

## **Press release**

SUNOVA AG unveils its new first and third generation SUNOVA SCG solar module fastening solutions

### **SUNOVA SCG systems by Montavent: solar module fastening systems that are ideal for PV installations mounted on trapezoidal-sheet roofs**



With its two new generations of SCG products, SUNOVA AG, which specializes in PV installations for industrial and commercial flat roofs, has rounded out its product portfolio. In addition to the company's flat-roof-compatible membrane-connected glass fastening systems (SUNOVA MCG systems) for plastic sheeting, SUNOVA now also offers two fastening systems that are optimally compatible with trapezoidal-sheet roofing – the SCG 1.1 and SCG 3.0. Both of these systems dovetail optimally with the

**mechanical properties of trapezoidal-sheet roofing, in terms of temperature-related shear force, as well as weight and handling.**

Grasbrunn, 06/05/2011 – SUNOVA, which specializes in flat-roof PV installations, will be able to meet its customer's requirements more fully going forward thanks to the addition of the SUNOVA SCG 1.1 and SUNOVA SCG 3.0 systems to the company's portfolio. These new solutions will henceforth enable SUNOVA to optimally meet the specifications for PV systems that are installed on metal roofs. SUNOVA CTO Werner Hillebrand-Hansen had this to say about the new products: "We often carry out PV installation projects for industrial flat roofs, which need two things: fastening elements that can be installed on plastic-sheeting roofs; and fastening systems that allow PV modules to be mounted on trapezoidal-sheet roofing. In the interest of meeting our customers' need for complete solutions in this domain, we have now added metal-roof fastening systems to our portfolio. Our SCG 1.1 fastening solution allows for the installation of thin-layer modules, while the 3.0 models are intended for use with crystalline modules."

#### **Fastening systems that dovetail optimally with the inherent mechanical properties of trapezoidal-sheet roofing**

The weight, design, and material properties of both of the aforementioned SUNOVA SCG systems are fully compatible with metal roofs. The components used in SUNOVA's SCG 1.1 and 3.0 solutions are constructed of high-quality aluminium and stainless steel, and all of their seals and rivets exhibit temperature stability and UV resistance. Unlike the fastening systems of other providers, SUNOVA's

take account of the longitudinal expansion that occurs in trapezoidal-sheet roofing when it is subjected to temperature fluctuations.

In the interest of allowing the roof the space it needs to compensate for the forces to which it is subjected, SUNOVA uses a fastening system that is devoid of continuous horizontal struts. The vertical struts, which thanks to their short lengths only need a few beads each, have enough clearance between them to compensate for longitudinal expansive force.

In lieu of vertical struts that are fastened to the underlying metal-roof support structure via hanger bolts, SUNOVA's SCG systems use specially made retaining feet and expansion-proof rivets, thus allowing for stable joints and ruling out the possibility of the kind of hazardous sheet-metal cracks and fatigue fractures that can occur over time when long profiles are attached using hanger bolts. Hence SUNOVA's SCG systems deliver outstanding fastening performance when it comes to joining modules to trapezoidal-sheet roofing; plus their functionality doesn't in any way degrade roof seals.

### **Minimal tools needed for installation; simple and low cost logistics**

Once SUNOVA's SCG retaining feet and expansion-proof rivets have been installed on the strut beads (which can be done using conventional drills and rivet tools), both systems are installed by simply sliding and snapping them together. Thus the installer need not bring any additional tools up to the roof, and this in turn eliminates labour intensive logistics.

The same holds true for the substructure per se, in that both systems are devoid of continuous horizontal struts; plus the vertical struts are a maximum of 1 meter in length (depending on the module technology used); and this in turn greatly simplifies the component warehousing and shipping process. And in fact, the largest component in third-generation SUNOVA fastening systems is only 40 mm in length and thus readily fits into standard boxes. The shortness of these elements also saves resources, since less aluminium and other materials are used in the manufacturing process than would otherwise be the case.

### **Rapid and efficient roof mounting**

Both systems are optimal for PV installations that are mounted on light-construction trapezoidal-sheet roofs with a 5–30 degree slope and with sheets that are at least 1 mm thick (for aluminium) and 0.5 mm thick (for steel). Once the preformed and predrilled vertical struts have been positioned, and have been joined to the beads using retaining feet and expansion-proof rivets, all subsequent mounting steps are realized by simply sliding and snapping the components together – a process that takes a matter of seconds for each element. Moreover, the substructures are compatible with various frame heights thanks to the systems' adjustable module holders. A special slip guard ensures that the modules remain in their original positions. And the fact that the entire system is mounted without the use of bolts virtually rules out any mounting errors.

The new SUNOVA solar module fastening systems meet DIN 1055-4 wind suction standards. In addition, the tear-out strength of the systems' sealing rivets has been tested and approved by TÜV Rheinland for various types of sheet metal.

**About SUNOVA**

SUNOVA unites extensive experience in flat-roof construction with the latest in photovoltaic technology. This comprehensive approach forms the foundation for a pan-European network of highly qualified sealing operations capable of realizing photovoltaic solutions that are optimized for any flat roofing system. The functionality and profitability of all solutions are guaranteed for at least 20 years. SUNOVA supplies exceptionally long-lived flat roof weatherproofing united with perfectly matched, patented photovoltaic mounting systems, state-of-the-art thin-film technology (glass–glass) and crystalline modules complete with frames. As general and project contractor, SUNOVA provides perfected flat roof and solar energy solutions from a single source.

**PR contact:**

Sibylle Thiede

Tel.: +49 (0)89-1890473-81

[sibylle.thiede@sunova.eu](mailto:sibylle.thiede@sunova.eu)