



STANDARD PRODUCT



CUSTOM PRODUCT

PROTOTYPE

## NEWTEC Solar-Roof-Tile

### NEWTEC KUNSTSTOFFTECHNIK

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### NEWTEC KUNSTSTOFFTECHNIK

 is a member of the PLASTON  
GRUPPE

## SYSTEM DESCRIPTION

NEWTEC is a new PV tiling system element which covers exactly the same area as four conventional swiss tiles.

Due to the specific design of its acrylic frame, the solar tile mounts like a standard tile. No additional underconstruction is needed.

The tile also features a connection system (plug-in), including a by-pass diode in the junction box for easy wiring.

One major advantage of the NEWTEC system is that the craftsmen involved in mounting and connecting the tiles can work independently. Roofer and electrician do not have to be present at the same time, which enables easy installation at low cost.

This roofing system fits well with both new and existing buildings.



## APPLICATION FIELD

Building type	Any type of residential and commercial building whose roof tilts at 15° or more
Building elements	Integration on standard roofing elements made of clay, concrete, or fiber cement tiles utilizing established roof sealing techniques
Mounting technology	Mount onto existing wooden roof sub-construction
PV Module	Any kind of module technology with amorphous, poly-or monocrystalline cells

## AT DEMOSITE

PV Area	8,4 m <sup>2</sup>
PV Module	Siemens Solar
Power, voltage	36 W, 11 V (standard test conditions)
Size	766 x 505 mm
Connection	3 x 8 modules in series; junction box technology with snap-in connectors

## NEWTEC Solar-Roof-Tile

This PV tile system, marketed by Newtec Kunststofftechnik, was jointly developed by the Swiss firms :

**Alpha Real**  
PV Engineering  
Zurich, Switzerland

**Müller AG**  
Roofing Construction  
Zug, Switzerland

**Plaston Gruppe**  
Plastic Industry  
Widnau, Switzerland

## SYSTEM TECHNOLOGY

Three important technical features characterize the new PV tile :

- The plastic frame is made of special recycled Acryl which withstands high UV exposure without damage. This plastic has been used outdoors for many years. The tile Newtec was the first PV module with plastic frame to be Ispra certified (CEC Spec. 503 - IEC 1215)
- The special overlapping pattern of the frames guarantees absolute water tightnes
- Rain water is drained into a small gutter, allowing proper self-cleaning of the module.

