

NEW

Data sheet

# Marley SolarTile®



Marley SolarTile® 335W photovoltaic panels offer the genuine 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
- ▲ Lightweight, compact and simple to install
- ▲ Market-leading fire performance\*
- ▲ Exceptional industry leading wind resistance performance
- ▲ 15 year guarantee

**15 YEAR**  
MARLEY ROOFING SYSTEM WARRANTY

## PITCHED ROOF INTEGRATION

Sleek, low-profile integrated solar that replaces the roof covering for an improved aesthetic and for simple roof maintenance, now at similar cost to above-roof panels.

## WIND RESISTANCE

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

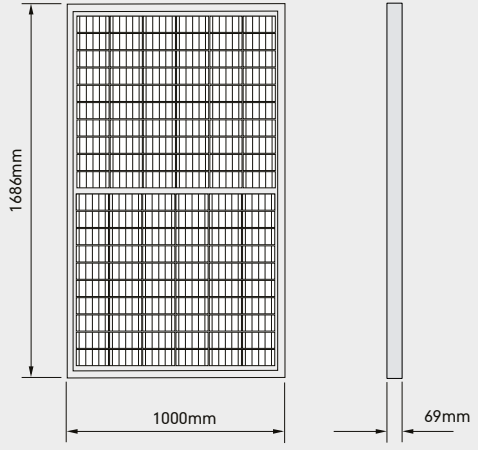
## FIRE

Marley SolarTile®\* 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<sub>ROOF</sub> T1, T2, T3 and T4.

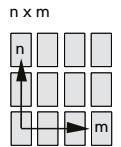
## TECHNICAL DATA

Size of PV16 panel	1000mm wide x 1686mm high
Aperture area	1.622m <sup>2</sup>
Minimum pitch	20°
Maximum pitch	60°
Body thickness (nominal)	69mm
Weight	21.7kg
Static roof loading	12.9kg/m <sup>2</sup> (distributed)
Characteristic wind resistance	5.32kPa
Ultimate design load**	5.32kPa
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

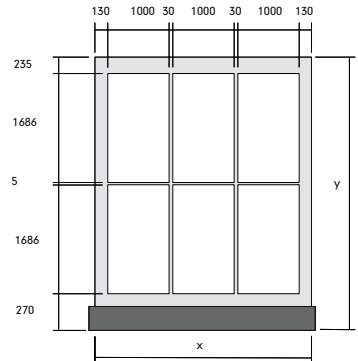


## TYPICAL CONFIGURATION



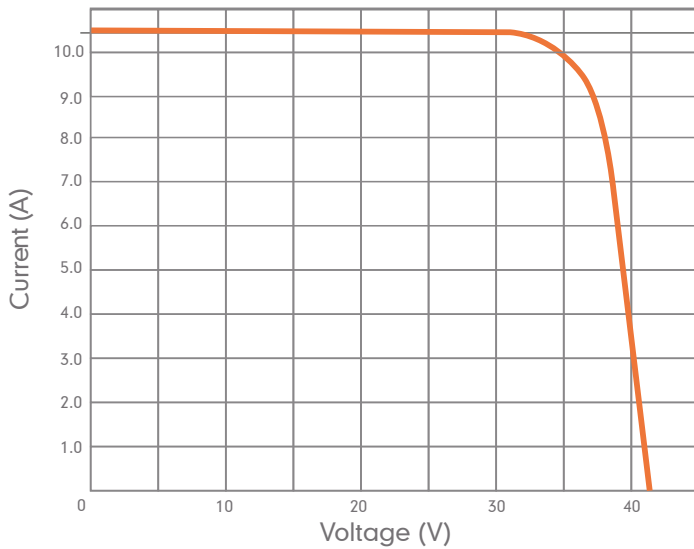
$$x = 260 + (m \times 992) + ((m-1) \times 30)$$

$$y = 505 + (n \times 1640) + ((n-1) \times 5)$$



\* Marley SolarTile® is Clearline Fusion a 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.

## IV CURVE



## ELECTRICAL DATA

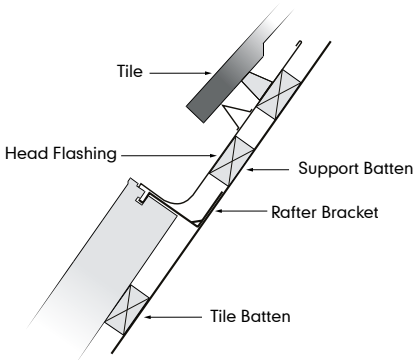
Model	PV16-335
Peak power*	335Wp
Efficiency**	20.7%
No. of cells	60x2
Max. power voltage ( $V_{mpp}$ )	34.7V
Max. power current ( $I_{mpp}$ )	9.7A
Open circuit voltage ( $V_{OC}$ )	42V
Short circuit current ( $I_{SC}$ )	10.3A
NOCT†	44°C
Cell type	Monocrystalline Silicon
Power temperature co-efficient	-0.38%/°C
Current temperature co-efficient	0.05%/°C
Voltage temperature co-efficient	-0.30%/°C
Max. system voltage	1000 $V_{DC}$
Max. fuse rating (A)	20
Safety classification	Class II
Electrical connectors	Genuine Stäubli MC4 PV-KST4, PV-KBT4

\*Subject to a manufacturing tolerance of +/- 3%. \*\* Based on aperture area.

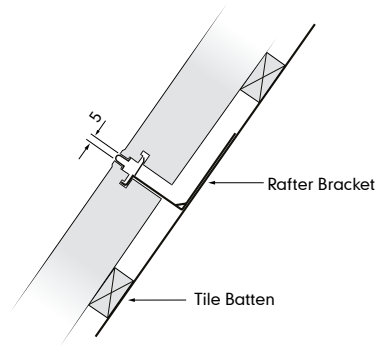
† Nominal Operating Cell Temperature

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.

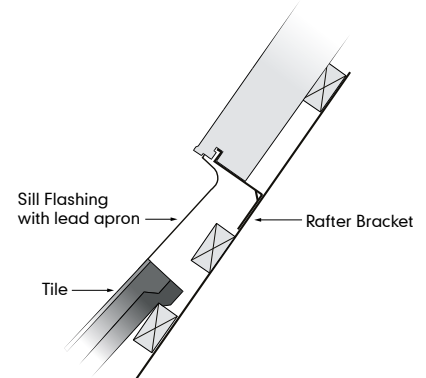
### HEAD DETAIL



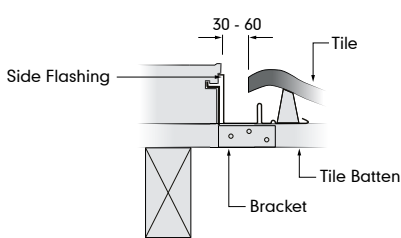
### JOIN DETAIL



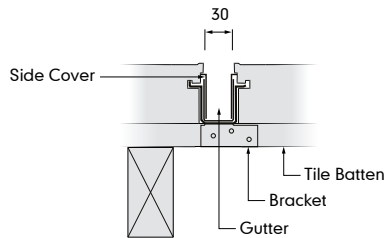
### SILL DETAIL



### SIDE DETAIL



### GUTTER DETAIL



## 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

Visit [marley.co.uk/specifying](http://marley.co.uk/specifying)

# Tell me more

Call 01283 722588

Email [info@marley.co.uk](mailto:info@marley.co.uk)

Or visit [marley.co.uk/solar](http://marley.co.uk/solar)

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