#### Data sheet

# Marley M10 SolarTile®

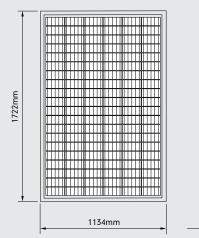
## **\***Marley

NEW

Marley SolarTile®M10 photovoltaic 405Wp panels offer the cost-saving benefits of using renewable energy to help power our homes, along with sleek aesthetics and long-lasting, maintenance-free performance.



- Integrated with full Marley roof system and all tile types
- Renewable energy to reduce household bills
- Very low profile and unobtrusive
- ▲ Large panel size means rapid, simple installation
- Market-leading fire performance\*
- Exceptional industry leading wind resistance performance
- ▲ 15 year guarantee



\_\_\_\_\_70mm

 Marley SolarTile® is a Clearline Fusion Viridian Solar product and the only roof-integrated solar system accredited with the highest resistance to spread of flame and fire penetration in all European fire tests.

#### PITCHED ROOF INTEGRATION

Sleek, low-profile integrated solar that replaces the roof covering for an improved aesthetic and simple roof maintenance.

#### WIND RESISTANCE

The certified wind resistance for Marley SolarTile<sup>®</sup>\* is more than four times higher than competitor products and suitable for even the most exposed locations.

#### FIRE

Marley SolarTile<sup>®</sup>\* is the only roof-integrated solar system accredited with the highest resistance to spread of flame and fire penetration in all European fire safety tests, achieving  $B_{Roor}$  T1, T2, T3 and T4.

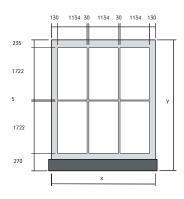
#### TECHNICAL DATA

Size of M10 panel	1134mm wide x 1772mm high
Aperture area	1.885m²
Minimum pitch	20°
Maximum pitch	60°
Body thickness (nominal)	70mm
Weight	25.0kg
Static roof loading	12.8kg/m <sup>2</sup> (distributed)
Characteristic wind resistance	4.24kPa
Ultimate design load**	4.24kPa
Positive design load (IEC 61215)	5.4kPa
Fire rating EN 13501-5	B <sub>ROOF</sub> (T1, T2, T3, T4)
Authority*	IEC 61215, 61730, TUV, MCS05, MCS12
Compatible roof coverings	All Marley concrete and clay plain, and interlocking tiles. Also compatible with tiles and slates of other manufacturers

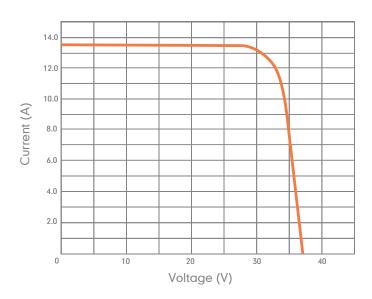
\*\* Design resistance to ultimate loads includes a partial material safety factor of 1.0

#### TYPICAL CONFIGURATION







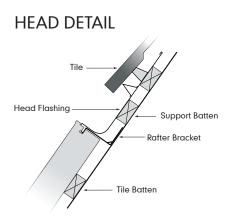


#### M10 PANEL - ELECTRICAL DATA

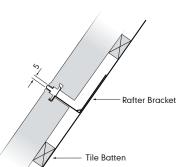
Model	MAPV16-405-M10
Peak power	405Wp
Efficiency*	21.5%
No. of cells	54x2
Max. power voltage (V <sub>mpp</sub> )	31.02V
Max. power current (I <sub>mpp</sub> )	13.06A
Open circuit voltage (V <sub>oc</sub> )	37.05V
Short circuit current (I <sub>sc</sub> )	13.62A
NOCT**	44°C
Cell type	Monocrystalline Silicon
Power temperature co-efficient	-0.35%/°C
Current temperature co-efficient	0.05%/°C
Voltage temperature co-efficient	-0.28%/°C
Max. system voltage	1000 V <sub>DC</sub>
Max. fuse rating (A)	25
Safety classification	Class II
Electrical connectors	Genuine Stäubli MC4 PV-KST4, PV-KBT4

\* Based on aperture area

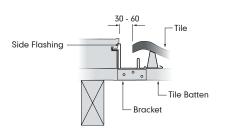
. \*\* Nominal Operating Cell Temperature Electrical specification measured under standard test conditions: Irradiation 1 kW/m<sup>2</sup> with light spectrum AM 1.5 and a cell temperature of 25°C.



#### JOIN DETAIL



#### **GUTTER DETAIL**



SIDE DETAIL

### 30 Side Cover

### Specification toolkit

Marley provides a comprehensive technical service and a range of online tools to ensure design performance and compliance to the latest Building Regulations and NHBC Technical Standards.

- ▲ Fixing specifications ▲ NBS clauses CAD details
  - ▲ BIM models

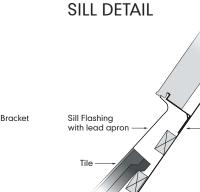
Rafter Bracket

Visit marley.co.uk/specifying



Call 01283 722588 Email info@marley.co.uk Or visit marley.co.uk/solar

Marley, Lichfield Road, Branston, Burton upon Trent, DE14 3HD





Tile Batten

Bracket

Gutter

