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
- 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**

- Edge strip
- Vapour barrier
- Aluminium sheet canted
- Insulating material
- ESG-Glass

**Coverings**
- ESG-single pane safety glass
- Colour enamelled or mirrored
- Aluminium, anodized or powder coated as per RAL or NCS
- Steel sheet, galvanised or powder coated as per RAL or NCS
- Stainless steel sheets, dimpled steel sheets

**Designs**
- Plane
- Plane with Z-edging all around

**Core material**
- XPS polystyrene-rigid foam, extruded
- PUR polyurethane-rigid foam
- Mineral fibre-insulating material
- Vacuum-insulating material

**Technical information**

<table>
<thead>
<tr>
<th>VACUPA</th>
<th>Conventional design</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>Aluminium, plane</td>
<td>Aluminium, plane</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>Vacuum insulating material + edge strip</td>
<td>Mineral wool + edge strip + edge band</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
</tr>
<tr>
<td>Aluminium, plane</td>
<td>Aluminium, Z-trimmed</td>
</tr>
</tbody>
</table>

**Examples for application**

- Images of various facade designs

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**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

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**Heat-insulating façade element with vacuum insulating core**

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

- 0,22 W/(m²K)

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**Technical information**

- Total thickness 36.0 mm
- Total thickness 154.0 mm
Selected COSMO® Façade elements

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

<table>
<thead>
<tr>
<th>Covering of glass / aluminium (thickness in mm)</th>
<th>Core material (thickness in mm)</th>
<th>Plate thickness (mm)</th>
<th>U-value (W/m²K)</th>
<th>Weight (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0 / 1.5</td>
<td>XPS (21)</td>
<td>24</td>
<td>1.21</td>
<td>9.3</td>
</tr>
<tr>
<td>6.0 / 1.5</td>
<td>XPS (24)</td>
<td>27</td>
<td>1.09</td>
<td>9.4</td>
</tr>
<tr>
<td>6.0 / 1.5</td>
<td>XPS (27)</td>
<td>30</td>
<td>0.98</td>
<td>9.5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Covering of glass / aluminium (thickness in mm)</th>
<th>Core material PUR (thickness in mm)</th>
<th>Plate thickness (mm)</th>
<th>U-value (W/m²K)</th>
<th>Weight (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0 / 1.5</td>
<td>16</td>
<td>24</td>
<td>1.42</td>
<td>20.0</td>
</tr>
<tr>
<td>8.0 / 2.0</td>
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<td>30</td>
<td>1.20</td>
<td>22.3</td>
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<tr>
<td>6.0 / 1.5</td>
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<td>30</td>
<td>1.07</td>
<td>20.2</td>
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<td>40</td>
<td>0.85</td>
<td>26.7</td>
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<tr>
<td>6.0 / 2.0</td>
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<td>40</td>
<td>0.80</td>
<td>17.4</td>
</tr>
<tr>
<td>10.0 / 2.0</td>
<td>28</td>
<td>40</td>
<td>0.90</td>
<td>31.5</td>
</tr>
</tbody>
</table>

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

Other structures and designs on request

Balustrade elements (Z-trimmed)

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.

Examples for application
- Used in the area of balustrades of curtain walls and window walls

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

Other structures and designs on request

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

Noise insulating characteristics on request

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® Composite panels
Unlimited possibilities for design

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COSMO® SL (Dispersion adhesives)
COSMO® EP (Epoxy-resin adhesives)
COSMO® DS (Dispersion adhesives)
COSMO® SP (Service products)

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

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

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Do you have any questions?

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Unlimited possibilities for design

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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

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Cleanliness refreshes your senses

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