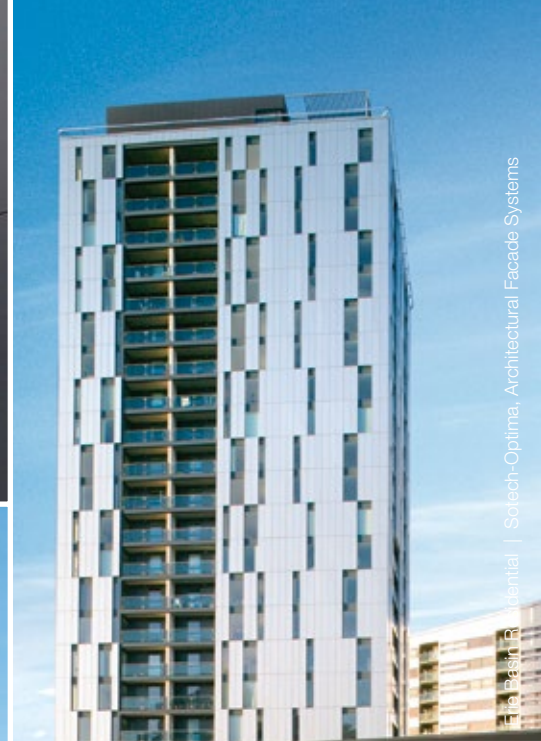


Small detached house | Heinz F. Mosler

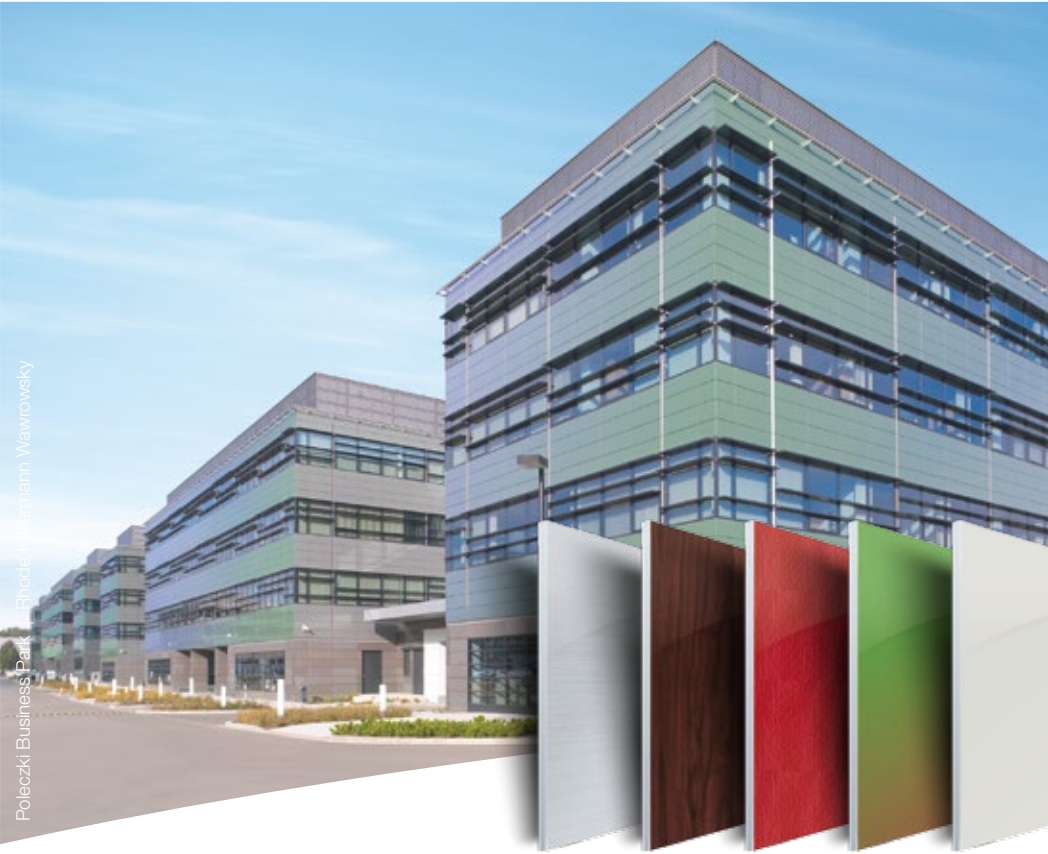


REYNOBOND® | REYNOLUX®
ARCHITECTURE BUILDING



High-Rise Residential | Sobach-Optima, Architectural Facade Systems

Poleczki Business Park | Phoder Kiernam Wawrowsky



Multiple Dwelling "Fasematt" | Joe Mattie

Aluminium composite panels and sheets:
Transform – Create – Fascinate.

THE PERFECT COMBINATION OF AESTHETICS,
FUNCTION AND PROFITABILITY



ARCONIC
Innovation, engineered.

Complete versatility in exterior applications – with Reynobond® and Reynolux®.

Reynolux® Building pre-painted aluminium is manufactured through coil-coating. It can be painted with a unique colour variety of coatings. The benefits of Reynolux® Building pre-painted aluminium are versatile. In addition to its UV and weather resistance it is also easy to transform and shape.

Reynobond® Architecture composite panel is consisting of two coated aluminium sheets that are laminated to both sides of a core (polyethylene or fire-retardant). It offers numerous advantages: Its low weight, small extension, high corrosion and weather resistance make it an outstanding product. Reynobond® Architecture is a solid material offering perfect flatness especially for large-scale implementations with special requirements.

Reynodual® Building pre-painted double sheet aluminium panel is the ideal complement to Reynobond® Architecture aluminium composite panel and Reynolux® Building pre-painted aluminium. It offers the same properties regarding for example easy processing or various applications. Please ask for the datasheet for more information.

Coming from the same manufacturing plant, the three products can be obtained in identical colours and combined in the same project, from the single-family house to residential, commercial and industrial buildings to large prestige projects.

Applications Reynobond® Architecture:

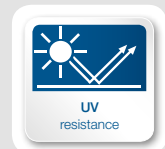
- Facades (ventilated facades)
- Exterior claddings, roof construction and trims
- Implementation of flat or curved soffits
- Claddings for balconies
- Accessories: gutters, window sills

Applications Reynolux® Building:

- Facades (trapezoidal or corrugated metal sheeting, cassettes, facade accessories, sandwich panels, honeycomb panels)
- Roofs (roof claddings, standing seam roofs, roof profiles, gutters)
- Accessories (seals for façades, roofs, corners etc., edge finishings, window sills)

Advantages:

- Cost-effective: easy and quick installation
- In widths up to 2,000 mm and lengths up to 6,050 mm
- Flexible and short delivery times
- Advice, before and during projects



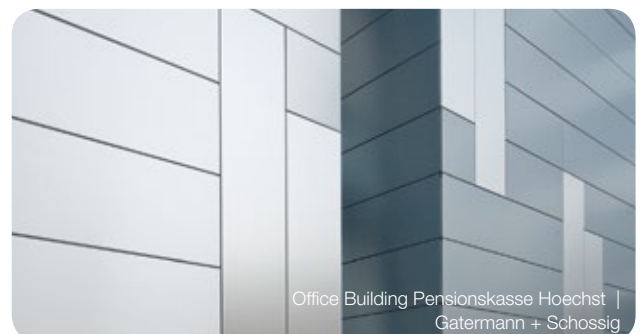
- Pre-painted aluminium sheet
- Core (PE or FR)
- Pre-painted aluminium sheet



- Pre-painted aluminium sheet
- Adhesive
- Pre-painted aluminium sheet



- Pre-painted aluminium sheet



Technical data Reynobond® and Reynolux®.

Composition aluminium composite panel Reynobond® Architecture

| | | | |
|---------------------------------------|---|------|------|
| Thickness composite panel | 3 mm | 4 mm | 6 mm |
| Thickness pre-painted aluminium sheet | 0.5 mm (±0.01 mm) | | |
| Alloy & temper | 3005 H46 | | |
| Core | PE or FR (fire-retardant) | | |
| Front side finish | DURAGLOSS® 5000 (35 µm) or PVDF 70/30 ¹ (25 µm) and anti-corrosion treatment | | |
| Reverse side finish | Washcoat and anti-corrosion treatment | | |

Characteristics aluminium composite panel Reynobond® Architecture

| | | | |
|-------------------------|---|------------------------|-------------------------|
| Width | 1,000 mm / 1,250 mm / 1,500 mm / 1,750 mm / 2,000 mm (-0/+3 mm) | | |
| Length | 2,000 mm up to 6,050 mm (< 4 m: -0/+4 mm; > 4 m: -0/+6 mm) | | |
| Weight in FR | 6.04 kg/m ² | 7.64 kg/m ² | 10.84 kg/m ² |
| Weight in PE | 4.69 kg/m ² | 5.61 kg/m ² | 7.46 kg/m ² |
| Tolerance in squareness | ≤ 3 mm | | |
| Tolerance in bow | ≤ 2 mm / 500 mm on the width and the length | | |

Performance aluminium composite panel Reynobond® Architecture

| | | | | |
|--|---------------------------------|---|----------------------------|----------------------------|
| Bond integrity | PE: ASTM D1876 FR: ASTM D903 | 4.37 N/mm (mini) or 25 pli | | |
| Tensile strength (R _m) | ASTM D6 38 – 82a | 46.26 MPa | | |
| Moment of inertia | | 0.31 cm ⁴ /m | | |
| Tensile yield | | 44.16 MPa | | |
| Stiffness (EI) | CSTB, DIBT | 0.125 kN.m ² /m | 0.242 kN.m ² /m | 0.242 kN.m ² /m |
| Flexural modulus | ASTM C393 (& ASTM D790) | 41,400 MPa | | |
| Surface coefficient of heat transfer U | | 5.7 W/m ² K | 5.6 W/m ² K | 5.4 W/m ² K |
| Thermal expansion | | 2.4 mm/m for a temperature variation of 100 °C | | |
| Sound attenuation (R _v) | ASTM E90 ASTM D6 38 – 82a | 25 dB | 26 dB | 27 dB |
| Temperature resistance | | -40 °C / +80 °C | | |
| Maximum allowable deflection | | L/30 (allows higher wind pressure or bigger sized elements) | | |

Performance and durability pre-painted aluminium sheet Reynolux® Building

| | | |
|--|------------------------------|--|
| Specular gloss | EN 13523 – 2 ASTM D 523 | DURAGLOSS® 5000: from 3 % to 80 % PVDF ¹ 70/30: from 25 % to 30 % |
| Durability class | NF EN 1396 | Class 4: severe industrial – extreme conditions/very severe coastal 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 | Very good flexibility: 0.5T |
| 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 2247 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 aluminium composite panel Reynobond® Architecture²

| | | |
|---------|-------------|--|
| Europe | EN 13501 | FR: B-s1, d0 |
| France | NF P 92-501 | PE & FR: M1 combustible; non-inflammable |
| Germany | DIN 4102 | PE: B2 – FR: B1 |

Fire certificates pre-painted aluminium sheet Reynolux® Building²

| | | |
|--------|-------------|------------------|
| Europe | EN 13501 | A1 |
| France | NF P 92-501 | M0 incombustible |

Reynolux® Building:

For Reynolux® Building pre-painted aluminium, the project and your expectations in terms of design will determine the metal to use: alloy from 3000 to 5000 and thickness from 0.7 mm to 2 mm. See “Performance of pre-painted aluminium sheet” part in the Reynolux® Building technical data. The pre-painted aluminium is CE marked and allows you to meet the strictest fire standards: the product does not burn.

Reynodual® Building:

Reynodual® Building is a double sheet aluminium panel that meets stringent fire-resistance requirements of EN 13501-1, class A2. Please ask for the technical datasheet for more information.

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 3D objects:

You can find all the CAD system files for riveted and screwed installation as 3D objects in electronic form on our website at www.reynobond.eu.

Coating options:

1. DURAGLOSS®:

High-performance coating based on polymer resin; resistant to moisture and UV rays; with additional coatings: Anti-Graffiti, Strong-Protect or EcoClean™ (self and air cleaning).

2. Our products are available in **four gloss levels**: high gloss, satin, matt and MattXtrem.

3. Various surfaces: **smooth, textured or brushed.**

¹ This document provides the results for two-sided PVDF. ² Fire certificates for other countries are also available.

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.).

Versatile and easy to transform.

Reynobond® Architecture and Reynolux® Building panels and sheets are characterised by an easy and quick installation but also by a long service life that requires little maintenance. The flexibility in transformation allows freedom in design for unusual shapes.



Transformation

Bending,
profiling,
pressing,
rolling ...



Transformation

Bending,
rolling ...



Wide range of colours.

You can find all surfaces
in our colour charts:

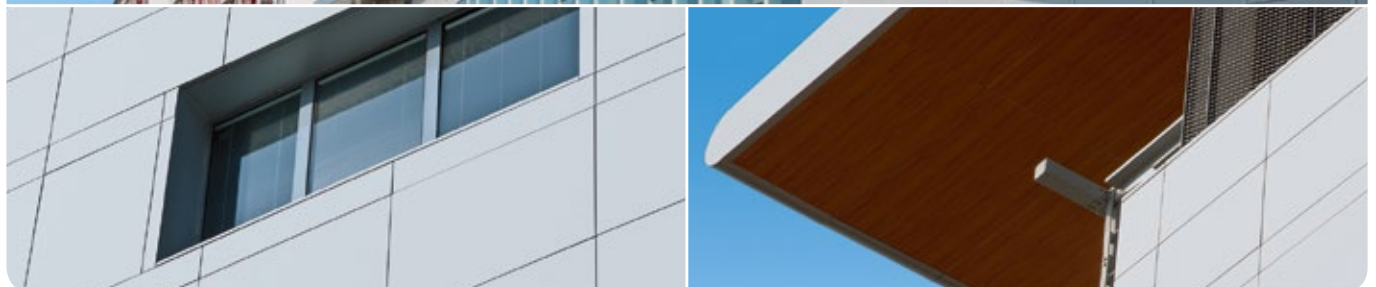
- WOOD Design: Oak, Zebrano
- NATURAL Design: Granite, minerals
- STANDARD: Unicolour
- EFFECTS: Chameleon, sparkling
- METALS: Stainless steel, brushed, mirror
- MINERALS: Stone, lime, concrete
- BRUSHED Look



All RAL- and NCS-standard colours can be supplied,
as well as customized colours.



Reynobond® and Reynolux® in the same project.

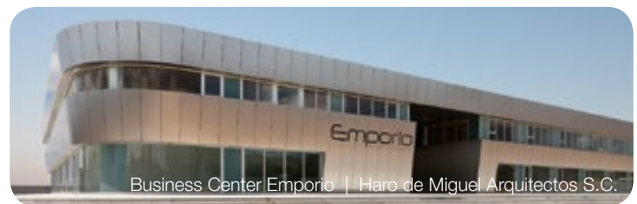
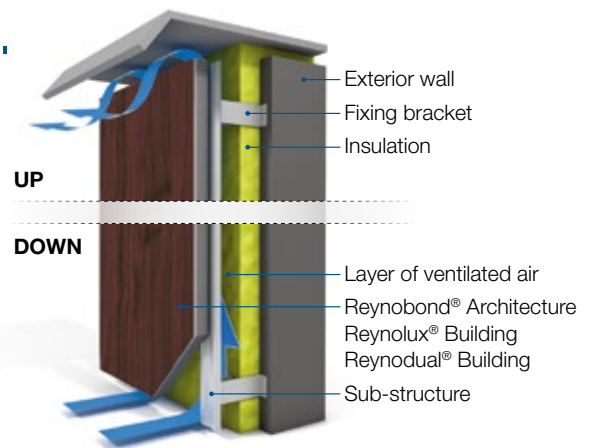


Ventilated facades – An energy-saving solution.

The Reynobond® Architecture, Reynolux® Building and Reynodual® Building ventilated facades contribute greatly to improving the energy performance of buildings and to achieving the objectives defined by the HQE (High Quality Environmental) approach and specific labels such as HPE (High Energy Performance) and Effinergie as well as for passive houses and renovation projects.

Advantages:

- Thermal inertia
- Reduction in structural thermal bridging
- Reduction in energy consumption
- Protection against rain and weather
- Lasting protection of investment
- Acoustic insulation improvement of 8 dB to 14 dB



Business Center Emporio | Haro de Miguel Arquitectos S.C.

Environmental option: Reynobond® | Reynolux® with EcoClean™.

Reynobond®|Reynolux® with EcoClean™ are the first aluminium facade materials (sheet or composite panel) that are both cost-effective and environmentally friendly. Using sunshine and humidity, particles of dirt and smog are rendered harmless. This is how the EcoClean™ coating contributes to the self-cleaning of the facade and the removal of pollution from the surrounding air.

Advantages:

- **Protecting the environment**
1000m² of the EcoClean™ coating destroy as much atmospheric pollution as about 80 trees. This is equivalent to the daily emissions of four cars.
- **Improvement of image**
The facade remains beautiful and clean over the long term.
- **Cost-effectiveness**
The self-cleaning feature of Reynobond® | Reynolux® with EcoClean™ panels considerably reduces the costs of cleaning and maintenance. Over half the costs of cleaning and scheduled maintenance on the facade can be saved.

Application:

The EcoClean™ coating is applied to walls exposed to rain and sunshine.

Availability:

The EcoClean™ coating is applied onto matt or satin finish, with the exception of the darker satin colours in DURAGLOSS® 5000.

Additional information:

To find out more about EcoClean™, you can retrieve information, videos or brochures on our website www.excellence-in-innovation.com, on the EcoClean™ tab.



**THE FIRST CLADDING PANEL TO CLEAN
BOTH ITSELF AND THE SURROUNDING AIR.**

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 based in Merxheim/France, a subsidiary of Arconic, an internationally leading company for technologies, engineering and manufacturing processes, offers a wide range of products for architecture and construction.

What's more, they come with all the solid virtues you would expect of a global company. This means, for example, that you get a warranty of up to 20 years on our DURAGLOSS® surfaces. Member of the ECCA (European Coil Coating Association), our company is certified according to the international standards ISO 14001 and 9001 and OHSAS 18001.



Reynolux®: EN 15088
 0036-CPR-M-081-2014



Controlled French manufacturing

Reynobond® Architecture, Reynolux® Building and Reynodual® Building panels and sheets are all made in France. Arconic Architectural Products 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.

