**Roofs with built-in solar panels**

Seam-welded stainless steel forms a water-tight, long-lasting and cost-effective roof skin that also lends itself well to the integration of photovoltaic modules and solar collectors. Here the seam height and the width of the solar module were coordinated in such a way as to create a unified and aesthetically attractive roof surface. Secure and fast installation of both the mechanical and electrical components was ensured through the use of a modular system.

The solar panels were fitted flush with the roof surface, between the stainless steel standing seams.

 Various configurations can be envisaged, provided the dimensions of the solar module – 1005 × 605 mm – are taken into account when designing the roof. Panels can also be retrofitted at a later date, if required.

Cross section through the roofing system, scale 1:20
1 Profiled sheet, 0.5 mm stainless steel, EN 1.4301 or EN 1.4404, seam-welded
2 Fixing profile, 0.5 mm stainless steel, EN 1.4301
3 Photovoltaic module or solar thermal collector

Photos: Rudolf Schmid GmbH, Großkarolinenfeld, D