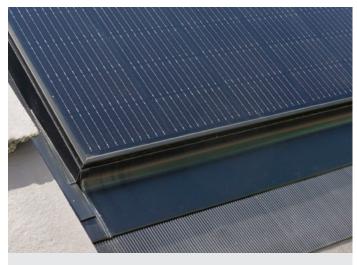
### Data sheet

# Marley SolarTile®

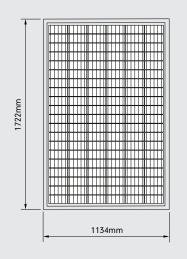
### **\***Marley

NEW

Marley SolarTile® 410Wp photovoltaic panels offer the costsaving benefits of using renewable energy to help power our homes, along with sleek aesthetics and long-lasting, lowmaintenance 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 installation
- Certified fire and flame performance
- Exceptional wind resistance performance
- 15 year guarantee as part of a Marley full roof system





70mm

#### 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 $^{\odot}$  makes it a suitable solution for even the most exposed locations.

#### FIRE

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

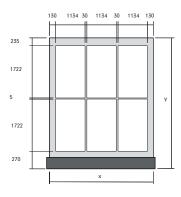
#### TECHNICAL DATA

Size of 410Wp panel	1134mm wide x 1722mm high
Aperture area	1.885m <sup>2</sup>
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

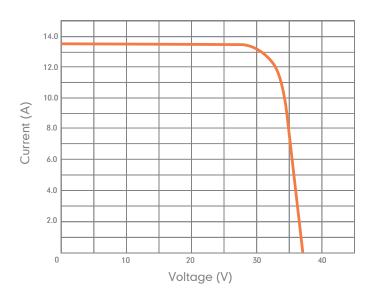








80% EFFICIENC



#### 410 PANEL - ELECTRICAL DATA

Model	MAPV410-M10
Peak power	410Wp
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**	45°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

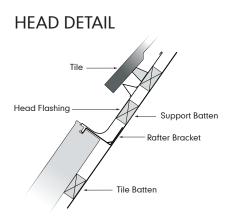
\* Based on aperture area

. \*\* 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.

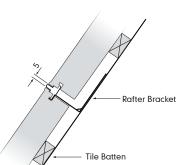
SILL DETAIL

Sill Flashing

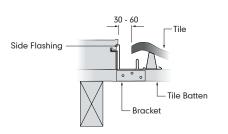
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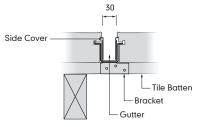
JOIN DETAIL



**GUTTER DETAIL** 



SIDE DETAIL



## Specification toolkit

Rafter Bracket

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 clause CAD details

Visit marley.co.uk/specifying



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

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