



ALTEC *SD_ON-ROOF*

Pitched roof systems – on-roof mounting
Parts and system solutions

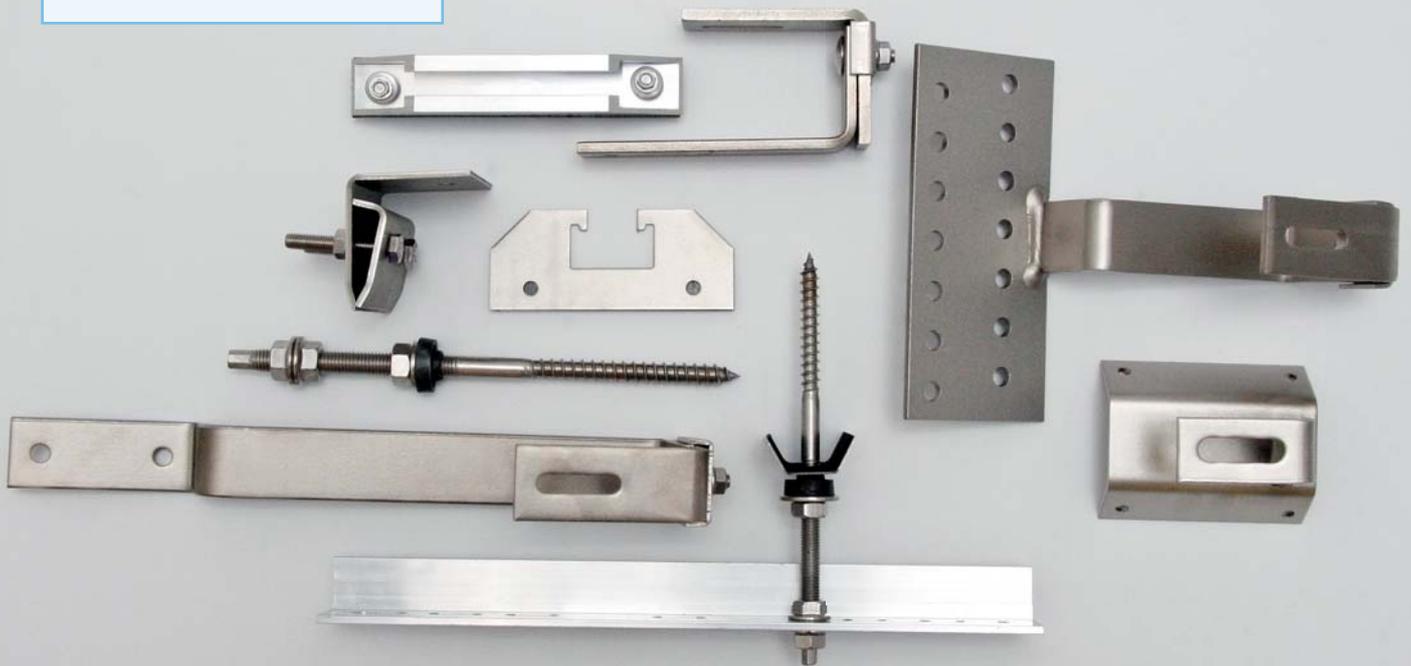
Roof mounting parts for every type of roofing

Roof mounting parts of ALTEC Systemtechnik AG

- Shingle, slate, plain tile and pantile roof hooks
- Clamps
- Adapter plates
- Hanger bolts
- Threaded rods
- Solar fasteners
- Trapezoidal shoes

Pitched roofs come in all shapes and sizes and our **mounting system ALTEC SD_ON-ROOF** has the matching equipment. This enables adjustment to individual roofs. The modular design of our assembly system allows combination with all single components offered. Therefore our system offers a high degree of flexibility in planning and usage.

To guarantee optimum use of space and to maximise efficiency, we offer detailed planning and roof layout. This includes a detailed analysis, prognosis of return and static calculation of the whole system according to Eurocode DIN EN 1991-1 part 1, part 3, part 5 and part 9.



Profiles and connectors



Profiles and connectors

- Rails: as needed or cut to desired length up to 6 m in length, also anodised black and/or perforated available
- Rail end caps
- Rail connectors for all rails
- Expansion connector: to compensate for changes in length caused by temperature variations
- Cross-connector for connection of profile rails with cross bracing rails and fasteners

In order to satisfy a diverse set of requirements, there are a variety of rails in our range. An optional accessory is rails end caps which complete the appearance and also serve to reduce wind noise. The **ALTEC** Systemtechnik AG product range also has a number of cross connector-variants, of longitudinal extension connector and rail connectors.



Module mounting parts



Module mounting parts for framed and unframed modules

- Clamping plates
- Clamping angles
- End-clamps
- Mid-clamps
- Slip protections
- Anti-slide protections
- Position locks
- Accessories

Module clamping angles and/or end clamps made from aluminium or stainless steel are fitted at the end of each module row. Sizes vary to fit the thickness of the module frame. We can also offer powder-coated or anodised clamps in your preferred system colour. The end/mid-clamp with shear off long nut also serves as effective theft prevention because the upper part of the nut is removed after the final tightening and the screw cannot be removed with conventional methods.

Module clamping plates and/or mid clamps are fitted between two adjacent modules. The threaded plate, optional in size M6 or M8, is similar in shape to the head of a hammer-head bolt and is fixed to the screw. To guarantee the optimum hold of the threaded plate, it must be screwed at 90° to the profile. The distance between the modules is determined by the size of the clamp.

Anti-slip safety clamping angles and/or end clamps are used for the assembly of horizontal modules to prevent the end clamps slipping along the profile rail. The clamp is provided with a screw 10 mm longer that pierces the rail when the nut is tightened and prevents the clamp slipping. In addition we offer a black anodised standard range which visually matches the module frame. Likewise we are able to match the colour of clamps to your system and/or roofing by anodising or powder coating them.



The roof-top systems overview

Easy installation

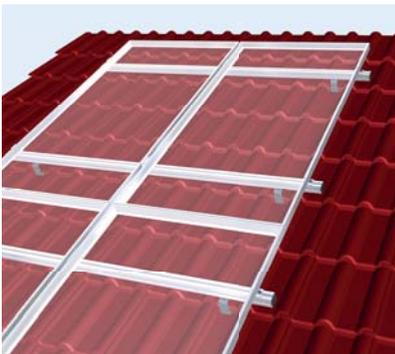
The complete system consists of roof fasteners (for example: roof hooks, roof seam clamps, hanger bolts, trapezoidal shoes, etc.), aluminium rails, stainless steel fasteners and clamps to anchor the modules to the rails. The selection of the roof attachment used is dependent on the roof pitch as well as the type of roof covering and substructure – their characteristics and carrying capacity is important with regards to the transfer of loads. The modules can be mounted both vertically and horizontally.

Mounting with cross connection

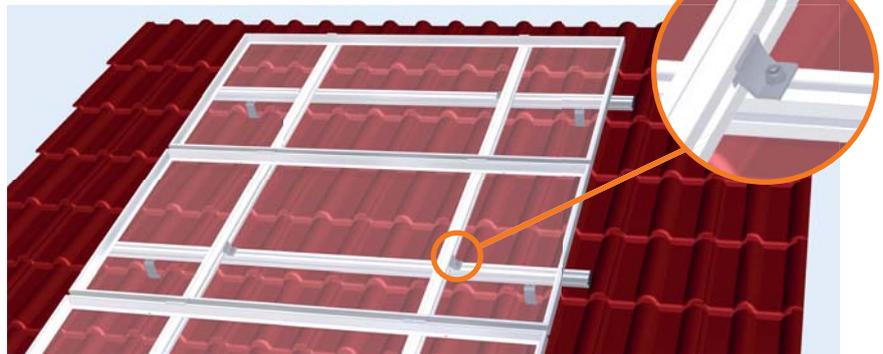
Cross mounting systems are sometimes necessary if the recommended clamping location of a module manufacturer must be followed exactly. Here the base profile rows are mounted on the fixing points on the roof. The second layer can then be freely positioned transversely across the base rails and thus modules are perfectly clamped. In addition a cross bracing evenly distributes any high wind and snow loads across all the supporting components. Furthermore, cross bracing is used when mounting points and rail locations provide limited amount of matching intersection points.

Advantages

- Optimised for all standard roofing
- Simple and quick assembly
- Very good value for money
- Corrosion resistant through use of stainless steel
- Can be combined with all individual system parts for pitched roofs from ALTEC Systemtechnik AG
- Comprehensive service from advice to sale
- Static calculated construction

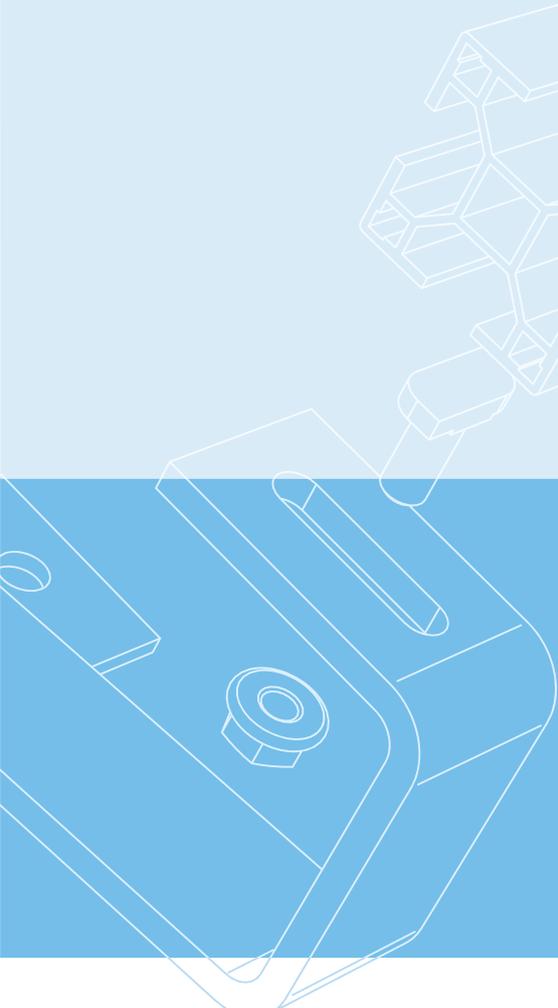


Vertically mounted modules



Horizontally mounted modules with cross connection





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