



Press release
04 April 2024 | Renningen, Germany

After slanted and flat comes vertical:

K2 WallPV - the new system solution for building façades

After slanted and flat comes vertical: the new mounting systems from K2 Systems add another dimension to the areas that can be used to generate energy. This is because they allow systematic and therefore fast PV installation on façades. The system is suitable for trapezoidal sheet metal and sandwich panels as well as for masonry and concrete walls. The modules can be clamped or hooked onto the frame. This means that planners and installers benefit from a high degree of flexibility with just a few components. At the same time, the new system ensures good rear ventilation and is also visually appealing.

Photovoltaic façades offer great potential for generating solar power. Especially as experts largely agree that it will not be enough to install solar systems on just roofs in Germany to achieve the goal of climate neutrality on existing buildings. Despite this, less than 10 percent of the roof potential and less than 1 per thousand percent of the façade potential has been exploited to date. The theoretical area potential for photovoltaics on façades is twice as large as that on roofs. This was the conclusion of a study by the Leibniz Institute of Ecological Urban and Regional Development (IOER) and Fraunhofer ISE. According to the study, the installation of photovoltaics on façades is particularly worthwhile for large buildings such as factories, educational institutions or public buildings. However, large residential complexes such as towers or block constructions also offer great potential.

Practical modular system

The development team has designed a clever modular system for K2 WallPV with just a few new elements. Proven components that are already familiar to many suppliers and users can be combined with newly developed products. Depending on the facade type, the following solutions are available:

- K2 WallPV FacadeRail for façades made of solid masonry or concrete. This variant also works for curtain wall façades with a thermal insulation composite system (ETICS) underneath.
- The K2 WallPV CarrierRail has a general building authority approval (abZ) for façades with Fischer Profil sandwich panels that already have integrated thermal insulation. It can also be used on MONTANATHERM sandwich panels. K2 Systems is already working with other sandwich panel manufacturers for approvals and building authority authorisations, so that further combinations will soon be possible.
- For buildings whose façades are constructed with trapezoidal sheet metal or corrugated sheet metal, the tried and tested K2 WallPV MultiRail can be used for installations. It has the connection unit and mounting rail in one component.



Connecting Strength

These allow modules with standard frames to be inserted or clamped: Module frames with 30 or 40 mm can be used with the insertion rail; when using the K2 MultiRail, module clamps can be used as an alternative. In Germany, it is important to ensure that the modules used for curtain wall façades have a general building approval (abZ) for overhead glazing from the German Institute for Building Technology (DIBt).

Yield in winter makes vertical PV systems attractive

These scalable modular components can be used to realise large-scale façade systems. What makes these vertical PV systems attractive is that the yield can be higher in winter than with PV systems on the roof due to the lower position of the sun, as the radiation then falls on the modules at a more favourable angle. According to the Fraunhofer Institute, the monthly fluctuation between summer and winter yields is also significantly lower with a vertical system, which facilitates the systemic integration of PV electricity. These systems also have lower operating temperatures and snow, and leaves and rainwater have no negative impact on performance because they do not remain on the modules.

Planning service from K2 Systems

The façade systems are first designed internally at K2 Systems. Planners and installers can send their enquiries to the company (by email to info@k2-systems.com), which offers a preliminary design for the preparation of the quotation for the customer. Necessary information includes location information, building data (façade dimensions), the façade cladding, and the anchoring base. Ideally, the checklist should be completed for this, which is available online on the company website for the respective products: <https://k2-systems.com/en/product-solutions-category/wallpv-facade-mounting-systems/> The condition is that these are systems with more than 30 kWp. In the future, there will be a digital planning tool for façade solutions, in which planners can design their projects independently - as is the case for roofs with K2 Base.

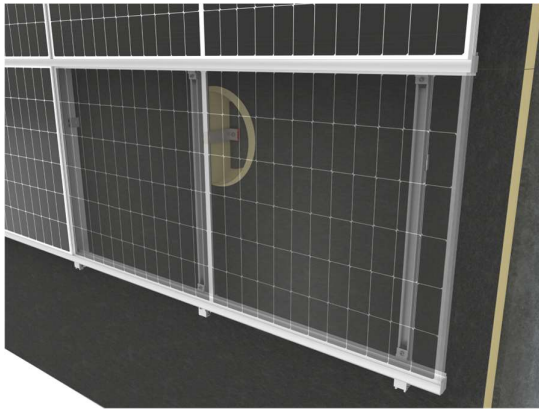
More information: <https://k2-systems.com/en/product-solutions-category/wallpv-facade-mounting-systems/>



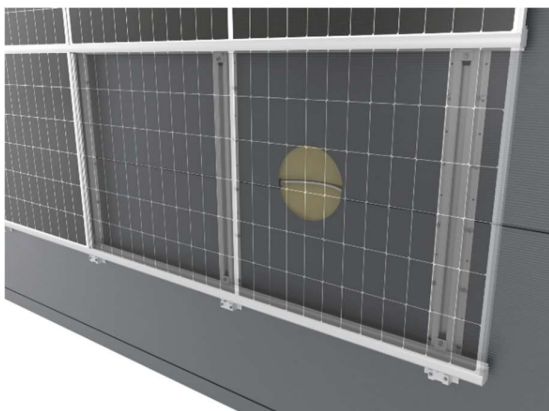
Connecting Strength



K2 WallPV is a clever modular system that combines existing tried and tested components with newly developed products. This provides simple solutions for a wide range of façade types.



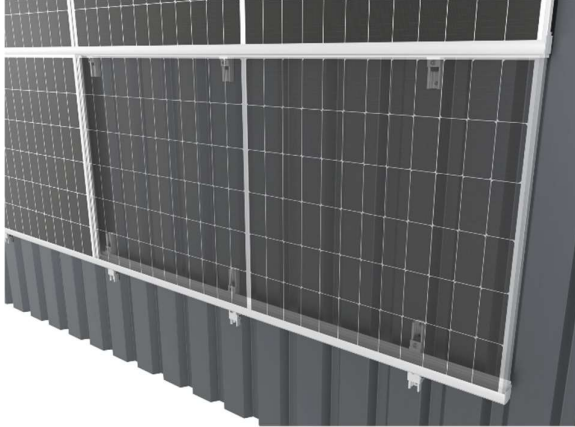
The K2 WallPV FacadeRail is the right choice when installing on masonry or concrete.



Die K2 WallPV Carrier Rail is a building authority approved support system for sandwich panels from Fischer Profil. It can also be mounted on MONTANATHERM panels.



Connecting Strength



The K2 WallPV MultiRail can be mounted on trapezoidal and corrugated sheet metal - here in the example with the insertion rail.



For smaller systems, the material-saving and favourable combination of K2 MultiRail and façade clamps is recommended.

About K2 Systems: We connect strengths: innovative mounting systems, digital technology and people with the know-how and energy to drive sustainable solutions.

Since 2004, K2 Systems has stood for global power generation from solar energy. The heart is the development of easy-to-install mounting systems that are precisely tailored to the needs of our customers. The soul is the common spirit of all employees. Together, we define technical innovation and set new service standards digitally as well.

At our headquarters in Renningen and our twelve international locations, we develop and sell mounting systems together with 400 employees for the photovoltaic systems of this world.

Press contact: Nina Oral | +49 (0) 7159 42 059 - 490 | n.oral@k2-systems.com

You can download corresponding image material here: : <https://k2-systems.com/en/company/press-media/>