

# Roof Integrated Photovoltaic Solar Tiles

# Romag

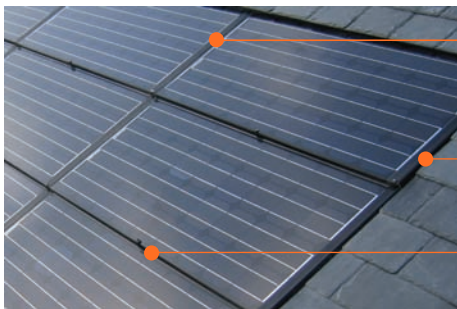


Roof integrated PV is fast becoming a popular and cost effective solution for new build projects and should be considered to maximise the benefit of the free electricity generated. Roof integrated PV tiles are not only aesthetically pleasing but also act as a replacement to roof tiles and can be easily fitted using our interlocking frame system.

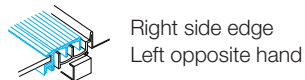
The Romag RI system has been developed for use on sloping tiled and slate roofs, with one of the highest power densities available on the market, the PV tiles integrate into the roof rather than being mounted on top.

This unique system combines our experience in producing high quality PV products with a market proven fixing system and can also be used as a 'total roof' solution. It is ideally suited for new builds or re-roofing as it is attached straight to the roof battens and can be used with a wide range of conventional roof tiles.

## Unique system design to resist water ingress



Vertical overlap



Right side edge  
Left opposite hand



Overlap

## KEY FEATURES

- System sits flush with the existing roof
- No additional planning
- No specialist roofing skills required for installation
- High power output - around 7 square metres per kwp
- 25 year linear performance power output guarantee
- System certified to IEC 61215 and IEC 61730

See overleaf for technical specifications.

**UK**  
MANUFACTURED

## The System Includes

- High efficiency Romag RI 6 Series polycrystalline PV modules
- All associated fixing clips
- Side gutters and header flashing
- Factory fitted connectors for interconnecting

## Test Standards

- MCS 012
- Weather-tightness tested by BRE to PIT Agreed Roofing Industry standards EN 15601: 2009
- External fire exposure test to BS 476-3: 2004, AA Rating
- Wind uplift resistance BS EN 14437:2004 - Achieved 4.5KPa
- Water Ingress tested in accordance with:
  - Pr EN 15601 - (Type B Test) 'Wind Driven Rain'
  - Pr EN 15601 - (Type D Test) 'Water Deluge'

## Quality

Romag's processes are also certified by BSI to the latest Quality Standard BS EN ISO 9001: 2008 and Environmental standard ISO 14001.

## Safety

Roof integrated PV tiles are certified by IPSOL in the UK in accordance with IEC 61215 Edition 2 and IEC 61730, and are manufactured in an ISO 18001 factory.

## Maintenance

Roof integrated PV tiles are passive with no moving parts to wear out. We do however, recommend an inspection of the modules at least once a year and any dirt build up should be cleaned off.

## Installation

Requires no specialist roofing skills. Please refer to the RI Installation Guide before starting installation. Roof integrated PV tiles must be laid and fixed to comply with:

- BS 5534:2003+Amendment 1:2010 Code of Practice for slating and tiling.
- BS 8000-6:1990 Workmanship on building sites. Code of practice for slating and tiling of roofs and claddings.

## Linear Performance Warranty

- 10 year product warranty
- 25 year linear performance warranty

## Temperature Characteristics

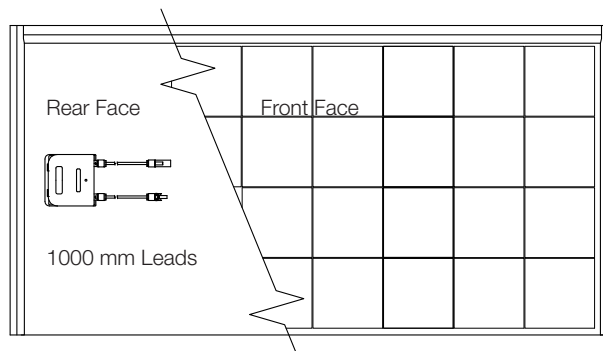
### Coefficients

Power -0.43%/°C  
 Voltage -0.341%/°C  
 Current -0.050%/°C  
 NOCT = 45°C

## Dimensions and Electrical Characteristics

	RI 6 (48)	RI 6 (32)	RI 6 (18)	RI 6 (12)
<b>Size mm</b>	1352 W x 1012 H	1352 W x 692 H	1510 W x 375 H	1036 W x 375 H
<b>Number of cells</b>	48	32	18	12
<b>Pmpp</b>	200	129	72	47
<b>Vmpp</b>	25.1	16.3	9.1	6.1
<b>Imp</b>	8.0	7.9	7.9	7.7
<b>Voc</b>	31.1	20.5	11.5	7.8
<b>Isc</b>	8.4	8.3	8.3	8.2
<b>FF</b>	76.9	75.6	75.3	73.4
<b>Efficiency</b>	14.6	13.7	12.7	12.1
<b>Weight kg</b>	17.5	11.5	7	5

## Typical RI 6 Module



RI 6 (48) module shown. RI 6 (32), RI 6 (18) and RI 6 (12) feature 32, 18 and 12 PV cells respectively.

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Romag is certified to ISO 9001 and holds both ISO 14001 and ISO 18001 certification



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