

Reynobond® | Reynolux®



Specification Text

Ventilated facades with
Reynobond® Architecture,
aluminium composite panels.

Standard – Specification text

Fixing systems

Reynobond[®]
(Cassette, riveted panels or screwed panels)

Orientation.....
(Vertical, horizontal)

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Information – Project information

Construction plan:

Construction foreman:

Architect:

Construction management:

Building description

New construction

Existing building (renovation)

Floors G +

Height of walls (footer – edge of roof) m

Total finished surfacem²

(shadow gaps disregarded)

Shell / outer walls

Concrete

Masonry of

Other

Information - Reynobond[®] composite panel product specifications

Producer: Alcoa Architectural Products SAS | 1 Rue du Ballon | 68500 Merxheim, France
Tel: + 33 3 89 74 47 96, Fax: + 33 3 89 74 46 90, web: www.reynobond.eu

Material structure:

Planning: Two-sided with 0.5 mm aluminium sheet metal
Rm: > 150 Mpa
Rp 0.2: > 120 Mpa
A50: > 2%

Core material: Plastic construction material class EN B s2 d0
or mineral construction material class EN B s1 d0

Panel thickness: mm
Panel width: mm
Panel length: mm

Surfaces:

Visible side: Baked enamel in coil-coating process according to ECCA guidelines (European Coil Coating Association)

Coating quality: DURAGLOSS 5000 or special enamel:

Colour
or special colour:

Effect:
(uniform colour, metallic, effect colour, decor)

Gloss level:% after 60° Gardner
(3% up to >90%)

Surface:
(Easy Clean, Scratch Resistant , Anti Graffiti)

Protective film: Laminated on visible side

Back side: Baked enamel in coil-coating process according to ECCA guidelines (European Coil Coating Association)
Coating quality: Protective coat

Material: Class B2, normal flammability = Reynobond
Per DIN 4102 Class B1, flame-resistance = Reynobond FR

Information - Processing

The Reynobond composite panels are as shown in the brochure. Reynobond processing

Informationen - Construction

A / Substructures and profile for covered fastening (hanging) with bolts KU 50/35 VA systems

Reynobond cassette systems are facade cladding based on Reynobond composite panels designed in cassette form, and mounted using chamfers on a vertically installed support structure of aluminium profiles. These elements are fastened to the building with adjustable angle brackets. Additional insulation is often installed between the building and cladding, whereby this insulation is ventilated through a ventilation layer running between the insulation layer and the back of the cassettes.

An inserter is inserted into the vertical support rail.

The HC8-TL self-tapping screw which is positioned in the guide allows a prepositioning of the axis in the mounting phase of the cassettes, as well as fine adjustment for better orientation of the splices between the elements. Furthermore, it also allows the blocking of the guides by leading the carrier through the screw holes.

The system permits individual dismounting of any cassette element and the creation of splices between cassettes.

The Reynobond composite panels form a pre-hung rear-ventilated facade, and are mounted on an aluminium substructure.

Manufacturer: Systea

Product: System KU

Alloy:EN AW 6060

Consisting of wall brackets mm

Vertical profiles Ref 782

The distance from the outer wall to the front edge

Vertical support profile is mm

B / Substructures and profile for covered fastening (hanging) without bolts
KU 50/35 NVA systems

Reynobond cassette systems are facade cladding based on Reynobond composite panels designed in cassette form, and mounted using chamfers on a vertically installed support structure of aluminium profiles. These elements are fastened to the building with adjustable angle brackets. Additional insulation is often installed between the building and cladding, whereby this insulation is ventilated through a ventilation layer running between the insulation layer and the back of the cassettes.

An inserter is inserted into the vertical support rail.

The HC8-TL self-tapping screw which is positioned in the guide allows repositioning in the mounting phase of the cassettes, as well as fine adjustment for better orientation of the splices between the elements. Furthermore, it also allows the blocking of the guides by leading the carrier through the screw holes.

The system permits individual dismounting of any cassette element and the creation of splices between cassettes.

The advantage of this variant is the capability of making a vertical splice with no visible axis.

The guides, made of the same profile as the base system, has no transverse axis, but it does have two gaps which are worked into the wings.

There are no gaps in the vertical chamfers of the cassettes.

An 80 mm long pipe segment is used, fulfilling two functions: the fastening of the edges, and the folding join of the pipe into the gaps in the guide.

The Reynobond composite panels form a pre-hung rear-ventilated facade, and are mounted on an aluminium substructure.

Manufacturer: Systea

Product: System KU

Alloy:EN AW 6060

Consisting of wall brackets mm

Vertical profiles Ref 782

The distance from the outer wall to the front edge

Vertical support profile is mm

C / Substructure and profile for visible fastening (rivets or screws)
RV 60 4c – SC 60 4c systems

Reynobond rivet or screw systems are facade cladding based on Reynobond composite panels which are fastened in sheets on an installed support structure of aluminium profiles. These elements are fastened to the building with adjustable angle brackets.

Additional insulation is often installed between the building and cladding, whereby this insulation is ventilated through a ventilation layer running between the insulation layer and the back of the cassettes.

By painting the rivet heads and screw heads with the colour of the facade panels, aesthetically pleasing colour combinations can be achieved.

The heat expansion of the panels must be taken into consideration. In order to avoid deformation, the expansion gap in the panel must be as large as the expected expansion.

Only blind rivets approved by the building authority may be used.

SAL 3/6-S-D21-4.8x19 screws are specially manufactured for the fastening of Reynobond panels. They permit the tension-free fastening of the facade panels.

The Reynobond composite panels form a pre-hung rear-ventilated facade, and are mounted on an aluminium substructure.

Manufacturer:.....SYSTEA / SFS

Product: Profile

Alloy:EN AW 6060

Consisting of wall brackets mm

Vertical profiles Ref 782

The distance from the outer wall to the front edge

Vertical support profile is mm

Anchoring: Approved anchors and screws

Facade distance: From outer edge of cladding to building structure / fastening base +/- tolerance compensation = mm

All fastening, connection and anchoring elements must be made of non-rusting materials. For anchors, suitability must be shown with a certification.

A static calculation must be shown for the panel dimensions, fasteners, connectors, substructure, wall brackets, and anchoring.

The facade structure must be build according to the construction details.

The contractor must present a verifiable static calculation and construction drawings before installation begins.

Information – Standard and / or guidelines to follow

Lastannahmen für Bauten	DIN 1055
Bleche und Bänder aus Aluminium	DIN EN 485
Strangpressprofile aus Aluminium	DIN
VOB Teil A, allgemeine Bestimmungen für die Vergabe von Bauleistungen	DIN 1960
VOB Teil B, allgemeine Bestimmungen für die Vergabe von Bauleistungen	DIN 1961
Brandverhalten von Baustoffen und Bauteilen	DIN 4102
Wärmeschutz und Energieeinsparung in Gebäuden	DIN 4108
Schallschutz im Hochbau	DIN 4109
Alu im Hochbau	DIN 4113
Arbeits- und Schutzgerüste	DIN 4420
Werkmäßig hergestellte Produkte aus Mineralwolle	DIN EN 13162
Nichtrostende Stähle	DIN 17440
Anodisch oxidiertes Aluminium	DIN 17611
Maßtoleranzen im Hochbau	DIN 18202
VOB Teil C, allgemeine Regelungen für Bauarbeiten jeder Art	DIN 18299
VOB Teil C, Dachdeckungs- und Dachabdichtungsarbeiten	DIN 18338
VOB Teil C, Fassadenarbeiten	DIN 18351
VOB Teil C, Metallbauarbeiten, Schlosserarbeiten	DIN 18360
Außenwandbekleidungen, hinterlüftet	DIN 18516
Règles définissant les effets de la neige et du vent sur les constructions	NV 65
Détermination de la résistance au pelage	ASTM D 1876
Aluminium et alliages d'aluminium	NF EN 485
Aluminium et alliages d'aluminium.	
Tôles et bandes revêtues en bobine	NF EN 1396
Aluminium et alliages d'aluminium en Barres	NF EN 755
Ossature métallique et isolation thermique des bardages rapportés faisant l'objet d'un Avis Technique	Cahier CSTB 3194
Sécurité contre l'incendie	NF P 92-507
Classement au feu des produits et éléments de construction	NF EN 13501
Regional building code	
Heat protection code	
Accident prevention guidelines of the employer's liability association	
Guidelines for the design and quotation of aluminium construction components (Information sheet no. 01 of the Bundesverbandes Metall, Essen)	
Guidelines for the use of anchor connections or building-authority approvals of the anchors used.	
Guidelines for use of flammable construction materials in high-rises (May, 1978)	
Building authority approval of Reynobond Z-33.2-1012	

Information - Estimate and billing according to DIN 18351 – VOB Part C, Facade work

In addition to ATV DIN 18299, section 5, the following applies:

General information:

The estimate for the services – regardless of whether it is done by drawing or by dimension – must cover the cladding, substructure, heat and noise insulation, surface treatment and the like for the dimensions of the cladding.

Splices will be ignored.

Uncovered frames, lock bars, stands, beams, and the like up to a 0.3 m individual width will be ignored.

When invoicing by length (m), the largest component length, or for bent components the outer component length, will be measured.

When invoicing by surface area (m²) of individual components with non-right angles or notched surfaces, the smallest enclosing rectangle shall be used.

The following will be deducted:

When invoicing by surface area (m²):

Gaps in the cladding, e.g. openings, niches, of 2.5 m² or greater individual size

When invoicing by length (m):

Interruptions over 1 m in individual length.

Scope of services

The manufacturer, delivery, and installation of a prehung, rear-ventilated facade cladding of **Reynobond** composite panels including all necessary substructure and construction site set-up, scaffolding, heat insulation, and cleanup.

Service description

Pos. 1 Construction site set-up

Construction, office, and lounge containers,
sanitary container, electrical connection box

Total item 1 €.....

Pos. 2 Scaffolding

Steel pipe scaffolding according to applicable directives and guidelines of the construction employer's liability association as well as VOB Part C DIN 18451 and DIN 4220, shall be delivered, set up, retained for the entire construction period, then dismantled and removed after approval.

The service also includes the reanchoring of the scaffolding in the facade joints.

Other workers are permitted to use the scaffolding at their own risk.

Remaining scaffolding anchors located in the joints will be invoiced separately.

Building height: m²

Standing area soil, grass, composite pavement

Anchoring base: Reinforced concrete, perforated brick masonry

The anchors must be inspected per DIN 4420

..... m² at € €

Item 2.1 Scaffolding anchors for facade maintenance / repair

Remaining scaffolding anchors located in the joints must be provided with caps.

.

..... units at € €

Item 2.2 Protection for passers-by

Above the entrances to doors and gates, for the safety of passers-by, grid supports and passers-by protection shall be provided

..... running m at €..... €.....

Total €.....

Carry-over €.....

Item 2.3 Scaffolding protective net covering

The surface described under the Scaffolding line item shall be covered with a protective scaffolding net (mesh width 2/2 mm).

For the net, there must be proof of wind force resistance provided by a materials testing agency.

The wind force from this covering must be borne by the scaffolding, which must correspondingly be anchored more firmly.

This anchoring strengthening, as well as set-up and dismantling, retention for the entire construction period, must be included in the calculation.

..... m² at €..... €.....

Total item 2 €.....

Service description

Item 3 Aluminium substructure of entire

facade surface, adjustable, free of warping,
corresponding to the formats of the cladding elements
for a facade cladding with aluminium
Reynobond composite panels, large-format,
with invisible fastening and with approved
anchoring elements (e.g. inserts)
shall be installed properly and according to statics.

Manufacturer:.....

Product:

Alloy:

Consisting of wall brackets mm

Vertical profiles

The distance from the outer wall to the front edge

vertical support profile is mm

Anchoring of substructure in the backwards
support layer of the building

..... m² at € €

Item 3a Aluminium substructure in vicinity of edge, like previous.

..... m² at € €

Total item 3 €.....

Item 4 Heat insulation for outer wall cladding

DIN 18165, non-flammable DIN 4102,
fastening with insulated brackets, on average
5 units/m², glued in addition,
insulation panels of mineral fibre with external
fleece coating, black, sides and edges glued over,
heat conduction group 035 or 040

Material: or equivalent

Fleece coating: Yes no

Thickness mm

..... m². at € **Total item 4 €**

Item 5 Facade cladding

Manufacture, delivery, and installation of all-sided edged
Reynobond..... according to static requirements and
(cassettes, riveted panels, clamped panels)
implementation examples.

Reynobond..... for the substructure listed in item 3
(cassettes, riveted panels, clamped panels)
must be hung, oriented, and secured against dislodging.

Grid size vertical mm

Grid size horizontal mm

Joint width vertical mm

Joint width horizontal mm

Implementation according to implementation examples

Reynobond..... part, page

(cassettes, riveted panels, clamped panels)

The calculated surface includes the entire processed cladding surface.

(shadow gaps disregarded)

..... m². at € €

Item 5.1 Facade edge area per DIN 1055
As supplement to Item 5
..... m². at € €

Item 5.2 Facade closure above (Attika)
Implementation according to implementation examples
Reynobond..... part, page
(cassettes, riveted panels, clamped panels)
The closure must be chamfered times.
As supplement to Item 5
..... running m at € €
Total €
Carry-over €

Item 5.3 Facade closure below (footer area)
Implementation according to implementation examples
Reynobond..... part, page
(cassettes, riveted panels, clamped panels)
The closure must be chamfered times and an insect shield
installed.
As supplement to Item 5
..... running m at € €

Item 5.4 Facade corner construction, external corners
Implementation according to implementation examples
Reynobond..... part, page
(cassettes, riveted panels, clamped panels)
As supplement to Item 5
..... running m at € €

Item 5.5 Facade corner construction, internal corners

Implementation according to implementation examples
Reynobond..... part, page

As supplement to Item 5

..... running m	at €	€
	Total	€
	Carry-over	€

Item 5.6 Facade corner construction above (Attika), external corners

1-part
 2-part

Implementation according to implementation examples
Reynobond..... part, page

As supplement to Item 5

..... running m	at €	€
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Item 5.7 Facade corner construction above (Attika), internal corners

1-part
 2-part

Implementation according to implementation examples
Reynobond..... part, page

As supplement to Item 5

..... running m	at €	€
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Item 5.8 Facade window closures, above (lintel area)

Implementation according to implementation examples
Reynobond..... part, page

As supplement to Item 5

..... running m	at €	€
	Total	€
	Carry-over	€

Item 5.9 Facade window closure below / windowsill

Manufactured of **Reynobond** composite panels
 Reynolux baked enamel aluminium sheet metal
 Aluminium profile

Implementation according to implementation examples
Reynobond..... part, page

Windowsill depth is mm

Visible side painted in
Reynobond colour
or special colour:

As supplement to Item 5

..... running m at € €

Item 5.10 Facade window closure, sides / embrasure

Implementation according to implementation examples
Reynobond..... part, page

The window embrasure must be chamfered
Embrasure depth mm

The window closure will be done with window closure profile
Visible side painted in
Reynobond colour
or special colour:

As supplement to Item 5

..... running m at € €

Total Item 5 €

Service description

Pos. 6 Cleaning

Cleaning of the facade cladding includes the removal of contamination caused by the contractor during manufacturer and installation. Cleaning according to the cleaning recommendations in the brochure "Reynobond handling" shall be carried out.

Total Item 6 €.....

Summary of items

Item 1	Construction site set-up	€.....
Item 2	Scaffolding	€.....
Item 3	Aluminium substructure	€.....
Item 4	Heat insulation	€.....
Item 5	Facade cladding	€.....
Item 6	Cleaning	€.....
	Subtotal, items 1-6	€.....
	Plus 16% VAT of €.....	€.....
	Total	€.....

City / date

Company stamp and legally binding signature