

Specifications for the green roof mounting system

General system description

System type:	Substrate loaded green roof photovoltaic mounting system
Module orientation:	one- or two-sided
Nominal module inclination:	at least 10°
Module mounting:	upright
Materials:	Aluminium, V2A, recycled plastic
Manufacturer's warranty:	12 years

Roof suitability

Inclination:	max. 5°
Substrate:	All pressure-resistant substrates

Properties

Min. distance parapet:	max. 500 mm
Min. distance roof edge:	max. 1500 mm
Attachment to the roof:	Penetration-free installation, large-area ballasting via substrate
Ground clearance of the modules:	At the deepest point min. 460 mm minus the substrate height
Permissible module sizes:	up to max. 1850 mm x 1340 mm (l x w)
Clamping of the modules:	<p>Clamping of the modules on the long side of the module to reduce the assembly time by reducing the number of clamps per module (max. 3 clamps per module).</p> <p>The clamps must be mountable by screwing them into the mounting profile by hand. After screwing in, the clamps must remain in place. It must be possible for one person to insert the modules into the clamp.</p>
Electrical properties:	An approved way to integrate the mounting system into the lightning protection/potential equalisation system.

Assembly of the system:	<p>The assembly and dimensions of the components must be designed in such a way that this can be done by one person.</p> <p>Machining (drilling, sawing) on the construction site must be minimized.</p> <p>Components must be prefabricated as far as possible. Assembly, especially of small parts on the construction site, is not permitted. The maximum number of standard components must not exceed ten pieces.</p> <p>Assembly positions of components must be clearly marked at the factory in order to avoid incorrect assembly.</p> <p>It must be possible to assemble the complete mounting system independently of the modules.</p>
Ballasting:	<p>A ballasting plan adapted to the location by software recommended by the manufacturer must also be supplied. The ballast planning must take into account the following criteria: wind and snow load according to EUROCODE and SIA standards. The ballasting of the system is carried out via the substrate.</p>
Approvals/standards:	<p>A design of the mounting system with corresponding wind tunnel tests is mandatory.</p> <p>CE marking</p>
Documentation:	<p>Static proof for the stability of the entire system, ballasting plan, occupancy plan, 3D total occupancy overview, surface load of actually occupied area, max. point load incl. snow load, testing of the support pressure, assembly documentation adapted to the module size.</p>