Photovoltaic mounting system MSP: How to integrate lightning current carrying capacity

With the risk of lightning strikes on the rise, designers and installers of large flat-roof solar installations are increasingly having to think about lightning protection. This is where the mounting system MSP for flat roofs by Ernst Schweizer comes in.

Safety first – this also applies to modules and inverters that require lightning protection. But lightning protection can impede the optimal use of roof space: With conventional mounting systems, a minimal space between lightning rod and PV system is required to prevent lightning from being transferred to the substructure. This takes up space, reducing the surface area available for PV.

Making the most of the surface area

There is a way of getting around the prescribed minimum distance between lightning rod and PV system in order to make full use of the roof area. The solution is a PV system with integrated lightning protection, so that part of the lightning current is transferred through the mounting system. This solution places special demands on material and design, however.

Ernst Schweizer AG's flat roof mounting systems have been tested for their lightning current carrying capacity. The result: Appropriately equipped, the PV flat roof systems MSP-FREW and MSP-FR-S by Schweizer are suited to help transfer the lighting current to the lightning protection system.

Saving time with good planning

The Solar.Pro.Tool planning software by Schweizer effectively aids designers and workers during the entire process of designing the system. The solar installation is arranged in pre-equipped blocks that only need to be connected with each other. All that's left to ensure lightning protection is connecting the system to the main grounding, and integrating it into the building's lightning protection system.

Substructure for the installation of a photovoltaic system on a hall roof.

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