

GIP Tailor-made Facade Systems

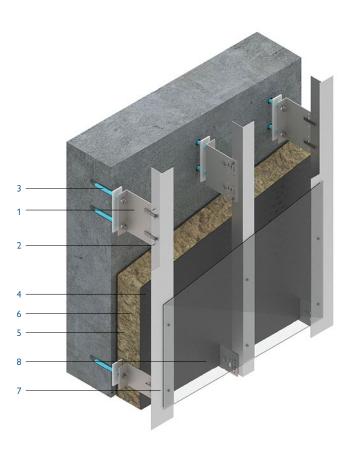
We offer customised turnkey solutions for your next facade project.

Ventilated curtain walls (VCW) have been an integral part of building construction in Germany and Europe for decades. During this time, they have proven themselves to be an almost damage-free and low-maintenance construction system. In addition, ventilated curtain facades allow a wide range of architectural design options.

GIP Fassade is a manufacturer of metal substructures for VCW and a contact for all technical questions in connection with the design, planning and realisation of VCW.

Typical structure of the facade system.

- 1_ Wall brackets
- 2_ Connection screws
- 3_ Facade anchors
- 4_ Vertical profiles
- 5_ Thermal insulation
- 6_ Ventilation gap
- 7_ Fastening elements for the cladding (rivets, ceramic clips, undercut anchor or similar)
- 8_ Cladding panels (ceramic, metal, fibre cement, composite)





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Substructure

The substructure transfers the dead loads of the facade cladding and the acting wind loads to the load-bearing exterior wall. As a rule, metal substructures are used to compensate for structural tolerances.

In most cases, the system consists of a two-part construction that is fixed to the outer wall of the building with anchoring means. This basic construction is aligned plumb and true to line and serves as a fastening level for the installation of different facade cladding materials.

The substructure system must be designed in such a way that changes in length of the materials used as a result of temperature changes can take place without stress. For example, when using aluminium profiles with a length of three metres (e.g. storey height), a change in length of about five millimetres must be taken into account (temperature range -20 to 80 degrees Celsius).

So-called fixed/sliding point constructions are used for this.

The wall bracket used has the following effect

- > as a fixed point when screwing the profiles into the round hole.

 The profile is fixed, so the dead weights and wind loads are transferred.
- > as a sliding point when screwing the profiles into the slotted hole.

 The profile slides in the slotted holes, so only the wind loads are transmitted.



