THE IDEAL ENERGY ROOF
The ideal energy roof

The Renusol Mounting Systems InterSole (ISSE) replaces the roof covering and aesthetically integrates the solar system in the roof. Planning (online possible) and installation are easy. The system consists of only a few components. The water-draining layer consists of full-surface HDPE plates. Modules of nearly every size can be mounted in horizontal as well as in vertical direction. The system is very flexible, insensitive to inaccuracies of assembly and in this way it always ensures optimum work results. The system can also eminently be used for roofs prefabricated in the factory; many projects have already been implemented with it. Numerous advantages become accessible to the user.

Costs
Costs for the in-roof mounting system ISSE add up to approx. 44 €/m² (retail price)
Costs for concrete roof tiles with laying add up to approx. 20 €/m²; for clay roofing tiles costs must be calculated from 30-40 €/m² (retail price). Then, costs must be added for the on-roof solar mounting system with further 18-22 €/m².

With this, costs for roofs with concrete roof tiles pre-equipped for a solar system are nearly on the same level as they are for the ISSE. For roofing on high-quality roofs, ISSE is clearly the cheaper solution. This particularly applies because, for high-quality roofs, the optically attractive ISSE should be preferred to an on-roof assembly. Therefore, the ISSE is to be seen as a smart roofing that forms the loadable foundation for the Energy Plus roof.

Weight saving: In case of a tiled roof, additional loads of approx. 0.5 kN/m² act on the roof. An in-roof system with PV modules together with an ISSE mounting system only causes loads of 0.14 kN/m². This clear weight saving reduces costs in the dimensioning of all components including the foundation.

Versatile and flexible
This system can be used even for insulation over rafters. The modules can be arranged in a rectangular raster, but also staggered or triangular. This is especially advantageous for hipped roofs and tent roofs that enjoy increase in popularity.

Due to the fixation on the roof laths, an assembly with roof hooks in the rafters is not necessary anymore. With this, also roofs with slender lattice beams, e.g. bungalow roofs, roofs of city villas, can be roofed with PV systems according to standards. Otherwise, roof hook mounting in slender rafters has its limitations referring to the screw distances which do not occur in the ISSE system. This system can already be used from 20° roof pitch. For roof pitches of 15°-20° we recommend a water-draining underroof.

Quality and safety
Since the introduction of the product in 2003, more than one million m² in-roof systems have been successfully installed in more than 25,000 individual installations and without any product related leakages.

Interfaces
In new buildings or for renovation of roof surfaces, end users more and more wish to install photo voltaic systems. Roofing with concrete roofing tiles or clay roofing tiles, their laying and subsequent processing is ineffective and relatively expensive. Building companies often leave the end user free to decide about the assembly of the photovoltaic system because of the warrant problems. This clearly reduces the real net-output in the project and reduces the customer satisfaction. The installation of an in-roof system, whether built with prefabricated roofs or with classic carpentry construction, will here be the ideal solution.

Warranty:
It has been using since 2003. Proven to be watertight. As far as we know, it is the most approved in-roof system on the market. 10 years product warranty.