

COSMO® Façade elements
Fascination in glass and metal



Together toward success

A strong partner

weiss

Quality, service and high delivery reliability are the basic pillars of the success of our group of companies. We have continuously improved and further developed our portfolio in the last years; this also includes the acquisition of new companies. By now, about 325 employees at four sites participate in the success of our group.



Company

By pooling the core competences of our business segments of adhesives and composite panels under a single roof, we are able to offer solutions from one source to our customers that are efficient and of high technical quality.

We are among the leading manufacturers in these two business segments in Europe and moreover, we also increasingly sell our products outside of Europe, such as in China, Russia and the USA.

Company history

Since the company's foundation in 1815, Weiss has developed from a small hide-glue producer to an internationally acting, industrial company for modern adhesive systems and composite panels. With a passion for quality and the aspiration to meet our customers' high expectations, we are a recognised and reliable partner on the market.

! Weiss is the only enterprise that produces adhesives and composite panels.

Powerful product range

Adhesives Division

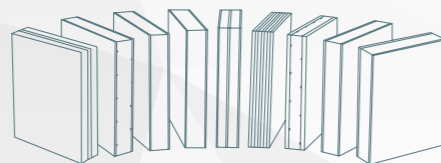


Durably firm joints

Traditional bonding technologies like riveting, soldering, welding, or screwing are more and more replaced by modern adhesive systems, resulting in many advantages.

Our product range includes more than 400 variants of surface and construction adhesive and superglues, as well as special adhesives for a wide variety of applications.

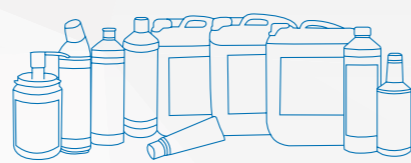
Composite panels Division



Unlimited possibilities for design


Composite panels made by Weiss leave nothing to be desired. Because there is a large number of top coats and core materials available as well as the possibility of combining and processing them in many different ways, a vast number of creative designs results for the finished element.

PUDOL Cleaning and care agent

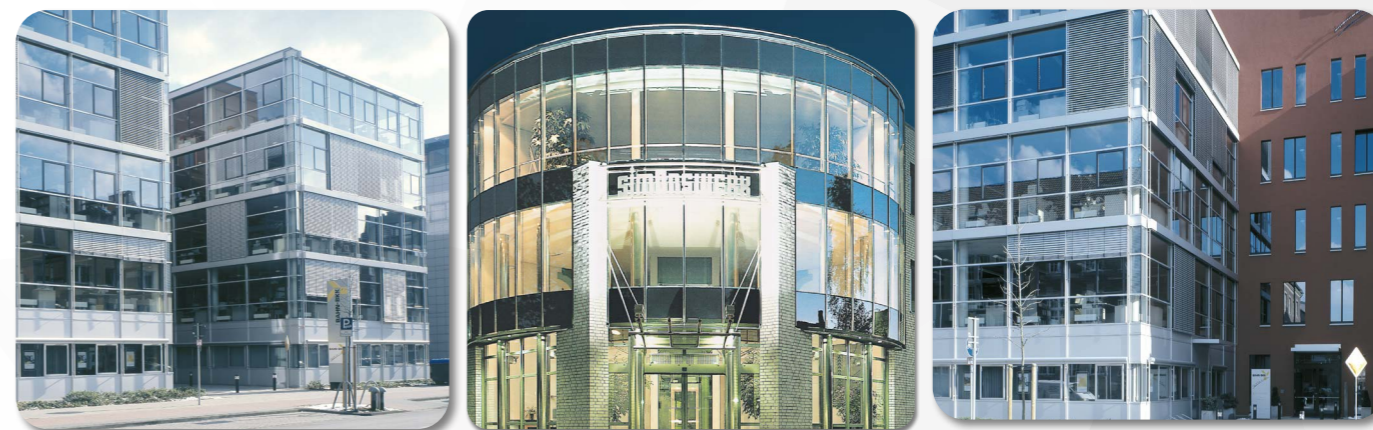


Cleanliness refreshes your senses

PUDOL stands for convincing quality of special products in the field of commercial cleaning. In addition to a complete range of cleaning and care products for different applications, we are offering a comprehensive service with interesting solutions and benefits.

 A subsidiary of the Weiss Group

COSMO® Façade elements - Fascination in glass and metal



Façade elements for highest demands

With all its building-physical and economic advantages, the façade element is the preferred building component for commercial and functional buildings.

Our façade elements have proved to be successful for many years with their excellent heat and noise insulating characteristics in famous buildings of European architecture.

Our façade elements connect surface design and excellent building-physical characteristics with a variety of creative possibilities in modern architecture. The façade surfaces that are resistant to light and scratching make sure that only low maintenance is required over many years.

Façade elements of glass

Using the glass elements in numerous colours as desired in an appropriate way you can design extraordinary architecture with these fascinating surfaces of glass. Glass gives the façade optical lightness and elegance.

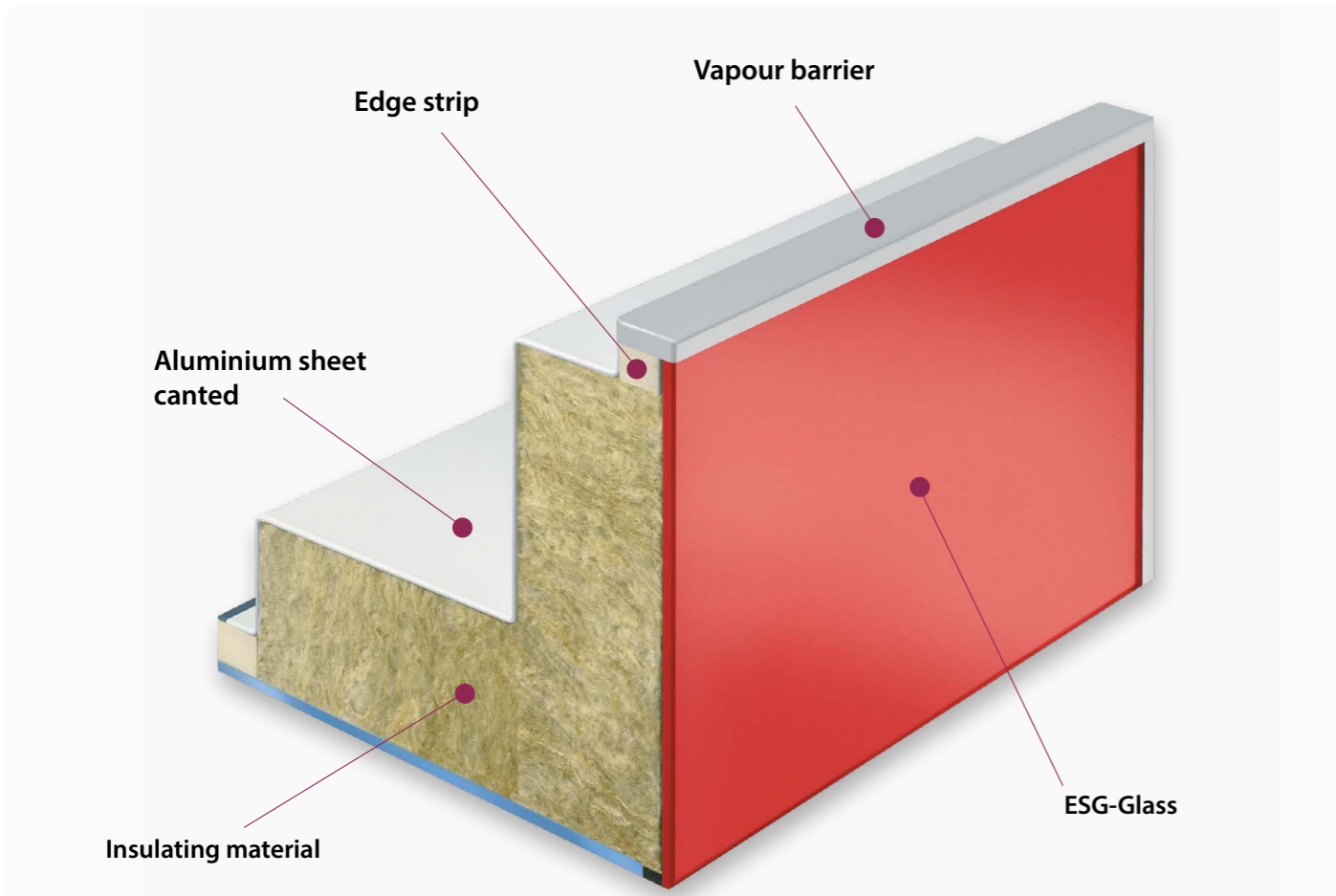
Decorative perspectives

If using the façade elements for decorative purposes as architectural feature elements, there will be various perspectives for the design as steel or aluminium elements. The shear and tension resistant, composite materials meet the highest demands on material quality and design concepts.

Selected reference projects

- Gerry Weber, Halle
- Balda, Bad Oeynhausen
- Bertelsmann Stiftung
- WDR, Köln
- Allee-Center, Magdeburg
- KaDeWe, Berlin
- KWU, Berlin
- Steigenberger Hotel, Bad Pyrmont
- Deutsche Post, Siegen
- VW, Warschau
- Messe, Leipzig
- Alte Post, Dortmund
- Metro, Düsseldorf
- Schokoladen-Museum, Köln
- Flughafen, München
- CCB Bergedorf, Hamburg
- Neroport, Kopenhagen
- D Space, Paderborn
- Corus, Niederlande
- Nordostpark, Nürnberg

Structure of a typical COSMO® Façade element



Coverings



ESG-single pane safety glass colour enamelled or mirrored



Aluminium, anodized or powder coated as per RAL or NCS



Steel sheet, galvanized or powder coated as per RAL or NCS

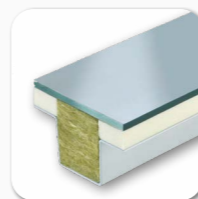


Stainless steel sheets, dimpled steel sheets

Designs



Plane



with Z-edging all around

Optionally tacked or welded and plastered corners.

Formats

Individually designed meeting the constructional requirements, please contact us.

Core material



XPS polystyrene-rigid foam, extruded



PUR polyurethane-rigid foam



Mineral fibre-insulating material



Vacuum-insulating material

Heat-insulating façade element with vacuum insulating core



VACUPA

Vacuum insulating core element

Product description

VACUPA is a façade element with excellent thermal insulation characteristics. It was developed for mounting situations in which compact structures are important. Often, thicker heat-insulating elements cannot be used due to their profile design. Because the internal vacuum core has excellent thermal insulation characteristics expensive sheet edges will not be required for VACUPA. Maximum heat protection in combination with small structural depth makes this panel to be a unique alternative.

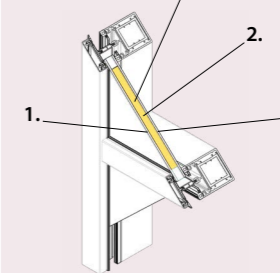
Special characteristics

- Excellent thermal insulation
- Various design possibilities using glass, aluminium or steel coverings
- Long-term high temperature resistance
- Low edge effects / thermal bridges
- 8 - 10 times higher thermal insulation compared with conventional mineral wool
- Easy application and assembly due to appreciable space saving

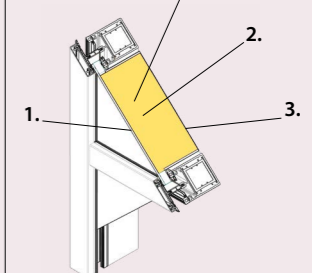
Technical information

These two structures reach a U-value of 0.22 W/(m²K) in the intermediate panel area

0,22 W/(m²K)

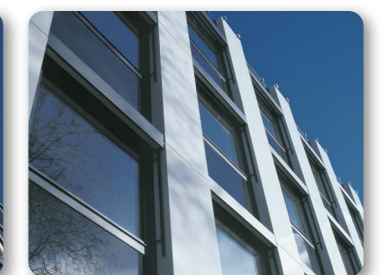
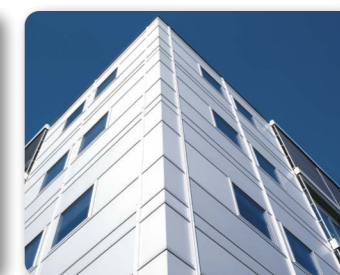


0,22 W/(m²K)

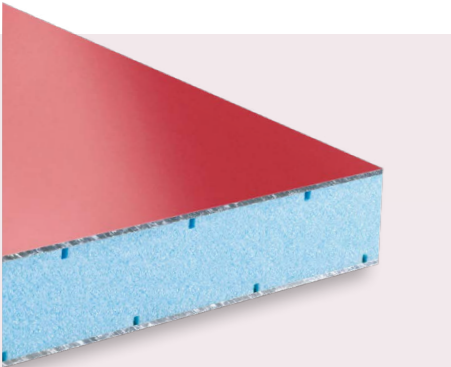


VACUPA		Conventional design	
1. Aluminium, plane	2.0 mm	1. Aluminium, plane	2.0 mm
2. Vacuum insulating material + edge strip	32.0 mm	2. Mineral wool + edge strip + edge band = vapour barrier	150.0 mm
3. Aluminium, plane	2.0 mm	3. Aluminium, Z- trimmed	2,0 mm
Total thickness	36.0 mm	Total thickness	154.0 mm

Examples for application



Selected COSMO® Façade elements



Other structures and designs on request

Aluminium façade elements

Product description

Aluminium façade elements consist of 1.0; 1.5; 2.0 or 3.0 mm aluminium coverings on both sides. Optionally, XPS, PUR rigid foam, vacuum insulating material, or mineral fibre insulating material can be used as internal core.

The noise insulating characteristics of these elements can be improved by special inlays; U-values and noise insulating characteristics depend on the constructional requirements.

Technical information

Coverings aluminium/aluminium (thickness in mm)	Core material (thickness in mm)	Plate thickness (mm)	U-value (W/m ² K)	Weight (kg/m ²)
1.5 / 1.5	XPS (21)	24	1.21	9.3
1.5 / 1.5	XPS (24)	27	1.09	9.4
1.5 / 1.5	XPS (27)	30	0.98	9.5

Special characteristics

- Light, rigid and impact-resistant
- Easy to clean and corrosion-resistant
- Highly colour- and weather-proof coating
- Various types of edge design, e.g. with edge strip, vapour-tight taped or sealed

Examples for application

- Façade / balustrade elements
- Window panes / door panels

Aluminium-glass façade elements

Product description

Aluminium-glass façade elements consist of 6.0, 8.0, or 10.0 mm single-pane safety glass with an aluminium covering and rigid foam core and are available in all RAL colours.

This sandwich element meets the highest quality expectations which are ensured by regular monitoring of the high-grade materials.

Technical information

Covering of glass / aluminium (thickness in mm)	Core material PUR (thickness in mm)	Plate thickness (mm)	U-value (W/m ² K)	Weight (kg/m ²)
6.0 / 1.5	16	24	1.42	20.0
8.0 / 2.0	20	30	1.20	22.3
6.0 / 1.5	23	30	1.07	20.2
8.0 / 2.0	30	40	0.85	26.7
6.0 / 2.0	32	40	0.80	17.4
10.0 / 2.0	28	40	0.90	31.5

Special characteristics

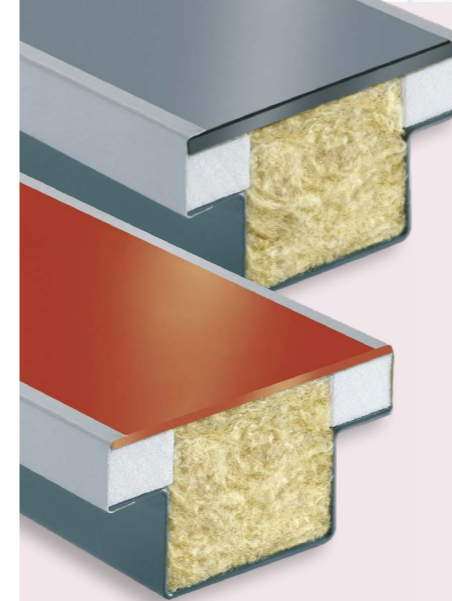
- Light, rigid and impact-resistant
- Easy to clean and corrosion-resistant
- Highly colour- and weather-proof coating
- Various types of edge design, e.g. with edge strip, vapour-tight taped etc.
- Fire resistance category of building materials B2 as per DIN 4102 - normally flammable

Examples for application

- Façade / balustrade elements
- Window panes / door panels

Other structures and designs on request

Balustrade elements (Z-trimmed)



Other dimensions and designs on request

Glass-aluminium / aluminium-aluminium balustrade elements (Z-trimmed)

Heat and noise insulating façade design

Product description

These Z-trimmed balustrade elements are very well suitable for balustrades mounted on curtain walls and window walls that put high requirements on heat and noise insulation. Because we use high-grade, quality-proofed materials and perform a strong quality control, you will receive definitely a premium product.

Technical information

Formats and structures depend on the constructional demands.

Example:

Insulating core:
Mineral fibre board

Thermal conductivity:
0.035 W/(mK)

Coverings:
Glass, aluminium, steel ...

Colours:
Anodized, RAL, NCS...

Fire resistance category:
A1

Edges:
Various designs, individual options as desired by the customer

Formats/thickness of panel:
Fixed formats, different designs, as desired by the customer

Special characteristics

- Light, rigid and impact-resistant
- Easy to clean and corrosion-resistant
- Highly colour- and weather-proof coating
- Various types of edge design, e.g. with edge strip, vapour-tight taped or sealed
- Various design possibilities using the most diverse materials

Examples for application

- Used in the area of balustrades of curtain walls and window walls



Covering of glass / aluminium (thickness in mm)	Core material mineral wool (thickness in mm)	Plate thickness (mm)	U-value* (W/m ² K)	Weight (kg/m ²)
6.0 / 2.0	40	48	0.76	21.8
6.0 / 2.0	60	68	0.53	22.5
6.0 / 2.0	80	88	0.41	23.2
6.0 / 2.0	100	108	0.33	23.8
6.0 / 2.0	120	128	0.28	24.5

Noise insulating characteristics on request

* Calculation of U-values not considering the edge area and without considering the frame design (calculated value)

An overview of our range of products

Experience quality on a whole new level, with the powerful products by Weiss:



COSMO® Adhesives

Durably firm joints

COSMO® CA (Cyanoacrylates)
COSMO® PU (Polyurethane adhesives)
COSMO® CL (Cleaning agents)
COSMO® SL (Dispersion adhesives)
COSMO® HD (Hybrid adhesives)
COSMO® EP (Epoxy-resin adhesives)
COSMO® DS (Dispersion adhesives)
COSMO® SP (Service products)

Fields of application

- + Windows and doors
- + Transportation / Marine engineering
- + Industry
- + Assembly
- + Dry construction
- + Airtight bonding
- + Wood / Furniture industry
- + Container construction
- + Composite panels
- + Fire protection
- + Advertising industry

Do you have any questions?

Our Service Center
Business area Adhesives:
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COSMO® Composite panels

Unlimited possibilities for design

COSMO® Therm (heat-insulating)
COSMO® Silent (sound insulating)
COSMO® Protect (penetration resistant)
COSMO® Design (grooved)
COSMO® Tech (individual)
COSMO® Frame (frame widening)

Fields of application

- + Window and façade
- + Door construction
- + Industry
- + Automotive manufacturing
- + Trailer construction
- + Partition panel construction
- + Gate construction
- + Container construction
- + Energy conservation
- + Fire protection
- + Burglar resistance
- + Sound proofing

Do you have any questions?

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Our Service Center
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PUDOL Cleaning and care agent

Cleanliness refreshes your senses

PUDOL SOFT
Mild cleaning agent for sensitive materials
PUDOL CARE
Maintenance product for high gloss and hygiene
PUDOL POWER
Powerful cleaning agent for extreme pollution
PUDOL FRESH
Cleaning agent for cleanliness and fresh air

Fields of application

- + Flooring
- + Sanitary installations
- + Clothing care
- + Foodstuff industry
- + Household and gastronomy
- + Windows and glass
- + Dishwasher
- + Carpet and upholstery
- + Industry and workshop
- + Cars
- + Skin cleaning
- + Skin protection

Do you have any questions?

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