluminium sheets bonded together Reynodual® ensures high wind resistance and meets the high fire resistance requirements of class A2 (EN 13501-1). It can be easily shaped and processed. The fully recyclable panel is available in great widths and all colours.

## Application

Reynodual® is especially developed for outdoor applications on high-rise buildings and other buildings with high fire and wind resistance requirements. As a material for ventilated facades it meets the requirements of the RT 2012, especially with regard to thermal inertia, thermal bridges and thermal performance. It can be installed in cassette, screwed and riveted systems.

Learn more at [www.alcoaarchitecturalproducts.eu](http://www.alcoaarchitecturalproducts.eu).



## Manufacturer's particulars and installers qualifications

Cladding manufacturer should be qualified by Alcoa Architectural Products. Reynodual® aluminium double sheet panels should be installed by a fabricator/installator authorized by the principal manufacturer. The fabricator/installator shall have a minimum experience of 5 years in successfully installing aluminium facade claddings. The installation team should have sufficient experience in installing cladding. Contractor shall submit 10 years work guarantee from date of handing over.

## Cleaning:

Frequent and regular cleaning once a year is strongly recommended or when the appearance has become unsightly or when deposits of atmospheric pollution or matter washed down from building surfaces are apparent. Regular cleaning of organic coatings will maintain the surface in a satisfactory state.

- Washing operations have to be carried out progressively from bottom to top. Wipe along the polishing direction, not across it. Rinse away cleaning chemicals with liberal amounts of tap water working from top to bottom. Wipe dry if possible.
- Cleaning agents depends on the site location and on the degree of contamination. Only water based mild cleaning agents should be used for cleaning organic coated flat products. The manufacturer advice should be sought in other cleaning agents especially solvents. Do not use chlorine containing cleaning agents such as bleach or strong acids (e. g. mortar removers).
- Harsh scrubbing or the use of abrasive or solvent cleaners, which will change the finish, should be avoided.
- Do not use wire wool or hand objects to remove stubborn stains.

Composition		
Panel thickness		3 mm (-0.0/+0.3 mm)
Coated aluminium sheet thickness		1.5 mm
Alloy & temper		3000 serie
Front side finish		Anti-corrosion treatment and DURAGLOSS® 5000 (35 µm), PVDF 70/30* (25 µm) or polyester* (26 µm)
Reverse side finish		Anti-corrosion treatment and a varnish protection
Characteristics		
Width		1,000 mm / 1,250 mm / 1,500 mm (-0/+3 mm) If 2,000 mm requested, contact us.
Length		2,000 mm up to 6,050 mm (< 4 m: -0/+3 mm; > 4 m: -0/+6 mm)
Weight		7.9 kg/m <sup>2</sup>
Tolerance in squareness		< 3 mm
Tolerance in bow		< 2 mm / 500 mm over lengths and widths
Performance		
Bond integrity	ASTM D1876	4.37 N/mm (mini) or 25 lbf/inch
Tensile strength R <sub>m</sub>	NF EN 1396	140–185 MPa in 3003 H44
Yield strength R <sub>p0.2</sub>	NF EN 1396	≥ 110 MPa in 3003 H44
Modulus of elasticity E		70,000 N/mm <sup>2</sup>
Stiffness (EI)		0,166 kN m <sup>2</sup> /m
Thermal expansion		2.4 mm/m for a temperature variation of 100 °C
Temperature resistance		-40 °C / +80 °C
Maximum allowable deflection		L/90
Performance and durability pre-painted aluminium sheet		
Specular gloss	EN 13523 – 2 ASTM D 523	DURAGLOSS® 5000: from 3 % to 80 % PVDF 70/30*: from 25 % to 30 %
Durability class	NF EN 1396	Class 4: severe industrial – extreme conditions / very severe costal marine (less than 3,000 m 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	(on process)
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 for Reynodual®		
Europe	EN 13501 – 1	A2-s1, d0

\* two-side coated

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

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