

POHL

POHL EUROPANEL® SYSTEM

RAINSCREEN METAL FACADE



POHL FACADE SYSTEMS

All POHL systems are back ventilated rainscreen facades. For good reason: ventilated curtain walls easily meet all the complex requirements of modern building projects.

Metals such as aluminum, stainless steel and brass provide the cladding material for all our systems, giving you a rainscreen system with maximum energy efficiency, great freedom of design and a long service life.

MAXIMUM PROTECTION FROM ENVIRONMENTAL INFLUENCES

POHL rainscreen systems are always built with the following components: support frame, substructure, insulation, back ventilation and cladding. A well-thought-out concept with many constructive advantages:

Effective protection of the underlying components from environmental influences



High resistance to mechanical stress and vandalism



Two-stage protection against heavy and driving rain



Simple replacement of damaged elements



Dry insulation layer and variable insulation thickness



Convenient assembly and tolerance compensation



Highest fire protection standard (EN 13501-1)



Optimal sound insulation (up to 14 dB higher sound reduction index)




Protection from overheating in summer and flexible shadowing options



Healthy interior climate





Property: One Stephen Street, London, UK

Architect: Orms Designers & Architects Ltd

Facade system: POHL Custom-made

Material: Stainless steel

POHL EUROPANEL AT A GLANCE

POHL Europanel has proven itself for more than 40 years in facade design worldwide. The system can be easily adapted to your needs, since a system facade usually offers precisely the right basis for an individual and unique solution.

Together with our broad surface portfolio we offer you maximum design possibilities with a cost-efficient facade system.

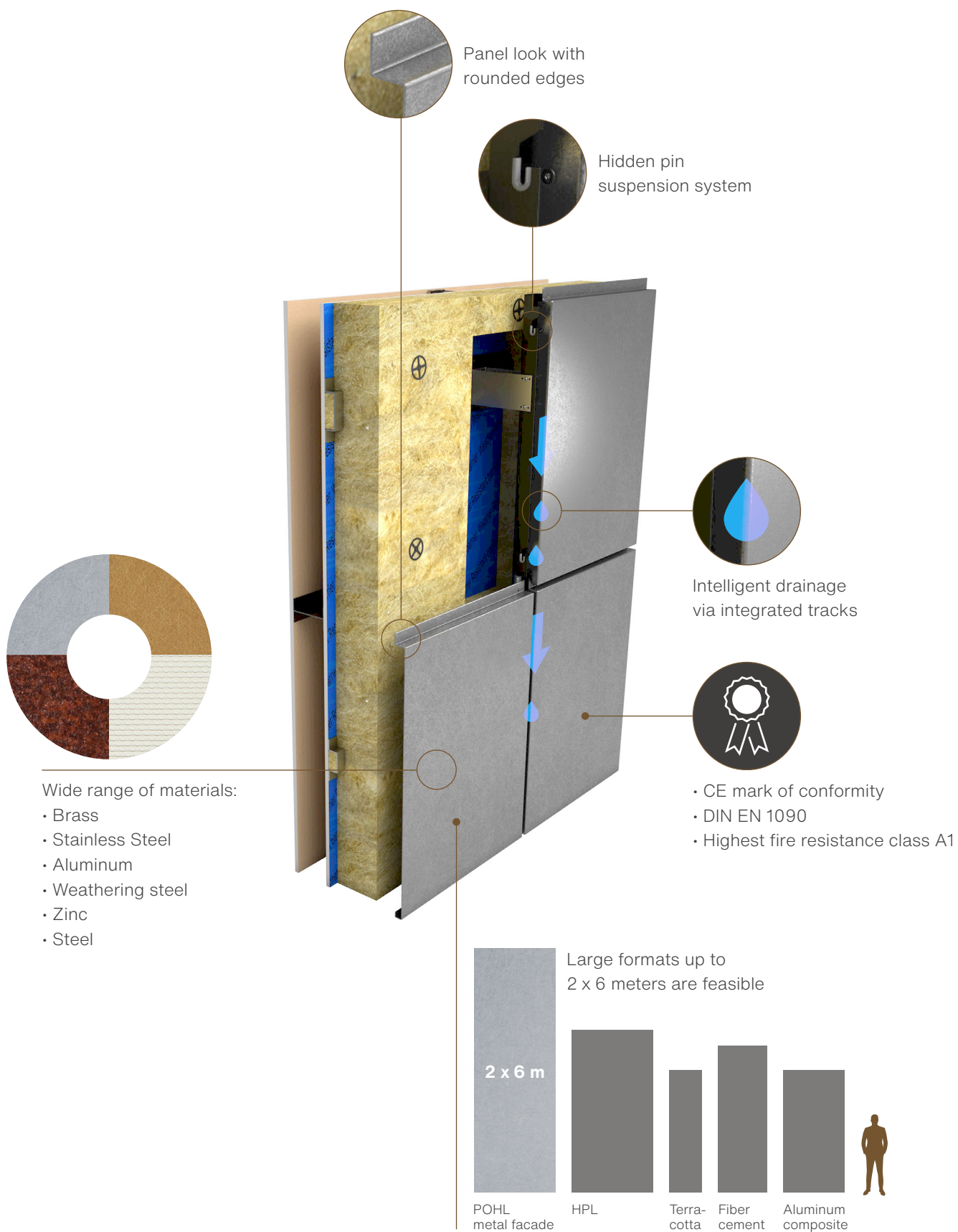
Property: Cologne Cathedral Baptistery, Cologne, Germany

Architect: Allmann Sattler Wappner Architekten

Facade system: POHL Europanel, POHL Europlate

Material: Brass

Surface: POHL Bronze



SAVE TIME AND COSTS IN ENGINEERING

Every architectural design is unique. Nonetheless planning time and costs can be significantly reduced through the professional development of lead details.

**UP TO
30%
TIME SAVED IN
PLANNING**

We provide you with all the details of the POHL rainscreen facade system in 2D and 3D and our technical planning department will support you in the detailed engineering of your specific project.

BIM READY

Your project is BIM-based?
We have the appropriate data available.

**UP TO
50%
COST SAVING
IN STATICS**

With the help of a certified engineering office for glass and facade construction, we have already determined the load-bearing capacity of our system components. The results of extensive component tests are available for transfer to any common structural analysis program.

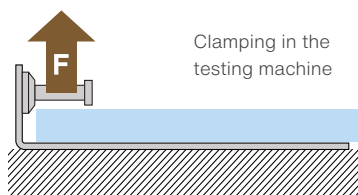
**EXTREMELY
LOW ERROR
RATE**

The high degree of detail in our technical drawings guarantees a smooth implementation for the entire project implementation.

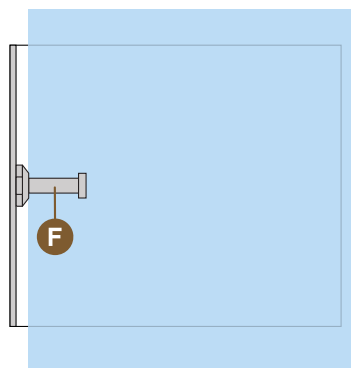
STATIC LOAD CAPACITY OF POHL EUROPANEL

Due to extensive component tests with different material thicknesses of aluminum, stainless steel and brass, we have reliable static data for the POHL Europanel. For example, the load capacity of the POHL Pin and the deflection of large sheets due to wind loads are important factors for planning, material and statics costs.

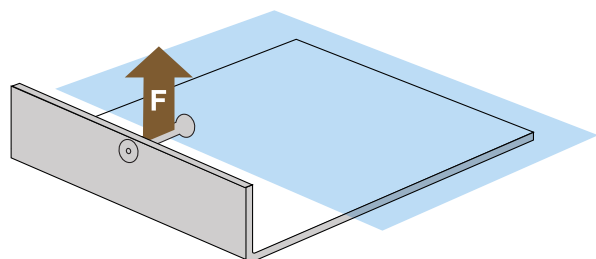
In the following figure the interaction between the POHL Pin, panel and substructure are examined in a tensile test (wind suction direction)



Clamping in the testing machine



Material: aluminum
Thickness: 3 mm
F: resulting force which causes a plastic deformation of 1 mm in the component
Designed value of the load-bearing capacity $F_{u,RD}$: 0,99 kN
value determined by test (5%-fractiles)

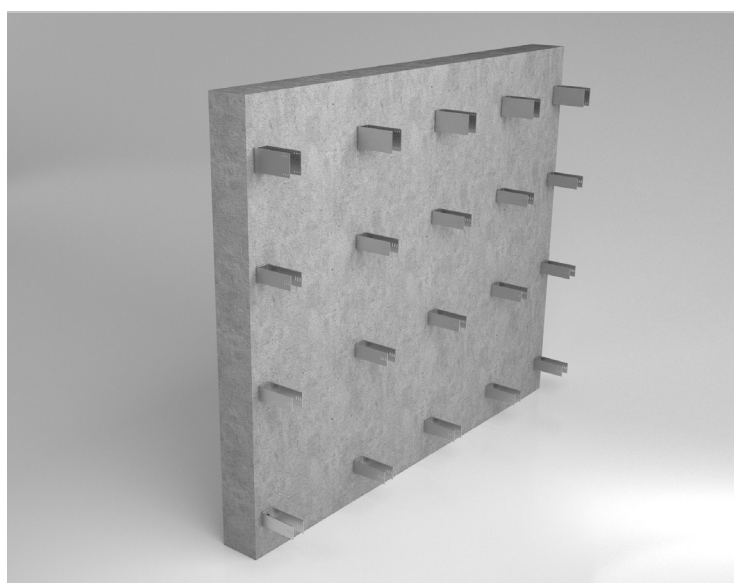


THE RESULTS OF THE COMPONENT TESTS ARE CLEAR

In the tests, our POHL Europanel achieves a load capacity up to 30 percent higher than mathematically assumed.

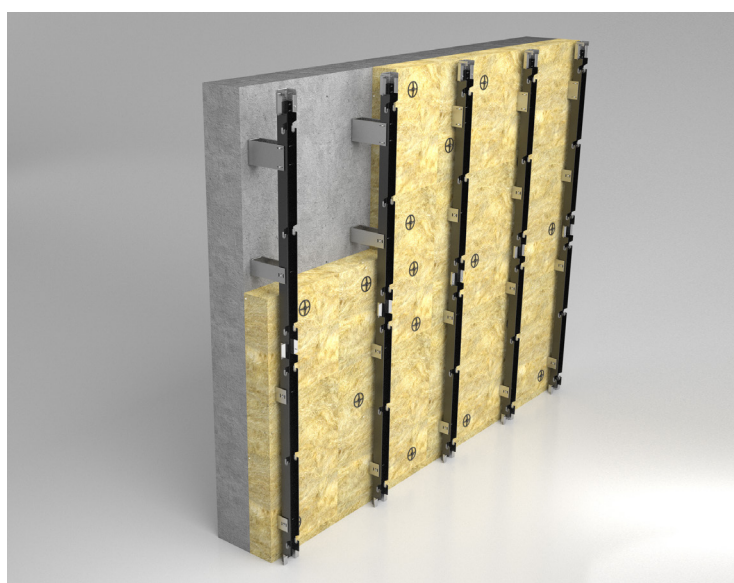
EASY INSTALLATION

POHL Europanel follows the modular principle. The suspension pins and the support rails are already prefabricated to size and facilitate installation. The degree of prefabrication is adjusted individually depending on the situation on site.



INSTALLATION OF THE WALL BRACKET

The multiple pre-punched wall brackets allow compensation for carcass tolerances of +/- 25 mm. By using stainless steel wall brackets ensures the highest energy requirements are fulfilled.



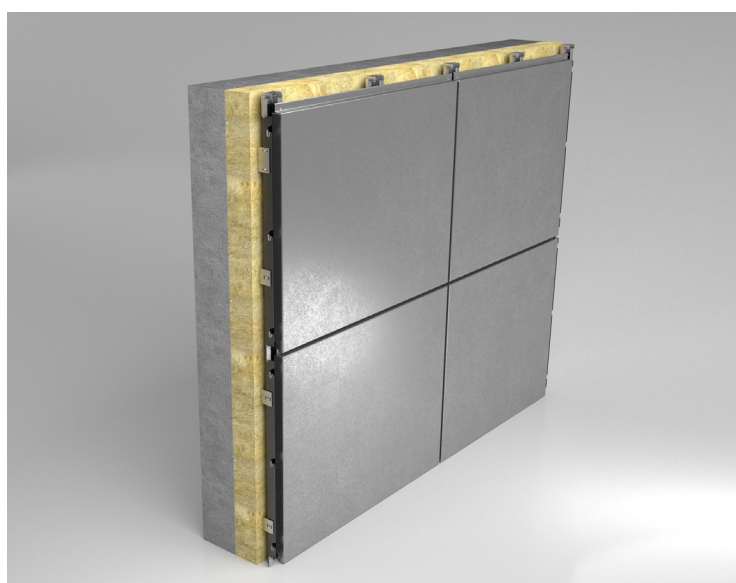
FASTENING THE INSULATION LAYER

The insulation material is cut at the points of the spacers and guided over them to the outer wall. In the next step, the mounting rails are fixed to the brackets.



MOUNT AND ALIGN THE PANELS

The POHL Pins not only facilitate assembly but also help to align the right position. After final positioning, the mechanical locking screw is set.

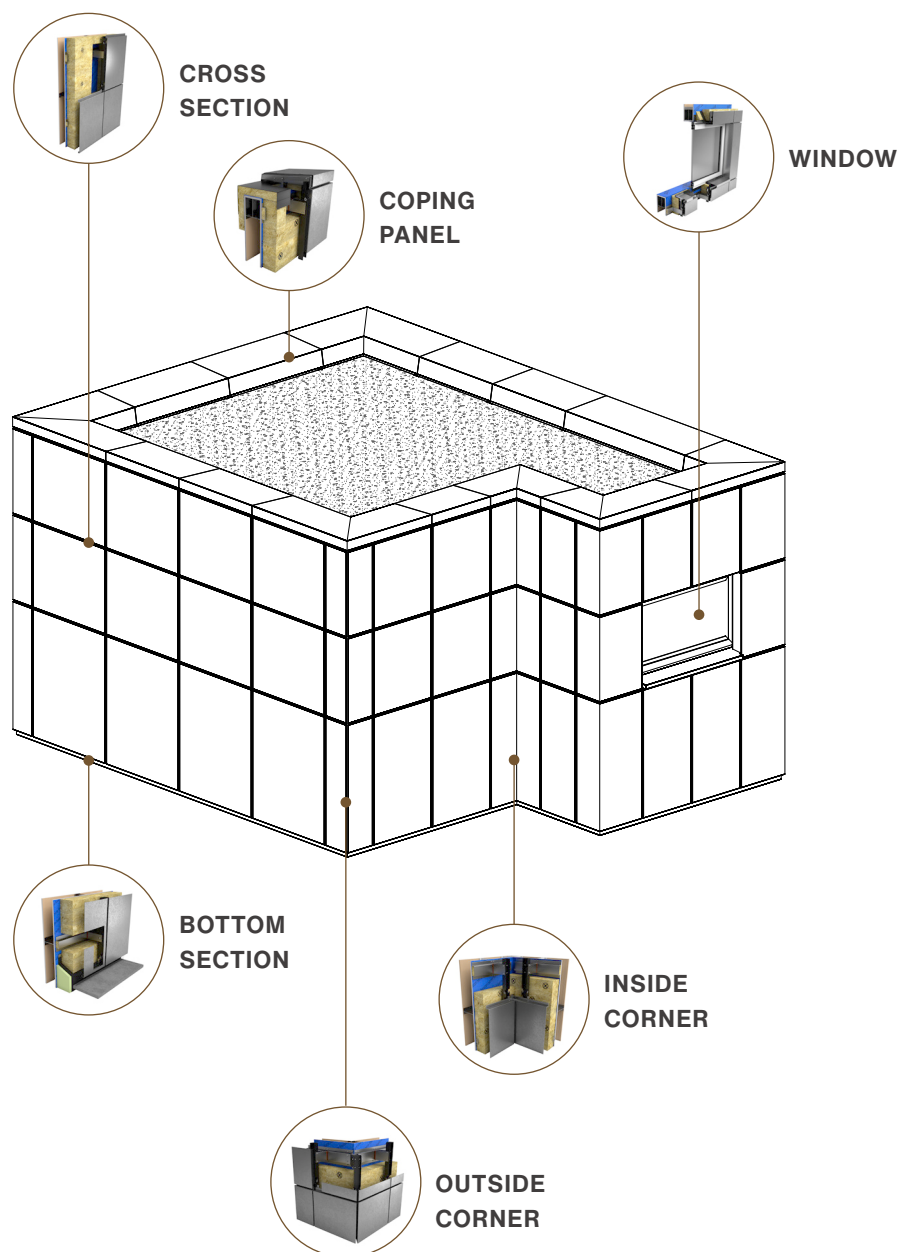


RESULT

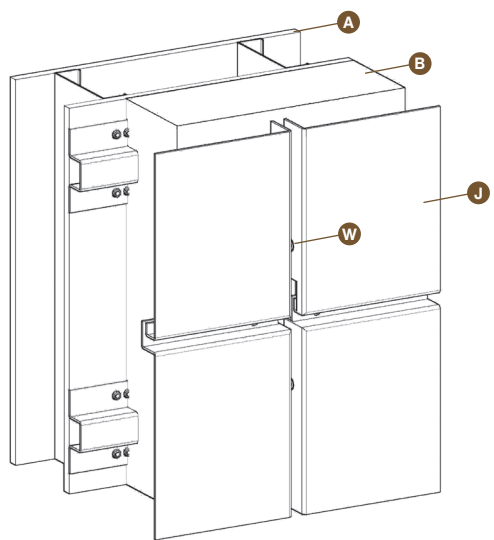
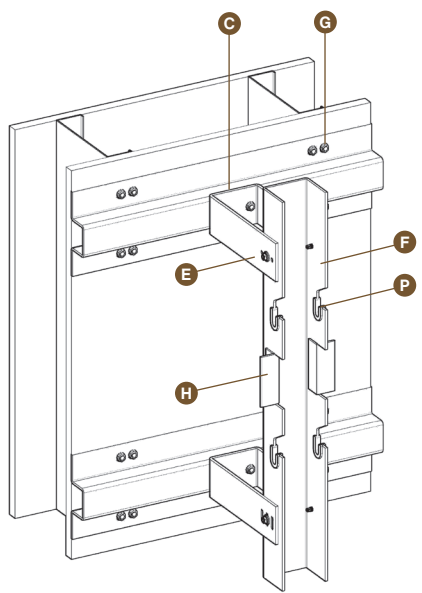
POHL Europanel is successfully installed and protects the building effectively and sustainably.

POHL EUROPANEL

Based on the standard details, POHL Europanel can be used for all cladding areas of a building. For example, also for canopies, columns and interior cladding.



CROSS SECTION

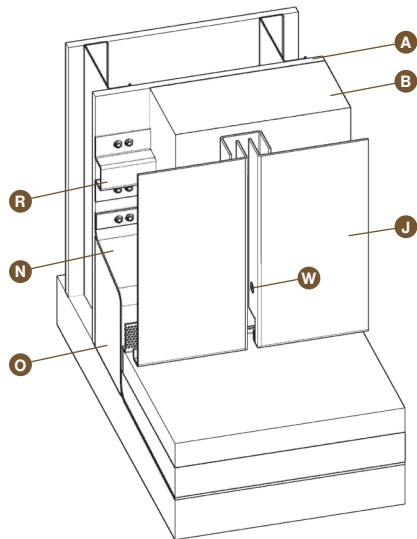
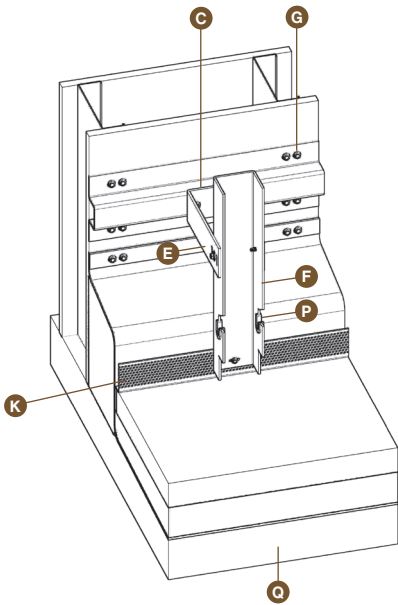
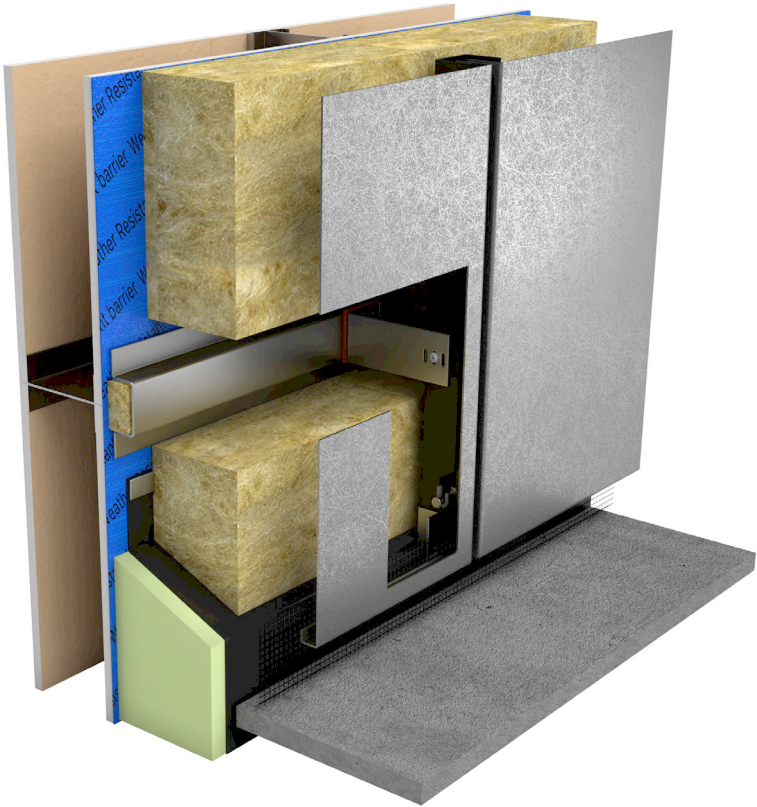


A	Concrete
B	Insulation
C	Thermal skin
E	POHL Bracket

F	POHL Track
G	Self-drilling screw
H	Splice plate
J	POHL Europanel

P	POHL Clip
W	Hook-in bolt

BOTTOM SECTION

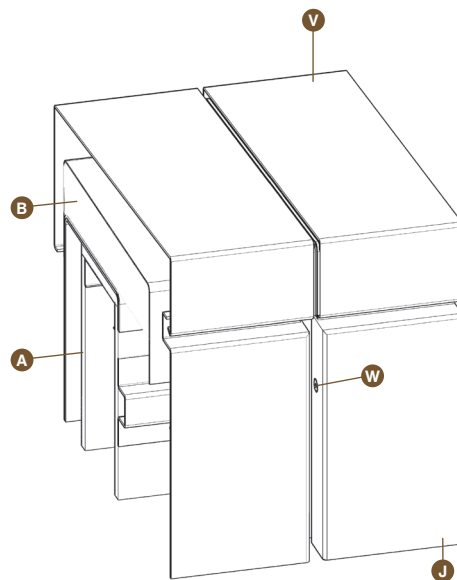
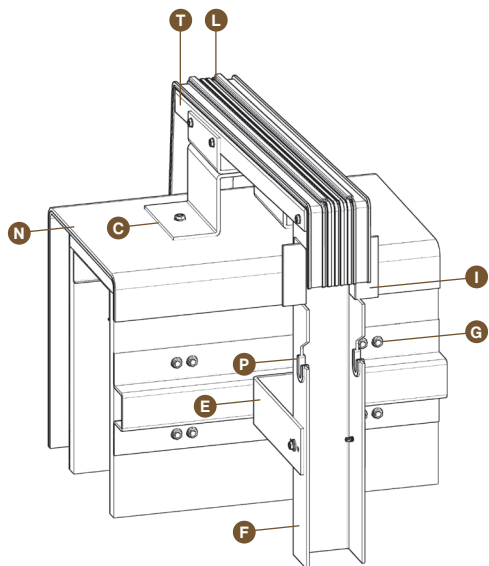
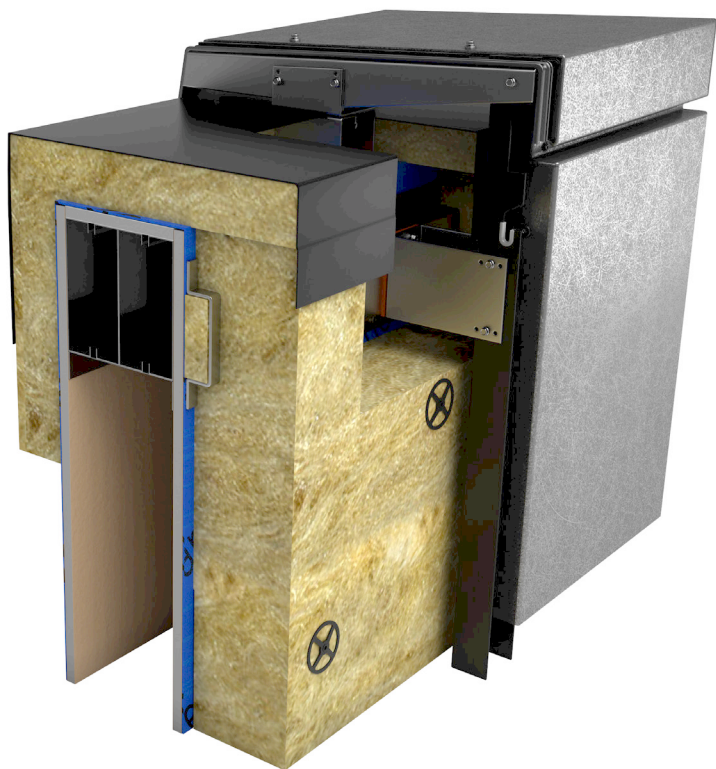


A	Concrete
B	Insulation
C	Thermal skin
E	POHL Bracket
F	POHL Track

G	Self-drilling screw
J	POHL Europanel
K	Vermin screen
N	Membrane
O	Perimeter insulation

P	POHL Clip
Q	Paver
R	Pressure cop
W	POHL Hook-in bolt

COPING PANEL

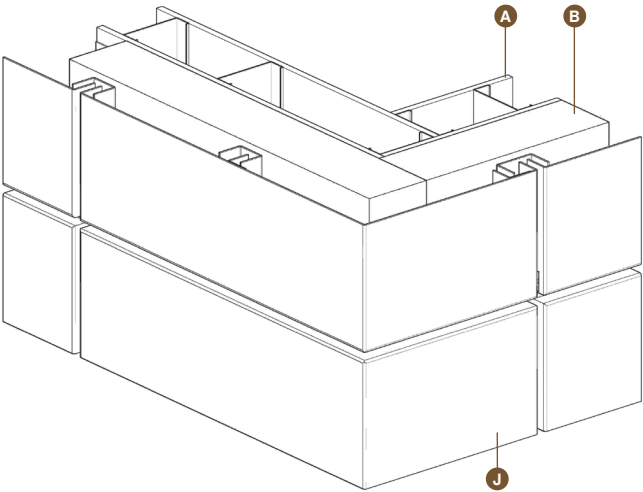
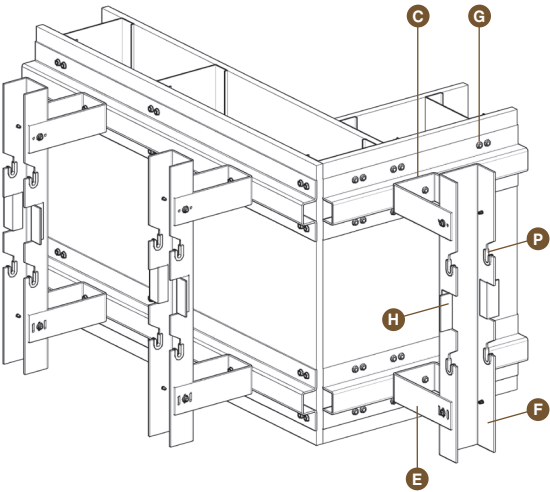
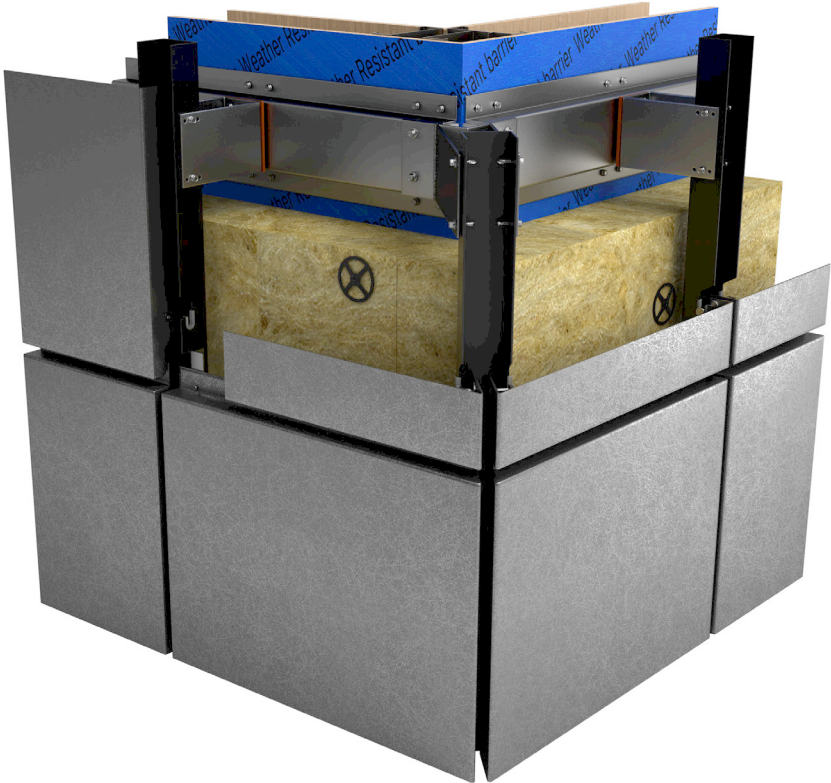


A	Concrete
B	Insulation
C	Thermal skin
E	POHL Bracket
F	POHL Track

G	Self-drilling screw
I	F-channel
J	POHL Europanel
L	Splice with gaskets
N	Membrane

P	POHL Clip
T	Coping Track
V	Coping panel
W	POHL Hook-in bolt

OUTSIDE CORNER

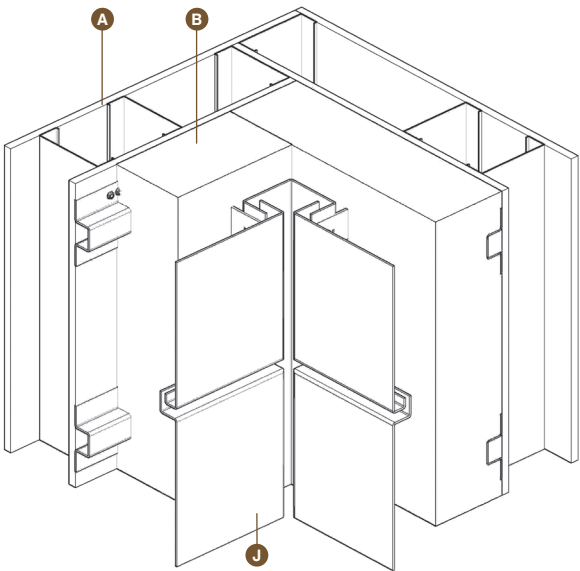
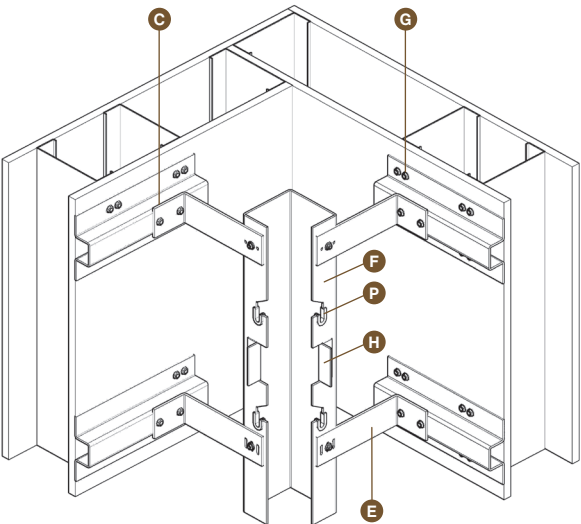
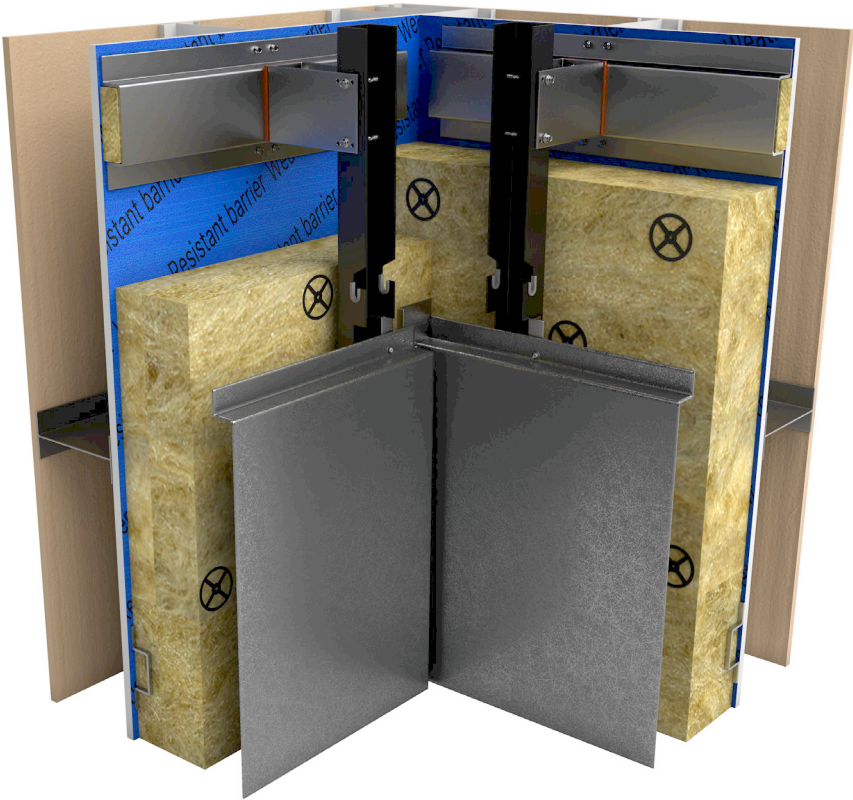


A	Concrete
B	Insulation
C	Thermal skin

E	POHL Bracket
F	POHL Track
G	Self-drilling screw

H	Splice plate
J	POHL Europanel
P	POHL Clip

INSIDE CORNER

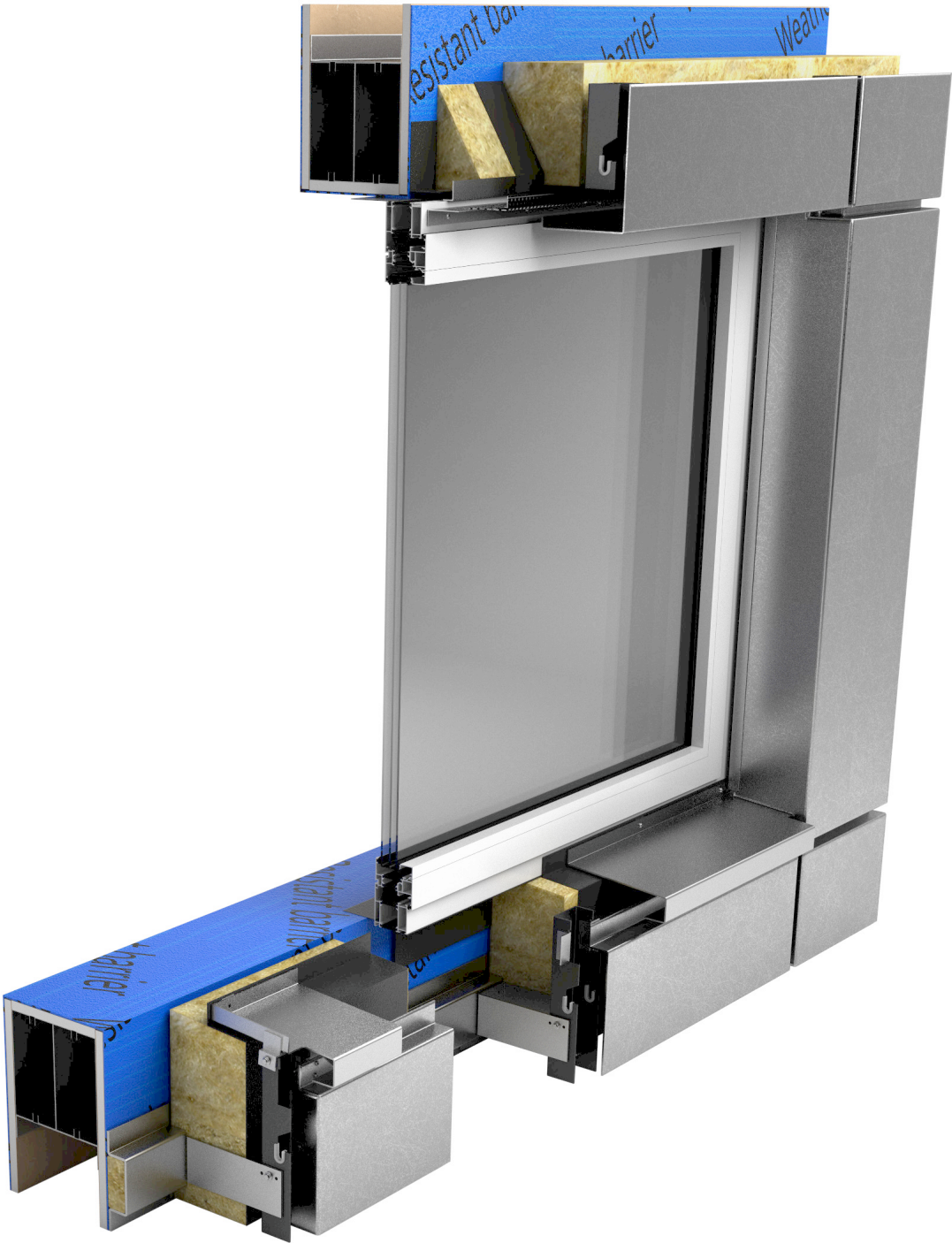


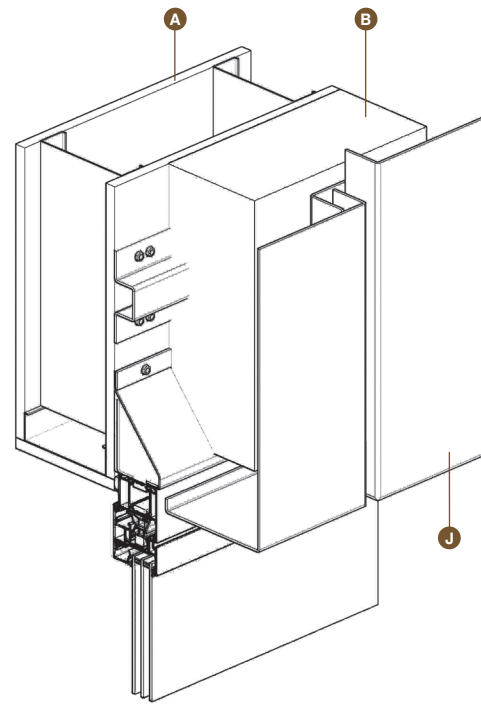
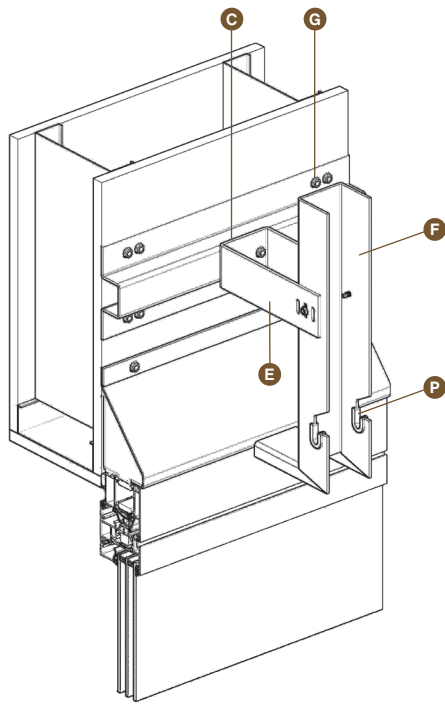
A	Concrete
B	Insulation
C	Thermal skin

E	POHL Bracket
F	POHL Track
G	Self-drilling screw

H	Splice plate
J	POHL Europanel
P	POHL Clip

WINDOW





A Concrete

B Insulation

C Thermal skin

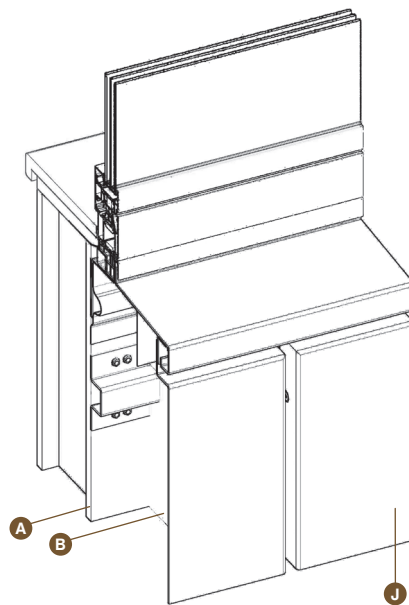
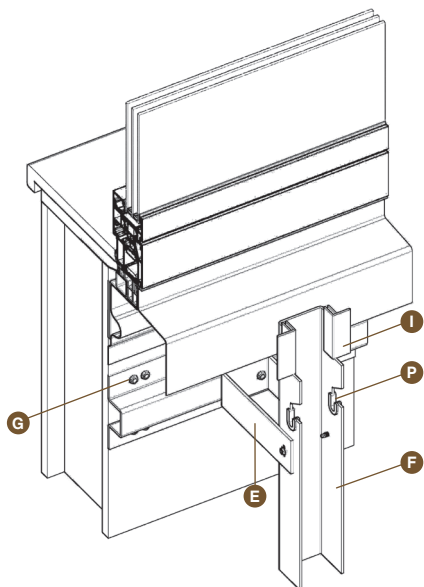
E POHL Bracket

F POHL Track

G Self-drilling screw

J POHL Europanel

P POHL Clip



A Concrete

B Insulation

E POHL Bracket

F POHL Track

G Self-drilling screw

I F-channel

J POHL Europanel

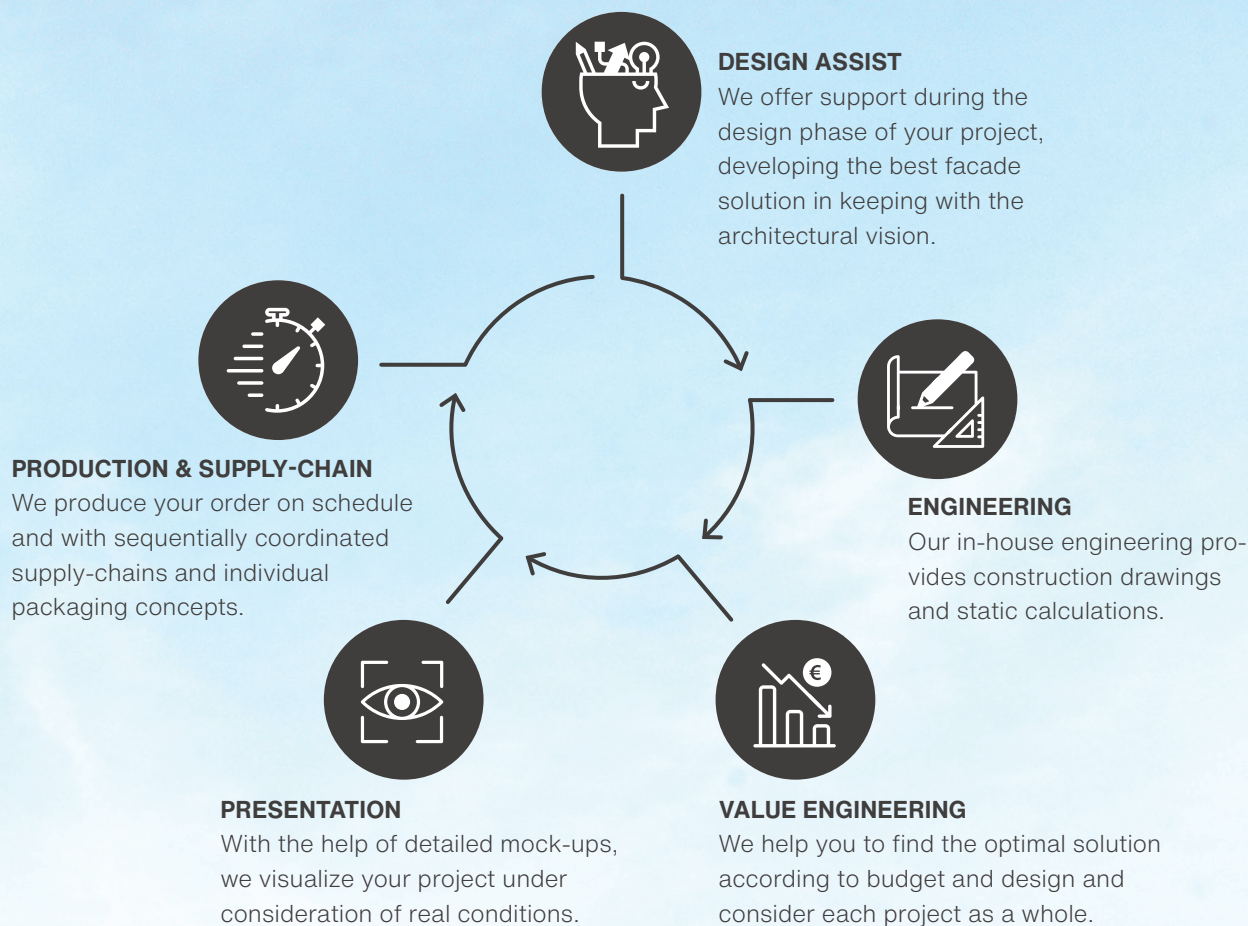
P POHL Clip

POHL 360° SERVICE FOR YOUR PROJECT SUCCESS

Architecture, facade construction and sustainability - a complex building project must be coherent from all perspectives. We offer you the technical expertise right from the start to bring all sides together. POHL's interdisciplinary team of sales, project management, technology and production is at your disposal.

Are you working towards a LEED or Bream certification?
We will support you: certification@pohl.net

La
TOUR de
M. EIFFEL

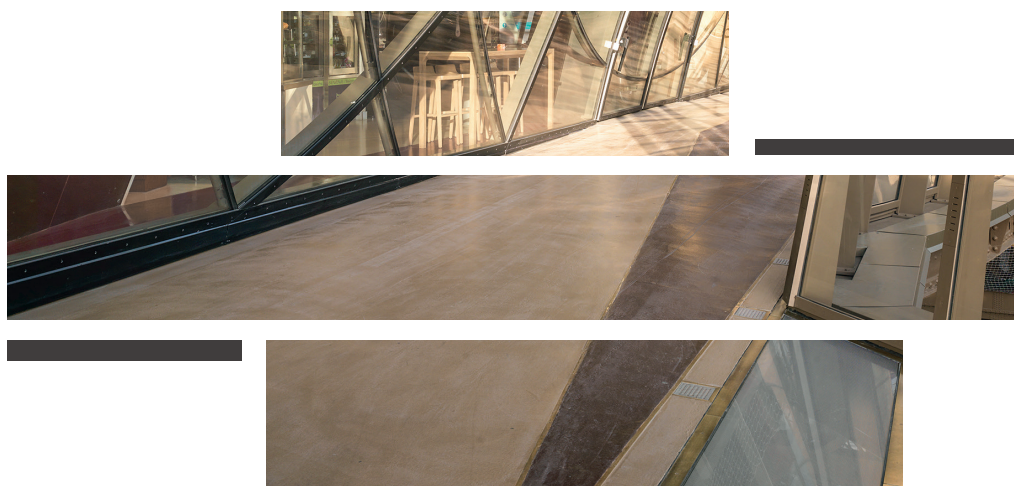


Property: Eiffel Tower, Paris, France
Architect: Agence Moatti-Rivière
Facade system: POHL Europanel
Material: Aluminum



100 PERCENT ENVIRONMENTAL RESPONSIBILITY

Responsible use of resources is one of our core corporate values. Through an optimized supply chain, we are able to reduce the CO² footprint of our products to a minimum. Starting with the purchase of emission-free base material, through resource-saving production to well thought-out packaging concepts and a 100% recycling rate.



POHL Group of Companies

POHL FACADE DIVISION

POHL Metal Systems GmbH
Robert-Bosch-Str. 6
50769 Cologne
Germany

Tel.: +49 221 70911-0

info@pohl-facades.com
www.pohl-facades.com

GET IN TOUCH

