

Reynolux[®]
Building



Discover the
flexibility
of outstanding
materials!

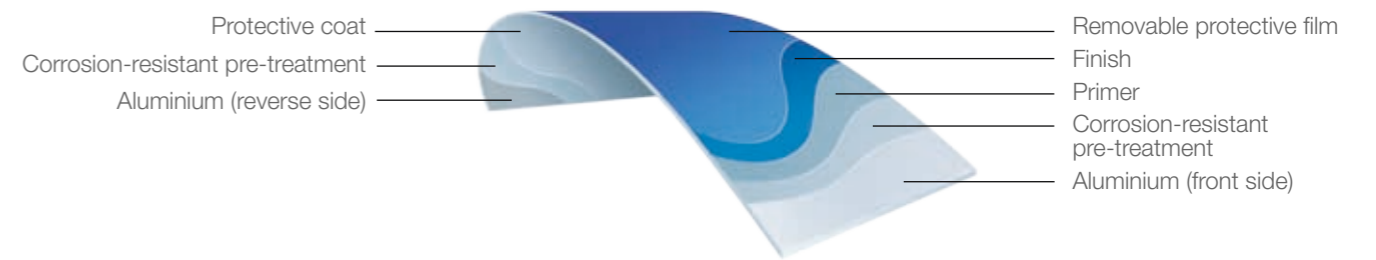


Dedicated to your Success

Only Reynolux[®] offers you so many different possibilities for your products!



Examples for dual coating:



Reynolux[®] is a pre-painted aluminium sheet or coil manufactured through the coil-coating process. Unlike powder coating, this process allows for the application of one or more layers of coating, all in uniform quality and with no colour deviation between different delivery batches.

Reynolux[®] is a tremendously versatile product. It is suitable for roofs, facade cladding and many other interior and exterior applications. Reynolux[®] can be used in new construction as well as for refurbishment. Reynolux[®] opens up creative possibilities in a market segment that far too often moves no further than the standard options. It can also be coated with in a unique palette of colours through our coil-coating systems.

Even small batches can be delivered in any choice of colour. The simple processing of Reynolux[®] lets you create luminous colours in original shapes. The outstanding physical and chemical characteristics of the coatings give Reynolux[®] an extraordinary resistance to UV rays and good weather protection.

The optimal adhesion of the paints allows for the coil-coated material to be shaped in many different ways. The ideal material temperature for the machining of Reynolux[®] should not be below 20 °C. Research and development play a central role with Reynolux[®]. The optimisation of existing products and the development of new ones assure that in selecting Reynolux[®], you are choosing the most innovative programme on the market.



A unique product for numerous applications!

A versatile base material: its outstanding technical properties mean that Reynolux[®] can be used universally. The variety of available colours and the simple processing are making it the preferred product for applications in the building and architectural segments.

Special applications possibilities:

Alcoa Architectural Products in Merxheim, France has achieved synergy between its two flagship products, Reynobond[®] and Reynolux[®]. That product combination, designed to be implemented modularly, allows for links between pure aluminium and aluminium composite panels, and hence the achievement of even the most complex projects.

Roofing:

Reynolux[®] is easy to process, simple to fix, is lightweight, resistant to exterior conditions and is very durable: in short, it is an ideal roofing material. Its aesthetic and appearance similar to the tiles respect perfectly the harmony of the building.



Facades:

Its excellent weather resistance makes Reynolux[®] a very long-living product that opens a broad range of cladding possibilities for your facades. Simple to fabricate and available in many colours and coating systems, it can be perfectly combined with other materials.



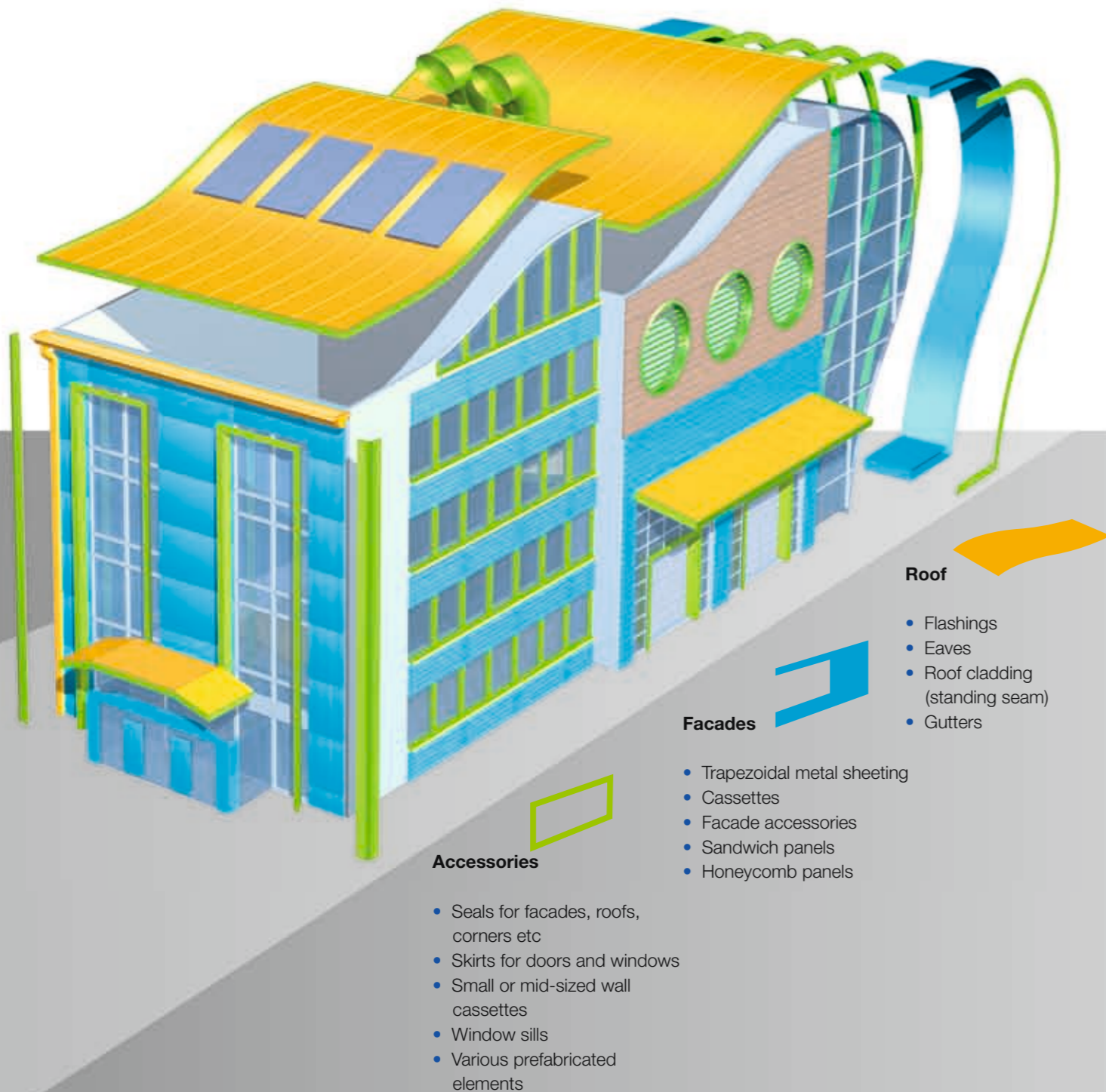
Accessories:

Primarily because of its simple processing, Reynolux[®] is the ideal product for the design of new buildings and for refurbishment of old ones. Our flexibility in delivery quantities and meeting deadlines as well as the unlimited variety of colours makes Reynolux[®] an ideal building material.



Quality and flexibility for your success!

When you use Reynolux[®], you are well prepared for all kinds of projects found in the building and architecture fields. Beyond our standard versions, we offer a variety of custom configurations optimally tailored to your needs.



We have such faith in the high quality of Reynolux[®] that we offer up to a 20 year guarantee. Whether for roofs, walls or accessories, with Reynolux[®] you are always making the right choice and securing yourself a loyal customer base.

Ease of processing.

Reynolux[®] can be fabricated without problems using standard machine processes like cutting, profiling, folding, bending, pressing, drilling and sawing. Joining can also be accomplished through standard means like screws, rivets, glue and folding. Reynolux[®] is primarily shaped in the workshop.

Reynolux[®] can be exposed to temperatures between -50 °C and +80 °C. Its linear expansion totals 0.024 mm/m/°C, which amounts to 1 mm/m during a 40 °C temperature fluctuation. This should always be considered when installing aluminium sheets.

The material can be delivered with a special protective film.



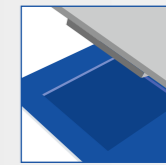
Folding



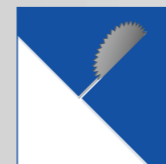
Drilling



Bending



Pressing



Sawing



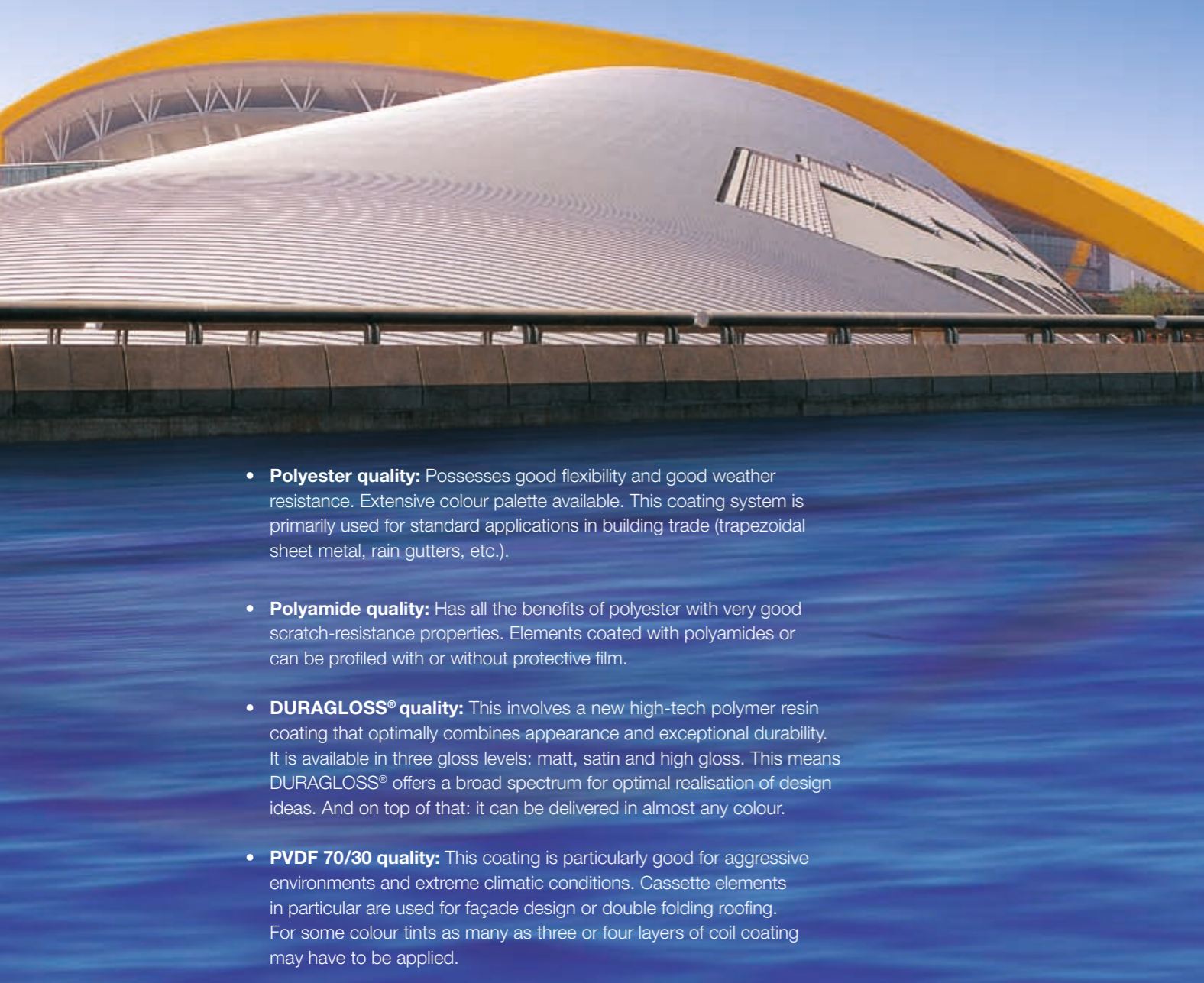
Profiling



Cutting

The variety of the four coating systems from which to choose!

With Reynolux® you can choose between four different coating systems. No matter which one you choose: all provide exceptional adhesion of the metal, are tremendously weather resistant and also allow many different applications. Select between these coating systems based on your needs:



- **Polyester quality:** Possesses good flexibility and good weather resistance. Extensive colour palette available. This coating system is primarily used for standard applications in building trade (trapezoidal sheet metal, rain gutters, etc.).
- **Polyamide quality:** Has all the benefits of polyester with very good scratch-resistance properties. Elements coated with polyamides or can be profiled with or without protective film.
- **DURAGLOSS® quality:** This involves a new high-tech polymer resin coating that optimally combines appearance and exceptional durability. It is available in three gloss levels: matt, satin and high gloss. This means DURAGLOSS® offers a broad spectrum for optimal realisation of design ideas. And on top of that: it can be delivered in almost any colour.
- **PVDF 70/30 quality:** This coating is particularly good for aggressive environments and extreme climatic conditions. Cassette elements in particular are used for façade design or double folding roofing. For some colour tints as many as three or four layers of coil coating may have to be applied.

We will always help you determine the optimal solution for your specific needs, e.g. material thickness, alloy hardness, colour quality, etc.

Delivery programme:

| | |
|--|--|
| Alloy series | 1,000/3,000/5,000 (others possible) |
| Temper | H0/42/44/46/48 |
| Length | Up to 7,000 mm |
| Thickness | 0.2 mm to 2 mm |
| Width | 40 mm to 2,000 mm |
| Coating systems (other systems also possible) | Polyester, one or two coats Polyamide coating DURAGLOSS® PVDF 70/30 |

ECCA Test Procedure*:

| | | |
|-----------------|---|---|
| ECCA T 1 | Coating thickness | Average thickness (µm): 25 +/- 5 (top side) 5 +/- 2 (reverse side) |
| ECCA T 2 | Specular gloss | Satin-finish gloss 35% +/- 5 Metallic 25% +/- 5 within an angle of 60° Gardner |
| ECCA T 3 | Colour difference | Spectrocolorimeter controls according to the Cielab scale |
| ECCA T 5 | Resistance on cracking on rapid deformation | No crack 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 |

Examples of flexibility:

| Thickness | Alloy | Inner bend radius | External bend radius |
|-----------|---------|-------------------|----------------------|
| (T) | | (Ir) | (Er) |
| 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 |

Flexibility up to OT interior bend radius based on ECCA T7.



* ECCA: European Coil Coating Association



In Alcoa Architectural Products, you have an absolutely reliable partner always ready to provide support.

- Exceptionally short lead times, our commitment to meeting delivery deadlines as well as our quick reactions allow us to forego large stocks. This enables us to lower your operating costs.
- With our joint offerings from Reynobond[®] and Reynolux[®], we open the door for new business possibilities and provide a competitive edge during the acquisition of new projects.
- Our technicians help you through all stages of project implementation, from planning to completion.
- As a pioneer in the field of coil coating, we possess extraordinarily flexible production capabilities and can deliver small amounts and any possible colours.
- Our on-going research and development assures a constant supply of the products that the market demands.
- Certified quality that you can trust: we are members of the ECCA* and are ISO 9001 and 14001 certified.
- Our guarantees last for up to 20 years, including special guarantees for various products, such as coating adhesion, colour and gloss durability and corrosion.
- We guarantee extremely low deviation between ordered and delivered quantities.

* ECCA: European Coil Coating Association

Work with a partner that gives you a competitive advantage!

Put your trust in the security of a global corporation!

Alcoa Architectural Products in Merxheim, France is a subsidiary of ALCOA, the world leading aluminium supplier. Nearly 107,000 employees in 44 countries manufacture and sell products from composite panels to kitchen foil.

The ALCOA group offers its clients the security of a global group – and yet at the same time the personal care of a regional, mid-sized company. And that internationally! Customers working in most European languages are currently serviced from the Merxheim location – because the staff at Alcoa is able to speak the language of our clients which encourages a close relationship.



Work with the world market leader!



Photo credits:
Title: Corus, Hospital St-Jacques, Nantes / France, GPAA, Gaëlle Péneau
 Architecte | **P. 2/3:** Corus, BMW Headquarters, Leipzig / Germany, Zaha
 Hadid & Patrik Schumacher | **P. 4:** Left, Preia, Residential settlement Hugo
 Breiner Hof, Vienna / Austria | **P. 4/5:** Centre, Inor, Inova Plastik, Barcelos
 / Portugal, César Fernandes & Jorge Brito | **P. 5:** Right, Alcoa, Industrial
 building, Prague / Czech Republic, Martin Vokaty | **P. 8:** Alcoa, Olympic Center
 Nanjing / China, Nanjing Architecture | **P. 9:** Lower left, Corus, Shopping Mall
 Scharbeutz / Germany, nrip partnershp Bötlinger-Neuwald | **P. 9:** Lower right,
 Corus, Theatre Agora, Lelystad / Netherlands, UN Studio Ben van Berkel

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