



SOLAR<sup>®</sup>co.shoe  
— CERTIFIED —



 **andreas meyer**  
solar · service · support



## Our innovation

We have developed the individual components of the **RALOS.shoe** with new and detailed modifications to perfect the safety for technicians and protect the material.

The result is the new **Solarco.shoe** – our new shoe for solar module work.

The **SOLARco.shoe** allows you to quickly and comfortably reach any point of your PV-system in a straight line.

The **SOLARco.shoe** guarantees safe, accident- and damage-free work on photovoltaic modules.







Quick and efficient access,  
easily done



## It makes sense to maintain your solar module system

Regular maintenance and care of the photovoltaic system is mandatory if you are to ensure the performance guaranteed by the module manufacturer. Well maintained systems avoid material losses and guarantee the desired maximum yield/power production. Consequently, maintenance as well as cleaning works are indispensable and they make sense in every aspect. According to the manufacturer, solar modules must not be subjected to concentrated loads.

Stepping on the modules and module frames, which often occurs during assembly and cleaning, inevitably causes damage and forfeits any warranty claims.

Cell cracks (microcracks), for example, promote the development of hotspots and destroyed glass surfaces promote insulation defects (riso). All this leads to power losses up to a complete failure of the plant.

The **SOLARco.shoe** enables safe, accident- and damage-free work on photovoltaic modules.

### Quick and efficient access

Walking on solar modules with the **SOLARco.shoe** guarantees efficient and safe working, which saves considerable time and cost. The extraordinary flexibility of the **SOLARco.shoe** allows you to reach any point of the solar module system quickly. Technicians as well as the materials are protected by the **SOLARco.shoe**. Photovoltaic modules won't be damaged because there is no risk of overload at any point due to the preformed carrier plate and the damping device especially developed for this purpose.

There is no need to relocate a riser or scaffolding when working with the SOLARco.shoe. When modules are replaced, the transport and interim storage of dismantled modules is a thing of the past. The SOLARco.shoe significantly reduces the operating costs and risks.

Costs are recouped quickly after only **2-4 work assignments due to lower investments in time, staff and equipment.**

With the **SOLARco.shoe**, service and maintenance work can be executed on all PV systems with a roof inclination of up to 37 degrees. Framed as well as frameless modules can be accessed safely, starting from a surface load capacity of 5,400 Pa/m<sup>2</sup>

### Fields of application:

- Visual inspection of the installation
- Visual inspection of the rack and substructure
- Safe module replacement
- Work on electrical components
- Support for large area cleaning using a robot (safe working under controlled visibility, tracking of power and water lines).



**Small space requirements, low weight, easy transport and easy handling**

## Test by the Fraunhofer Institute

The specific construction characteristics of the **SOLARco.shoe** are the connection between the newly developed geometrically pre-shaped carrier plate and the damping device specially designed for this purpose.

**The Fraunhofer Institute's certification confirms that the SOLARco.shoe won't produce any microcracks.**

The tests were carried out on PV modules of different technology standards and from different production years.

The **SOLARco.shoe** didn't produce **any microcracks** even when walking on PV modules that had been **mounted 8 years ago**.





## **TÜV-certified slip protection**

The non-slip surface mounted under the damping device is extremely flexible and adapts reliably to any unevenness up to 8 mm.

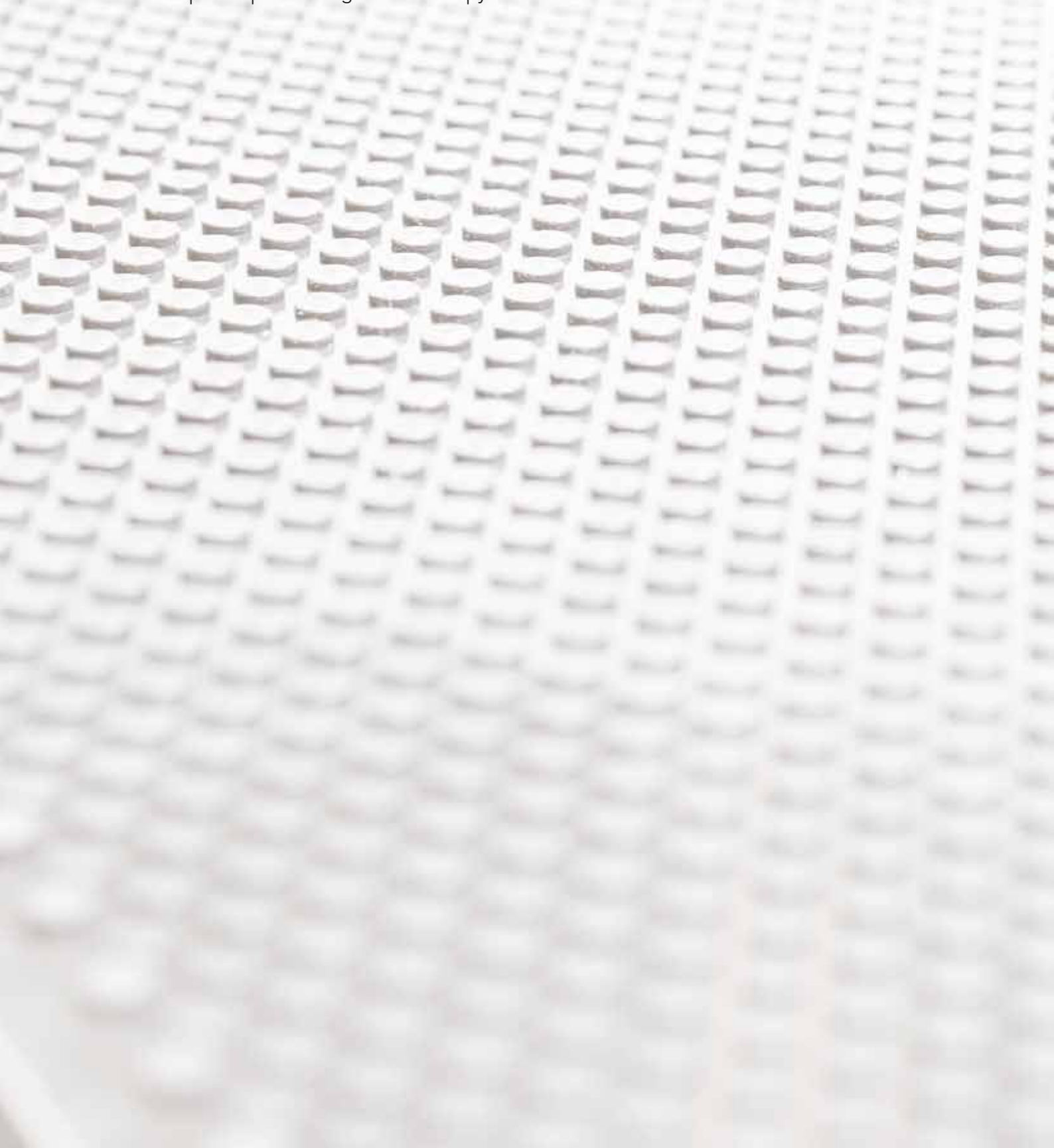
The TÜV Rheinland-certified anti-slip protection corresponds to the highest anti-slip classification of safety footwear.

### **Our anti-slip tests confirmed work was possible**

on a slope of up to 37 degrees with dry module surface,

on a slope of up to 32 degrees with wet module surface

and on a slope of up to 27 degrees with soapy surface.



## Inclination unit

This construction is a design innovation:

- it protects the feet's joints and ligaments
- it compensates for an inclination of up to 18 degrees
- it is delivered as a universal safety shoe binding with quick-tension and quick-release mechanism
- It is adjustable to European shoe sizes from 36 to 50
- no special shoes are required, just use your own safety shoes

## Sustainability

The assembly elements of our inclination unit are made of a high performance and heat resistant, **renewable, 100% biodegradable Biopolymer** with 10% carbon fibers.



Infinitely variable adjustment of the tilt angle.

## Certified tools for safe work.

**As a technician, always use certified work equipment.**

**As a client, always require certified work equipment.**

The **SOLARco.shoe** may only be used with personal protective equipment (PPE) in accordance with the relevant statutory safety and accident prevention regulations.

### Technical data:

Dimensions (LxWxH)	730 mm x 380 mm x 180 mm
Weight / shoe approx.	4.0 kg / 8,0 lbs
Load capacity / shoe approx.	100 kg / 220 lbs
inclination compensation up to	18 degrees
Shoe size EU	36 – 50
Operang temperatur	-32°F unl +158°F
Tested at a roof pitch of up to	37 degrees

### International and European patent application

