



Lower costs, more sustainability.

The affordable plastic roof tile with an integrated solar module made from 100% recycled polyethylene.







Sustainability should not be a luxury.

Solar energy is no longer just a trend – it is a crucial component for a sustainable future. However, the decision to install a solar roof is often difficult due to cost or aesthetic reasons. This is where our innovation comes in.

With Roofeco Solar, we have created a product that sets new standards in terms of material usage, CO₂ footprint, design, and product costs.

Because the energy transition can only succeed if everyone can participate.

A handwritten signature in black ink, reading "N. Fischer". The signature is stylized with a large, flowing "F" and a long horizontal line extending to the right.

Norbert Fischer
CEO

Easily installed. With a system.



Lightweight

Our solar roof tile weighs only 7.5 kg, making it easy for one person to install.

Assembly with system

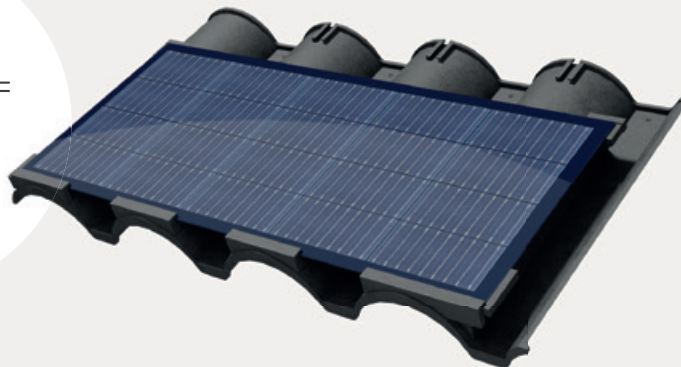
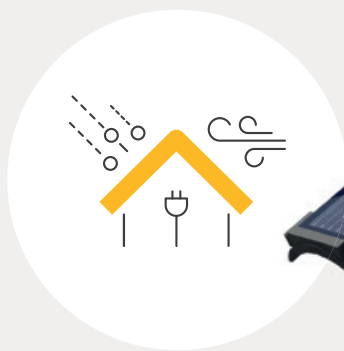
Thanks to the patented groove rail connection and concealed screws, installation is quick, safe, and clean.

Light substructure

With only 25% of the weight of a traditional roof, Roofeco Solar allows for a significantly lighter roof construction.

No special tools

The roofing system can be installed with standard tools such as a cordless screwdriver and jigsaw.



Stable and flexible.

Hail and storm resistant

The roof tiles are screwed to the battens, creating a resilient roof covering. Roofeco Solar is optionally available up to hail class 5.

Simply watertight

The Roofeco system is watertight from a roof pitch of 15°, so no underlayment is required.

High efficiency

Roofeco Solar is the largest in-roof solar tile on the market. Its wave design ensures good ventilation, which maintains high efficiency and prevents hotspot formation.

Durable quality

The plastic used is particularly resistant, colorfast, and aging-resistant thanks to nanotechnology – even after 25 years.

Good price. Top performance.

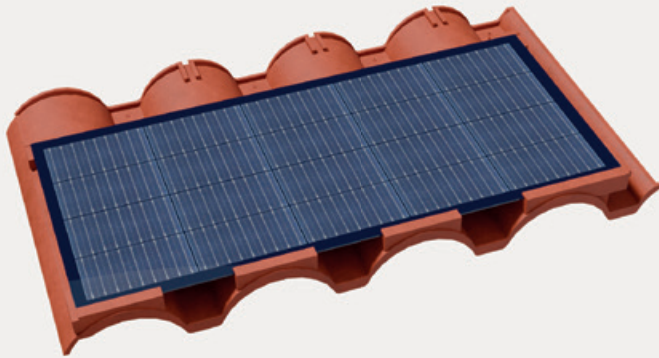


Most affordable in-roof system

For the price of a clay tile roof, you get the in-roof solar system with Roofeco Solar for free.

Price-performance ratio

Roofeco solar roof tiles are equipped with state-of-the-art cell technology and achieve the performance per m² of current rooftop systems.



Optimal roof utilization

Due to the better distribution of solar tiles on a roof, the installed capacity is equal to or higher compared to rooftop systems.

Lighter substructure

Only 25% of the weight of traditional roof tiles allows for a slimmer substructure and reduces construction time.

Quick installation

Up to 50% faster installation compared to a clay tile roof with an rooftop solar system.

100% Recycling. Minimum CO₂.



Recycled and Recyclable

The Roofeco roofing system is made from 100% recycled polyethylene and is refined with nanotechnology. Cut-off scraps are fully recyclable.

Minimal CO₂ Footprint

With only 10 kg of CO₂ per m², the Roofeco roofing system supports the easy realization of CO₂-neutral buildings.

Efficient Material Use

A lightweight roof structure and the elimination of solar mounting materials, aluminum profiles, and frames save resources and reduce costs.

Reduced Transport Effort

Low weight and combined delivery of tiles and solar cells reduce transport effort and improve the environmental footprint.

Innovative and patented.

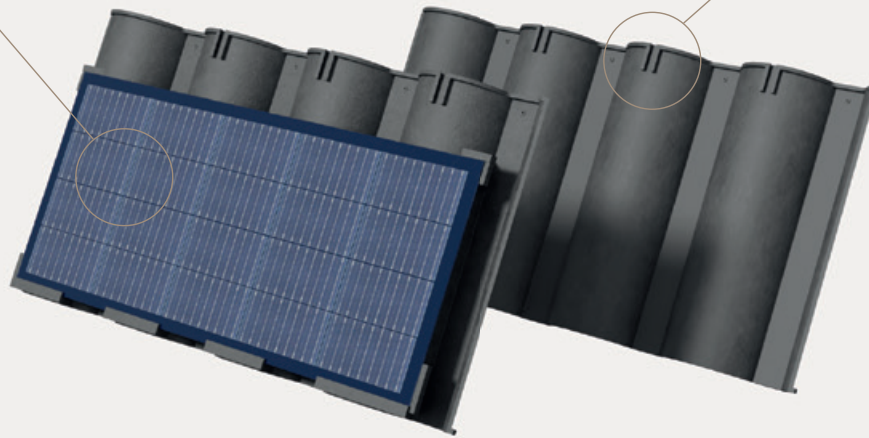
The solar roof tile impresses with an innovative design in which the solar module is firmly integrated into the roof tile base.

The structure and mechanical interfaces of the standard tiles of the Roofeco system remain unchanged – the roof can be covered as usual.

A central element is the groove rail connection, which enables secure and time-saving installation. Additionally, the design features a defined mechanical interface that allows the integration of new module technologies, making Roofeco Solar future-proof.

State-of-the-art cell technology

Groove rail connection



The Roofeco System.

Over 20 years of quality from Europe.

The tile elements of the Roofeco system are manufactured in Spain and meet European quality standards. The solar roof tile comes from Germany and is based on state-of-the-art components.

The Roofeco roofing system impresses with its high durability and offers effective sound and thermal insulation. Starting with a roof pitch of 15°, the roofing system remains permanently water-tight without additional measures.

Nanotechnological refinement ensures a self-cleaning effect, keeping the roof looking like new even after decades. This is evidenced by Roofeco roofs that have been in use for over 20 years in Costa Rica and other Central American countries.

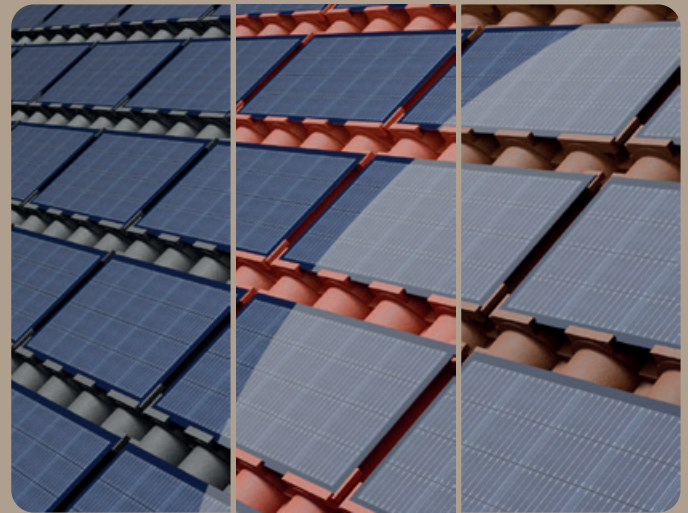
Here you can find more information about the Roofeco roofing system:

www.roofecosystem.com

Customizable.

In addition to the standard colors black, brick red, and chocolate brown, the Roofeco system can be manufactured in almost any color – this also applies to the integrated solar module upon request.

During the planning phase, we are happy to check the feasibility of individual design ideas. Just contact us.

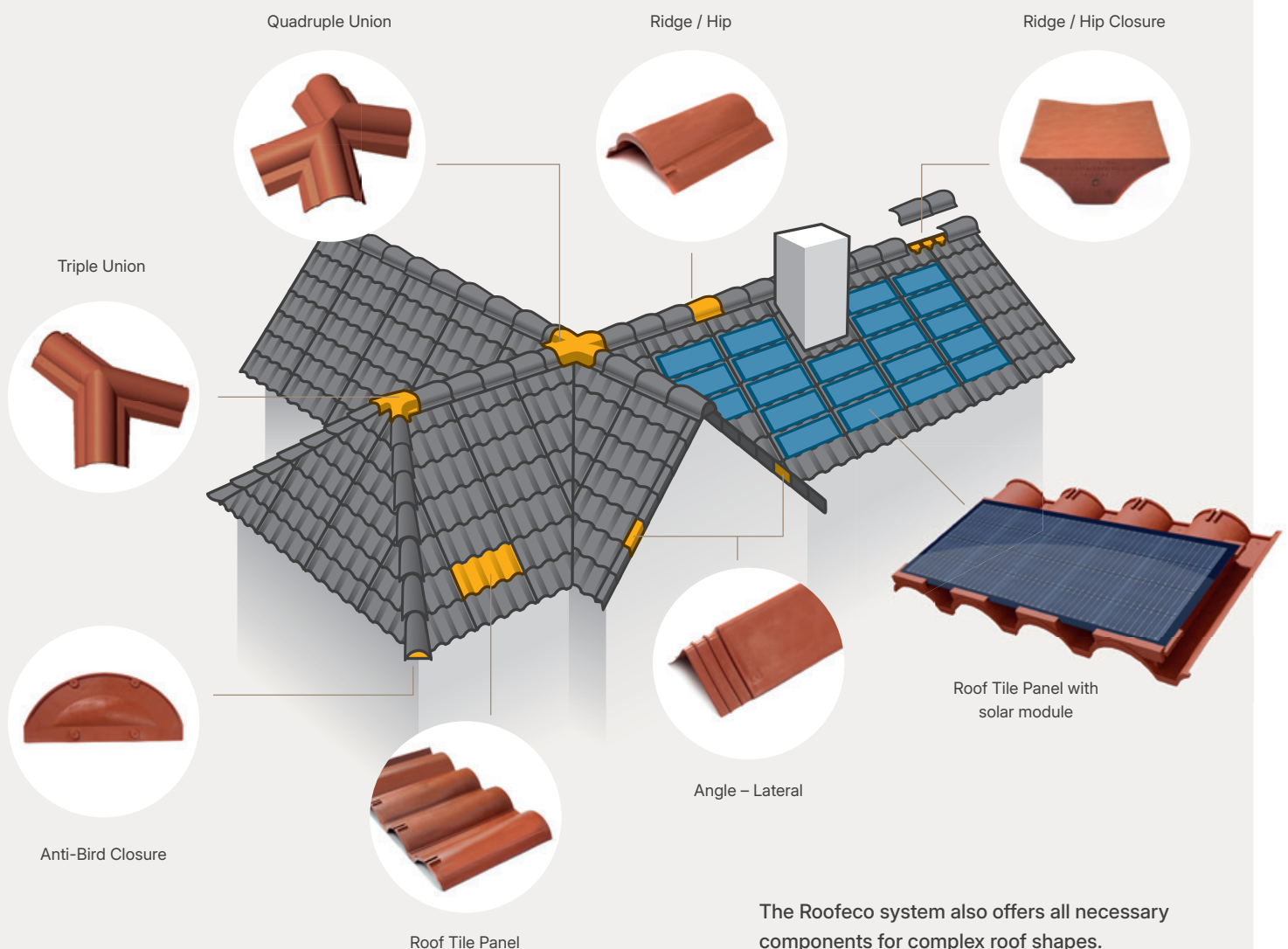


Black

Brick red

Chocolate brown

Thoughtful components.



The Roofeco system also offers all necessary components for complex roof shapes.

Specifications

Dimensions	L x W x H	1.007 × 570 × 80 mm
Roof coverage		1,05 m ² (2 roof tiles)
Weight		7,5 kg (approx. 15 kg per m ²)
Material		recycled LDPE (enhanced with nanotechnology)
CO ₂ footprint		10 kg CO ₂ / m ²
Recommended roof pitch		>10° (watertight from 15° without underlayment)
Ambient temperature		-40°C to +60°C

Electrical Data

Nominal power	P _{mpp}	81 W _p	0 / +3 %
Nominal voltage	U _{mpp}	12,8 V	
Nominal current	I _{mpp}	6,33 A	
Open-circuit voltage	U _{oc}	14,4 V	±5 %
Short-circuit current	I _{sc}	6,7 A	±5 %
System voltage		1.000 V DC	

Certification & Warranty

Product warranty		20 years
Certification (in progress)		IEC 61215, IEC 61730, IEC 61701
Hail resistance		Roof tile Class 5; Solar module Class 3 (Class 5 optional)

Get in touch:
www.roofeco.solar

sales@roofeco.solar

Roofeco Solar GmbH & Co. KG
Im Dünstborne 9
D-99510 Apolda

