

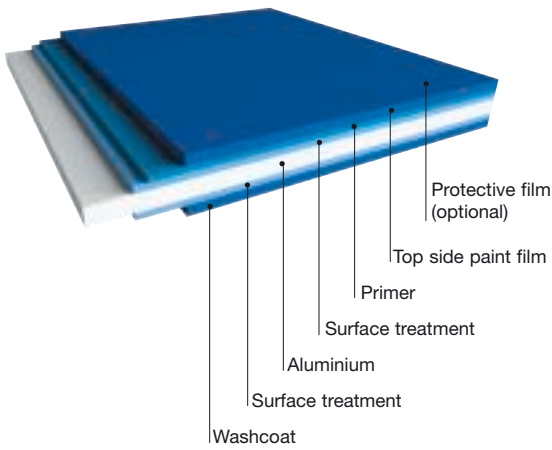
build for life

BUILDING & INDUSTRY

REYNOLUX[®]



Description: REYNOLUX® is a pre-painted product using coil-coating techniques enabling one or more coats of paint to be applied.



Introduction: REYNOLUX® is an excellent multipurpose material for roofing, façade cladding or any other indoor or outdoor use. REYNOLUX® can be easily used both in new and for renovation buildings. It is very easy to work and can be used for original shapes in bright colours. The excellent chemical and physical properties of the paints used give REYNOLUX® exceptional resistance against UV light and great protection against weathering. The optimal adherence of these paints means that the pre-lacquered product can be bent into many complex shapes.

USAGE

The multipurpose Standard

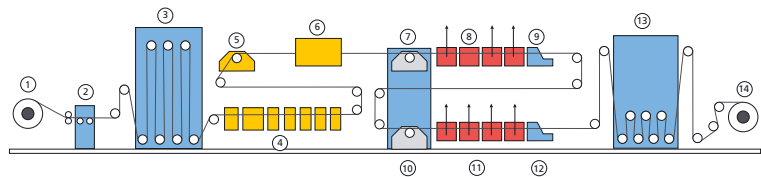


Made-to-measure material: As a pioneer in the coil-coating industry the Merxheim site draws on its 30 years of know-how to push forward innovation. Alcoa Architectural Products Merxheim will be the perfect partner for your projects: relentlessly meeting your needs, our technicians provide you with a complete service from the preliminary study right through to installation. Our in-depth knowledge of your requirements helps us progress together for a continual partnership improvement.

Alcoa Architectural Products Merxheim first objective is to give you great customer service. Therefore, the company has given its REYNOLUX® production process an extraordinary level of adaptability enabling both small quantities and special colour orders to be delivered worry free.

Flexibility, availability and speed are the essence of our logistics system allowing you to order and receive products just when you need them. REYNOLUX® is therefore delivered as you need it.

A coil-coating line



- | | |
|-----------------------------|--------------------------|
| 01 Decoiler | 08 Primer oven |
| 02 Stitcher | 09 Air and water coolers |
| 03 Entrance accumulators | 10 Finish coater |
| 04 Degreasing | 11 Finish oven |
| 05 Anti-corrosion treatment | 12 Air and water coolers |
| 06 Dry in place oven | 13 Exit accumulators |
| 07 Primer coater | 14 Recoiler |



Sabri Özel, Istanbul, Turkey

A versatile material: REYNOLUX®'s technical properties make it a very versatile material. The wide range of colours on offer and the ease with which REYNOLUX® can be worked make it the widely-preferred material for all building applications (roofing, skylights...).

Roofing: REYNOLUX® is easy to transform, light, hard-wearing, long-lasting and all this makes it the ideal roofing product. In addition, as it looks so similar to concrete roofing tiles, it blends in perfectly with the architecture of your buildings.



A private residence in Austria

APPLICATIONS

Diverse applications...



Rehabilitated building in France

Façades: Its resistance to even the toughest weather conditions makes REYNOLUX® a very hard-wearing product which also offers you a wide range of colours to brighten up your façade.

Its versatility means that it can also be combined easily with many other different materials.

REYNOLUX®-TRIM accessories: REYNOLUX®-TRIM is easy to work and is the ideal product for rehabilitation work.



Cora Hypermarket, Houssem, France

Special applications: Alcoa Architectural Products Merxheim has also created a synergy between its two leading ranges REYNOBOND® and REYNOLUX®. Their common range helps you to put different aluminium and composite materials together and makes the implementation easy however complex your projects may be!



Princess Margaret Hospital, Swindon, UK

Delivery program

Alloy	3003/3004 3005/5754
Temper	H42/44/46/48
Thickness	0,25 mm to 2 mm
Width	20 mm to 1500 mm
Paint quality	Polyester Polyester Polyamide Polyurethane Polyamide DURAGLOSS® PVDF 70/30

Exceptional bending qualities (examples)

Thickness (Th)	Alloy	Inside radius (IR)	Outside radius (OR)
0,3 mm	3004H48	0,6 mm	0,9 mm
0,5 mm	3005H46	0,5 mm	1 mm
1 mm	3005H44	1 mm	2 mm
1,5 mm	3003H44	1,5 mm	3 mm
2 mm	3003H44	3 mm	5 mm

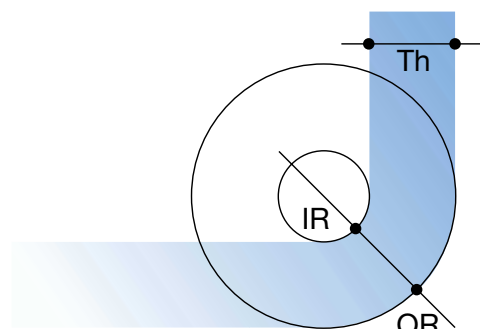
Other specifications : bending available on request

Th: Aluminium thickness

IR: Inside bending radius

OR: Outside bending radius

Bending to be performed over $t \geq 20^{\circ}\text{C}$



TECHNICAL DATA

...easy to work



Trapezoidal sheet



Bending



Roll bending



Joining



Drilling

Easy to work: REYNOLUX® can be worked using traditional processes including shearing, forming, bending, roll bending, drawing, drilling and sawing. Assembly is carried out in the traditional way using screws, rivets, adhesives and crimping. REYNOLUX® is shaped mostly in the workshop. REYNOLUX® can be exposed to temperatures within a range of - 50 to + 80 °C. Linear dilation is 0.024 mm/m/°C, that is about 1 mm/m for a temperature difference of 40°C.

ECCA tests*

ECCA T	Test description	Results
ECCA T 1	Coating thickness	Average thickness (µm) : • 25 +/- 5 (top side) • 5 +/- 2 (reverse side)
ECCA T 2	Specular gloss	• Low gloss 35 % to 80 % +/- 5 • Metallic 25 % +/- 5 within an angle of 60°
ECCA T 3	Colour difference	Spectrocolorimeter controls according to the Cielab scale
ECCA T 5	Resistance on cracking on rapid deformation	No cracking neither loss of adhesion
ECCA T 6	Adhesion after indentation	100 % adhesion
ECCA T 7	Resistance to cracking on bending	Results depending on the product

(*) ECCA: European Coil Coating Association



Scienceland, Shanghai, China



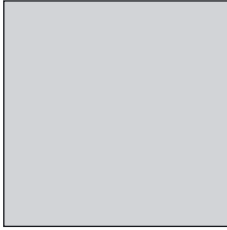
Exterior applications:

- | | |
|-----------------------------------|-----------------------------|
| 1 Profiled sheet aluminium | 7 Roof flashings |
| 2 Shutters | 8 Solar panel frames |
| 3 Guttering | 9 Sunblinds |
| 4 Cladding panels | 10 Roofing tiles |
| 5 Window sills | 11 Rollshutters |
| 6 Porch roofs | 12 Door fill panels |

Indoor applications:

Linear or panel ceiling, lighting...

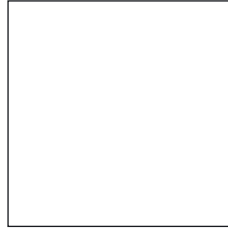
Standard



9006



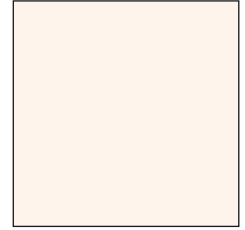
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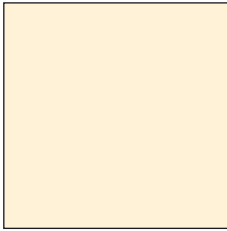
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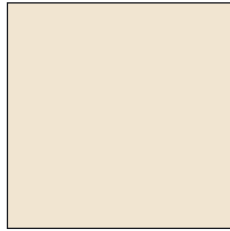
9010



9001



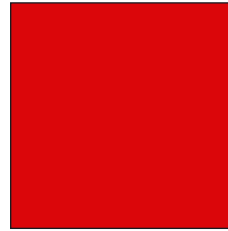
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1013



5002

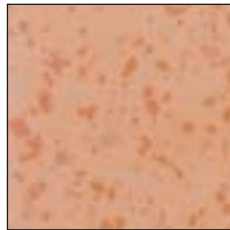


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COATINGS

Colour chart

Upon request



Stone



Antique copper



Zinc Quartz

Coatings: REYNOLUX® is coated with a high-performance lacquer with excellent adherence to metal, which stands up to the toughest weather conditions and has a very wide range of diverse applications. Further to study, we can offer a 10-year warranty upon request. The most frequently-used coatings are:

- **Polyester** lacquer presents good bending qualities, is hard-wearing in all weather conditions and is also available in a wide range of colours. This quality of coating is mainly used for standard building applications (e.g. trapezoidal sheet aluminium profiles and gutters).
- Apart from the benefits of polyester, **polyamide** lacquer is also highly scratch resistant. One of the most frequent uses is for roll shutters.
- **PVDF 70/30** lacquer is especially hard-wearing in aggressive environments (e.g. in industry) and hostile environments (e.g. extreme weather conditions). It is used for top-of-the-range products such as cladding frames and standing seam roofings.

Signage: REYNOLUX® is already very sought-after in the signing industry. Alcoa Architectural Products Merxheim is also a pioneer in this market where it is the only manufacturer to offer a range of colours which is common to REYNOLUX®, pre-lacquered aluminium, and REYNOBOND®, aluminium composite panels. This complementary range offers a new alternative and has enabled Alcoa Architectural Products to expand this range of applications.

Other applications: The uses of aluminium are boundless and its presence on the building market cannot be ignored. It is already widely used in the transport industry for truck bodywork, caravans and car seal cores. The market for industry is not declining in the least and has still many good years ahead of it. The versatility of pre-lacquered aluminium means that it can replace a whole range of other products.

SOLUTIONS

Other services



Halifax Call Center, Belfast

Services: Alcoa Architectural Products Merxheim not only ensures you high-performance and complementary products in REYNOLUX® and REYNOBOND®, but also provides you with a complete service based on a listening partnership. Our continual improvement process has enabled us to develop both our flexibility and our shorter delivery times and thus be able to meet your most demanding needs. In addition, our sales and technical departments are able to provide you with advice and best-suited solutions to your projects and realisations.



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