

AluLight

Additional elevation with reduced superimposed loads for flat roofs

- quick and simple mounting
- only a very few components
- individual system structural analysis



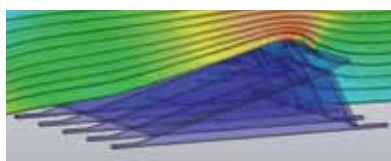
On many flat roofs, the area that can be used for photovoltaic installations can be enlarged by using load-optimized systems. Besides the systems that have been proven for years like CompactVario, SolRack, Windsafe, SolTube, etc., the **AluLight** system is a further system that can be used for the fastening of modules on flat roofs with minimum superimposed loads in completely closed rows and a fixed elevation angle of 12 degrees. The combination of several measures resulted in an optimum solution.

The modules are fixed to the trays using normal module clamps (end clamps).

With this system, concrete border stones fulfil three tasks:

They load the trays at the right spots, interconnect the trays and safeguard a distributed transmission of the pressure loads into the roof surface.

By using approved aluminum materials, both a virtually unlimited duration even with high UV-irradiations and certain approval in structural expertises is safeguarded.



Flow simulation



„Spoiler“ effect

Item no.	Name	Information
165003-001	AluLight B790-890 L1200-2000 330-12 kit	Aluminum body (330 mm wide), including: 4x self-tapping screw
165003-002	AluLight B890-990 L1200-2000 330-12 kit	4x threaded plate with screw M8x35, 14x blind rivet 4x6 flat head Al-St DIN 7337, without end clamps
165003-003	AluLight B990-1090 L1200-2000 330-12 kit	
165004-001	AluLight B790-890 L1200-1599 600-12 kit	for module lengths 1200-1599mm, including: 4x self-tapping screw
165004-002	AluLight B890-990 L1200-1599 600-12 kit	4x threaded plate with screw M8x35, 18x blind rivet 4x6 flat head Al-St DIN 7337, without end clamps
165004-003	AluLight B990-1090 L1200-1599 600-12 kit	
165001-001	AluLight B790-890 L1600-2000 750-12 kit	for module lengths 1600-2000mm, including: 4x self-tapping screw
165001-002	AluLight B890-990 L1600-2000 750-12 kit	4x threaded plate with screw M8x35, 18x blind rivet 4x6 flat head Al-St DIN 7337, without end clamps
165001-003	AluLight B990-1090 L1600-2000 750-12 kit	
169001-001	Windsafe B790-890 L1200-1599 12 degrees	Windsafe for module lengths 1200-1599 without self-tapping screws.
169001-002	Windsafe B890-990 L1200-1599 12 degrees	
169001-003	Windsafe B990-1090 L1200-1599 12 degrees	
169001-004	Windsafe B790-890 L1600-2000 12 degrees	Windsafe for module lengths 1600-2000 without self-tapping screws.
169001-005	Windsafe B890-990 L1600-2000 12 degrees	
169001-006	Windsafe B990-1090 L1600-2000 12 degrees	

Loading: Concrete blocks with sections up to about 255 x 65 mm. In order to determine the required loading, a specific structural analysis regarding the superimposed load has to be carried out. The distributed load depends on the actual row distance. In this structural analysis, the shade calculation and possibly the length of the loading stone are taken into account. For the protection of the roof cladding, surface protection mats with a width of 1000 mm are available on request.

Module clamping: Only for horizontal mounting, no Rapid clamps. The end clamps have to be chosen according to the frame height of the desired module and are not included in the AluLight kits. The adaptation of the trays to the specific module sizes was carried out according to general structural optimizations. The customer has to check whether the clamping area determined by the module producer is maintained.

Dimensioning: Conveniently with our auto-calculator (Schletter creates a structural analysis regarding the superimposed loads).

Layout: In order to keep the transport costs as low as possible, AluLight is delivered as a kit of individual formed parts made of sheet metal. These components can easily be assembled on the construction site with only a few simple work steps. All you need for mounting is a pair of riveting tongs or a similar tool.



- ❶ Fasten the stone retainer to the lower and to the upper edge (8 rivets).



- ❷ Fasten both side parts at the front and at the back to the upper edge (4 rivets).



- ❸ Fasten both side parts to the lower edge (6 rivets).



- ❹ Fasten the WindSafe for AluLight with 2 self-tapping screws to the back side of an AluLight tray.
Thus, the stability of the tray is improved even more.

Technical data

Material	Alu Light- tray AlMg3 Fastening elements: Blind rivet for Alu Light tray AlMg3, Socket head screw for module clamps VA 1.4301, threaded plate 30x30mm VA 1.4301
Structural analysis	Structural analysis according to the current specific national standards (in Germany DIN1055 and EC1). Structural analysis attachments on the dimensioning of the number of the required fixation spots, based on structural calculation. By all means consider the information on structural safety! The verification of the holding force of the roof to the substructure is not included in the general structural analysis attachments!
Calculation	Calculation and ordering can be done with our auto-calculator software, for example

Get all system prices fast and easy with our auto-calculator!
Further information at www.schletter.eu