

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.

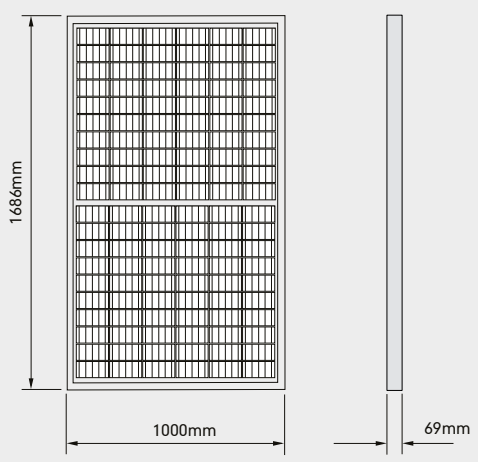


- ▲ Integrated with full Marley roof system and all tile types
- ▲ Renewable energy to reduce household bills
- ▲ Very low profile and unobtrusive
- ▲ Lightweight, compact and simple to install
- ▲ Market-leading fire performance*
- ▲ Exceptional industry leading wind resistance performance
- ▲ 15 year guarantee

15 YEAR
MARLEY ROOF SYSTEM WARRANTY

25 YEAR
80% EFFICIENCY GUARANTEE

60 YEAR
EXPECTED PANEL LIFESPAN



* 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.

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

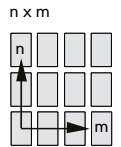
Marley SolarTile®* is the only roof-integrated solar system accredited with the highest resistance to spread of flame and fire penetration in all European fire safety tests, achieving B_{ROOF} T1, T2, T3 and T4.

TECHNICAL DATA

Size of PV16 panel	1000mm wide x 1686mm high
Aperture area	1.622m ²
Minimum pitch	20°
Maximum pitch	60°
Body thickness (nominal)	69mm
Weight	21.7kg
Static roof loading	12.9kg/m ² (distributed)
Characteristic wind resistance	5.32kPa
Ultimate design load**	5.32kPa
Positive design load (IEC 61215)	5.4kPa
Fire rating EN 13501-5	B _{ROOF} (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

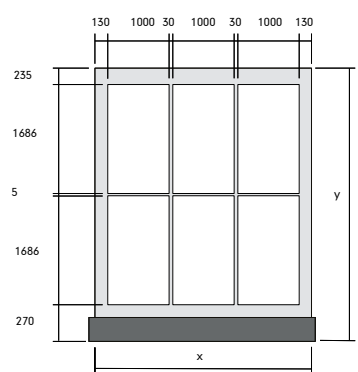
** Design resistance to ultimate loads includes a partial material safety factor of 1.0

TYPICAL CONFIGURATION

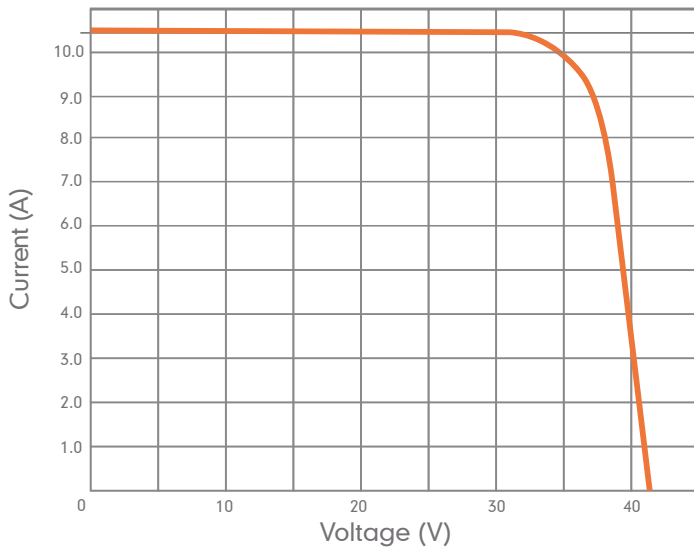


$$x = 260 + (m \times 992) + ((m-1) \times 30)$$

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



IV CURVE



ELECTRICAL DATA

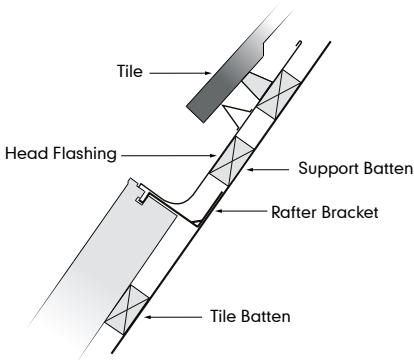
Model	PV16-335
Peak power*	335Wp
Efficiency**	20.7%
No. of cells	60x2
Max. power voltage (V_{mpp})	34.7V
Max. power current (I_{mpp})	9.7A
Open circuit voltage (V_{oc})	42V
Short circuit current (I_{sc})	10.3A
NOCT†	44°C
Cell type	Monocrystalline Silicon
Power temperature co-efficient	-0.38%/°C
Current 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.

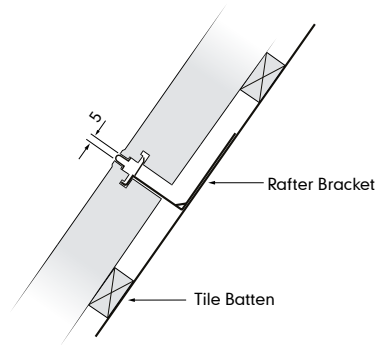
† Nominal Operating Cell Temperature

Electrical specification measured under standard test conditions: Irradiation 1 kW/m² with light spectrum AM 1.5 and a cell temperature of 25°C.

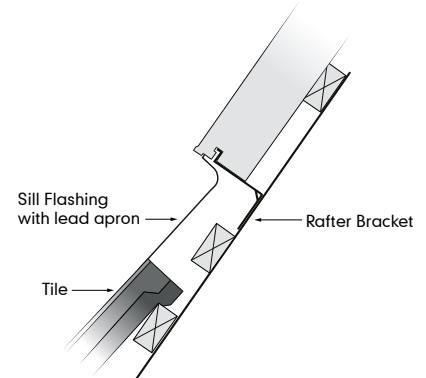
HEAD DETAIL



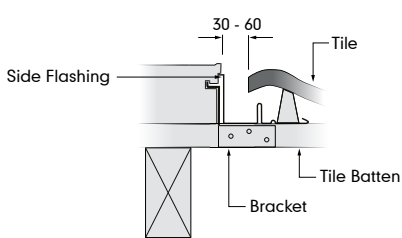
JOIN DETAIL



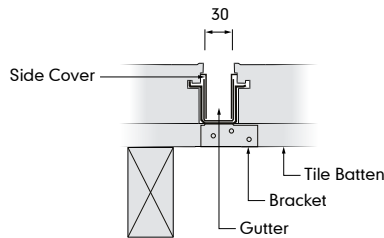
SILL DETAIL



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

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