

## **FAQ Frequently Asked Questions. Answers to questions from our customers in connection with the [EDS Energy Roof System](#):**



### **Is the [EDS Energy Roof System](#) suitable for flat roofs?**

The EDS energy roof system is based on a clay roof tile, which serves as a support for the photovoltaic modules. As with all other roof tiles, a minimum roof pitch is required.



### **What minimum roof pitch do I need to use the [EDS Energy Roof System](#)?**

The EDS energy roof system can be used from a roof pitch of 10 degrees. Depending on the roof pitch, the corresponding technical requirements must be considered.



### **Are special mounting devices required for the [EDS Energy Roof System](#)?**

Like any conventional clay roof tile, the EDS Energy Roof System is laid on a slatted substructure (battens / counterbalance) and requires no additional mounting devices.



### **What is the correct slat distance for the use of the [EDS Energy Roof System](#)?**

The optimal lath spacing (battens) is 38 cm and should be kept as close as possible. When laying a margin of + / - ..... cm is guaranteed.



### **How does the mounting of the photovoltaic panels take place with the [EDS Energy Roof System](#)?**

In the course of the installation of clay tiles and photovoltaic panel by the roofing specialist, it is ensured that on the one hand the overlying clay tile of the next row provides stability and on the other hand a high-quality clip, which is attached to the underside of the tile ensures that appropriate support is given.



### **Can I use storm clips and internal mounting brackets on the [EDS Energy Roof System](#)?**

As with any conventional clay roof tile, all the technical possibilities - such as Storm Clamps, Interior Brackets, .... Can be used.



### **Who is laying the [EDS Energy Roof System](#)?**

The EDS Energy Roof System is laid in the course of the roofing by the roofing specialist - exactly the same as any conventional clay roof tiles.



### **Is the roof surface equipped with the [EDS Energy Roof System](#) accessible?**

The roof surface is completely accessible after installation (maintenance work by the chimney sweeper, roof cleaning, ... ..). Caution is advised insofar as the inspection of the photovoltaic panels is a certain risk of slipping.



### **What parts does the complete package contain when I order the [EDS Energy Roof System](#)?**

The EDS Energy Roof System is a 100% rainproof clay roof with integrated photovoltaic modules and is exactly adjusted to the individual project and calculated. Included in delivery are all components required for the installation of electricity production:

- Clay tiles according to the project plan
- Special tiles according to the project plan
- Photovoltaic modules according to the project plan
- Prefabricated cabling and connector material according to the project plan
- Fixing clips for photovoltaic modules
- Inverter according to project plan



### **How does the failure of one module affect the next connected module in the [EDS Energy Roof System](#)?**

A maximum of 10 modules (1 module = 4 panels or 4 bricks) are connected in series and lead into the MPPT (Maximum Power Point Tracker). Each individual panel is equipped with an electrical resistor which ensures that high-voltages are avoided and optimum performance of the system is ensured, even with partial shading.



### **Are the modules interchangeable with the [EDS Energy Roof System](#)?**

The modules can be easily exchanged and are also safely integrated into the system thanks to the pre-assembled connectors. In the exchange itself, only the affected roof area is covered and after the exchange again (with the same roof tiles) made original.



### **What costs can be expected when replacing the modules of the [EDS Energy Roof System](#)?**

The costs of the module exchange depend on the number of exchanged modules (material value) and the working time required for the replacement. Here you can start ½ hour per module working time.



### **What weight per m<sup>2</sup> of roof area should be considered when planning the [EDS Energy Roof System](#)?**

The clay roof tile has a weight of 3.3 kg and a single panel has a weight of 0.7 kg - together 4 kg. For a m<sup>2</sup> of roof area, a total of 12 clay roof tiles + 12 panels (3 modules) are required, so that a weight per square meter of 48 kg of roof area is calculated.



### **What influence does a snowpack have on the performance of the [EDS Energy Roof System](#)?**

With snow-covered photovoltaic modules, the power can drop to zero when the power required to produce electricity cannot penetrate through to the module. This applies to all photovoltaic systems. The advantage of the EDS Energy roof system is that the roof surface can be walked on and "snow clearing" is possible on the roof. In addition, the module would soon warm with only low light transmission and thus ensure snow melting and slipping of the snow.



### **How to clean the modules of the [EDS Energy Roof System](#)?**

Basically, the EDS energy roof system is maintenance-free and the surface of the modules is self-cleaning (for example by rainwater). There are no separate cleaning measures required.



### **Is it possible, that the colour of the clay tile – used as a component of the [EDS Energy Roof System](#) – can be peeled?**

The colour of the clay tile is added before the burning process. The colour is based on the same material as the clay tile (mixed liquid of clay and colour). The process of burning guarantees the best connection between tile and colour, so that any kind of peeling off or remove is nearly impossible.



### **Is it possible, that the colour of the clay tile – used as a component of the [EDS Energy Roof System](#) – can change?**

Any surface influenced by UV – radiation, temperature in fluctuations and different kinds of weather, changes colour after years. As we use only natural clay the change of colour will not take places as for example in synthetic materials. A natural process is that the clay tiles can darken under the influence of light after years.



### **Can the [EDS Energy Roof System](#) be used as a „stand alone solution“ or must it be integrated in the public energy-net?**

The decision is in hand of the user. The EDS Energy Roof System offers solutions for integration as well as for standing alone systems. In any case you have to pay attention to regional regulations.