

Kalzip® Deck roof systems

Statically exactly adjustable and highly flexible



Kalzip Deck roof system

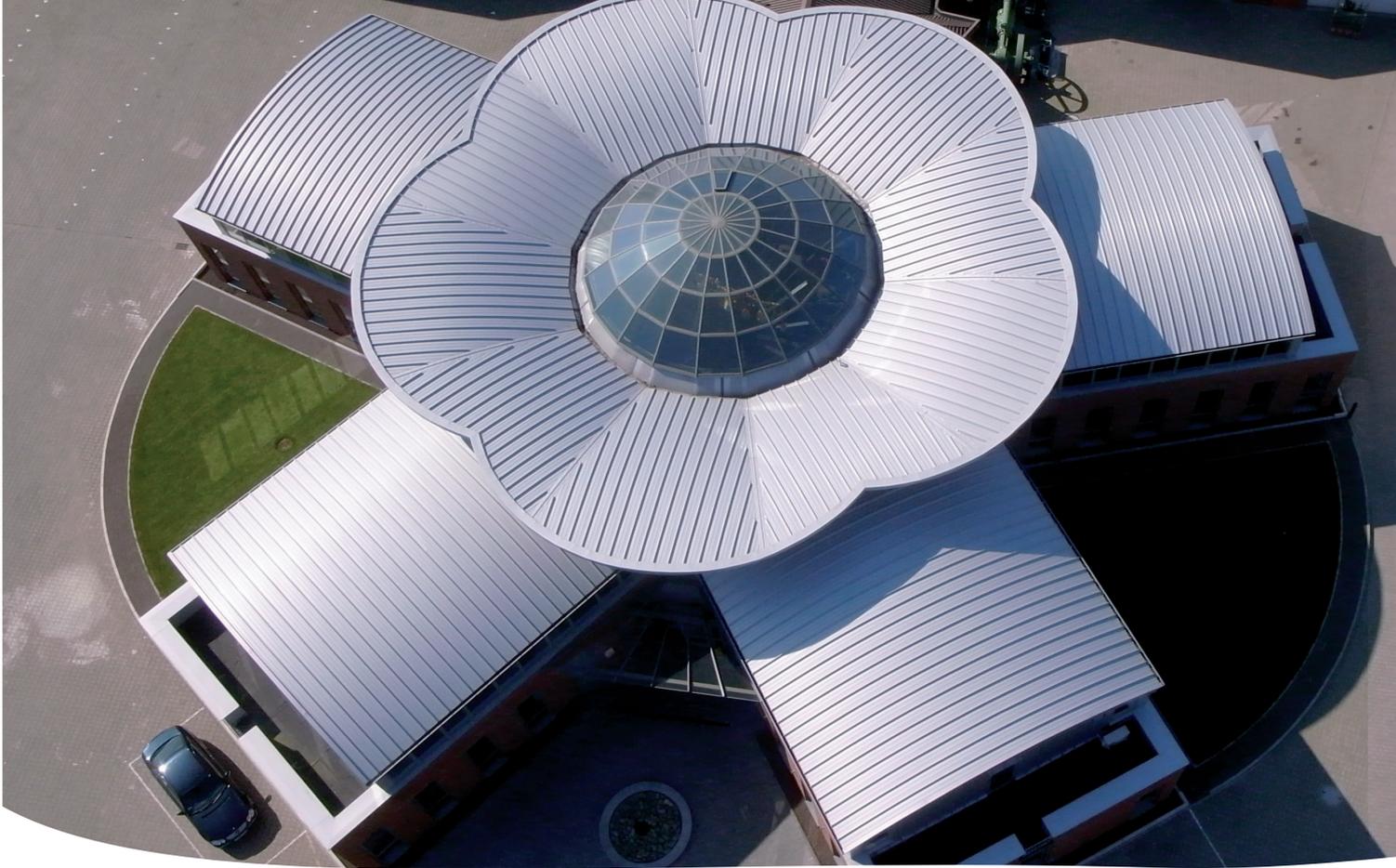
Statically exactly adjustable and highly flexible

Kalzip is a flexible, weather-resistant, easy-to-install, lightweight construction system which can be used to bridge even large spans without difficulty. Through extensive system components and accessories, Kalzip becomes a complete solution for building envelopes, easily combined with other building materials. This always results in again unique buildings, which are visually and technically convincing.

Advantages

- Applicable for all substructures
- Fast, largely weather-stand-alone installation
- Individual design variations from Geometries through XT free-form profiles for unusual building shapes
- Penetration-free roof cladding, therefore no weak points due to fasteners
- Complies with the requirements of the industrial building guideline and DIN 18234-1 for industrial roofs and the DIN EN 13984
- Durable and sustainable through the use of aluminium recycling alloy
- No lightning protection is necessary in the area, as the aluminium standing seam roof serves as a natural catchment device. Superstructures of any kind must be tested separately.





The application determines the design

The unique flexibility of the standard roof structure with a variety of profile construction widths makes it possible to combine the demand for form and function with technical perfection. The spectrum of convex, concave or elliptical and hyperbolically rounded shapes opens up interesting variations for creative architecture.

The Kalzip XT free-form profiles enable the implementation of computer-generated shape languages and construction principles made possible. Evolutionary animations, visualized in 3-D objects, bring forth new organic architectural forms - the fusion of biology and architecture.

The standard roof structure is predominantly designed as a warm roof structure and it is, like all other Kalzip roof structures, generally suitable for all roof pitches from 1.5 ° and for all substructures and supporting structures. The constructive design depends on the respective application. It takes into account loads caused by snow, wind, temperature and humidity.

Thermal insulation requirements can be met flexibly. The roof structure can be adapted exactly to the requirements of the building by selecting the thickness of the insulation material. In addition, sophisticated detailed solutions for interior and exterior drainage are available.

The advanced lightweight construction system

High safety over the entire service life

- The profiled panels are connected to the substructure by means of special clips that snap into the seams and are covered by the next element. The roof cladding will not be penetrated
- Pressure and suction loads become safe added
- The possibly existing residual moisture of the insulation layer can escape through the seams
- Sophisticated and detailed solutions for roof penetrations, connections and terminations for roof edges
- Non-flammable, resistant to flying sparks and radiant heat ("hard roofing")
- Kalzip assumes the function of a Collecting device according to DIN VDE V 0185-3 for lightning protection

Unlimited application possibilities

- Suitable for warm and cold roof constructions in all shapes, substructures, supporting structures and roof pitches from 1.5 °
- High stability and low self-weight - very well suited for large spans and the refurbishment of old roofs
- Lengths without joints over 100 m and more metres, when production takes place on-site.
- Adapts flexibly to any floor plan, building geometry and size

Vorzügliche bauphysikalische Werte

- High thermal insulation requirements are easily met. The roof structure can be adapted exactly to the requirements of the building by selecting the thickness of the insulation
- High quality sound insulation is made possible by constructive measurements
- Kalzip profiled sheets are optionally available with an anti-condensation coating (Kalzip Aquasine®) available

Durability and economic efficiency

- Corrosion-resistant, weatherproof Aluminium alloy as base material
- Insensitive to UV rays, resistant to microorganisms and to aging
- Particularly quick installation, mostly independent of weather conditions
- Economical due to pre-manufactured system components

All these advantages can be applied to all Kalzip systems and features.

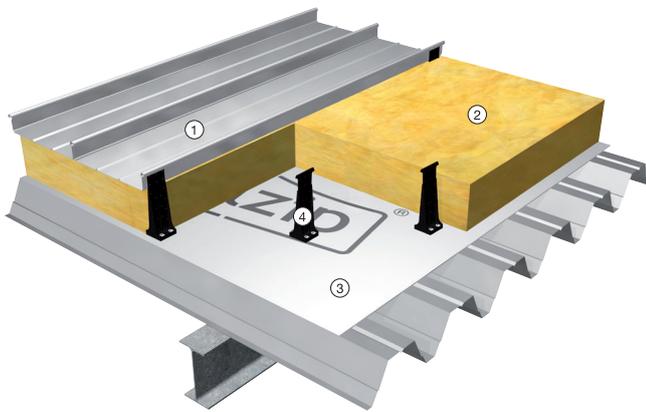


Martin Community Frankfurt-Schwanheim (DE)
Profile type: 50/429, HPC 7016 3%
Architect: Reuter + Werr Architekten BDA

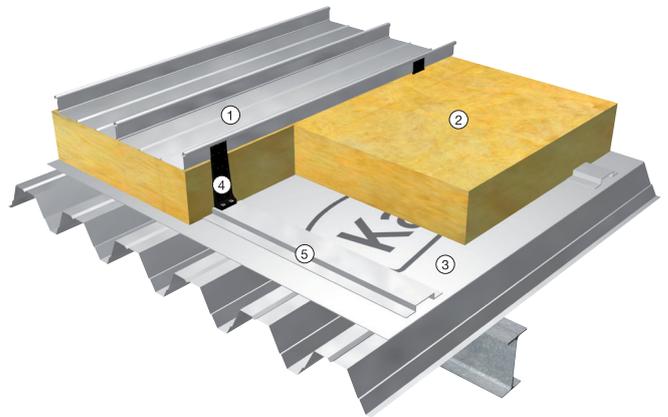
Eurowheel, Vorchdorf (AT)
 Profile type: 65/333, bronze
 Architect: Kienesberger Schröckenfuchs Archtecture



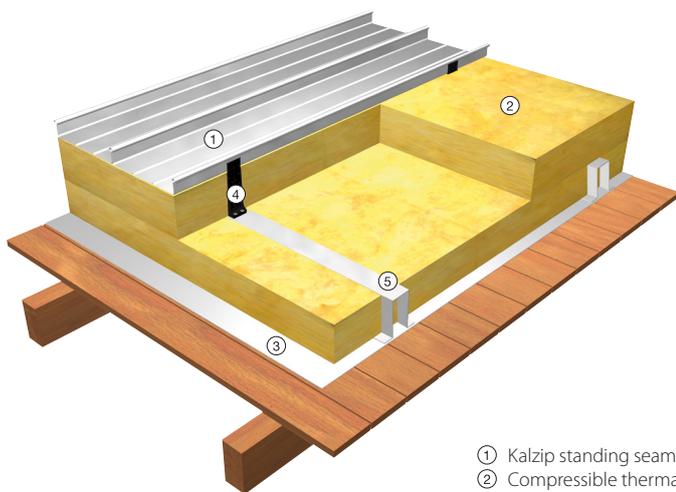
Non-ventilated Kalzip roof on a trapezoidal steel deck



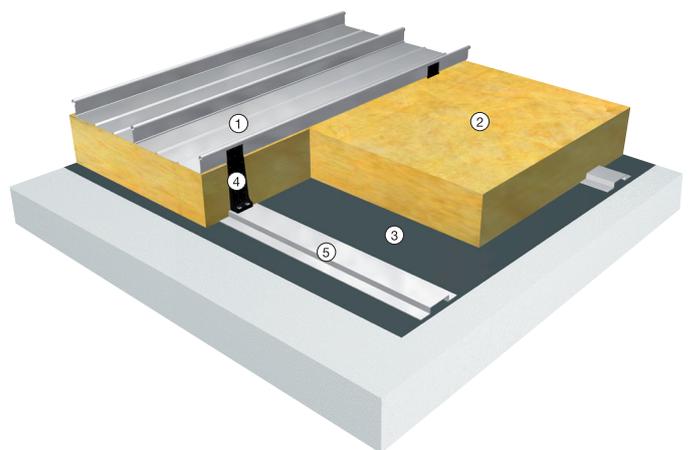
Non-ventilated Kalzip roof on purlins with trapezoidal inner sheet



Non-ventilated Kalzip roof on timber rafters with visible timber lining



Non-ventilated Kalzip roof on concrete with purlins



- ① Kalzip standing seam sheet
- ② Compressible thermal insulation felt
- ③ Kalzip vapour control layer
- ④ Kalzip composite clip
- ⑤ Hat profile

www.kalzip.com

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