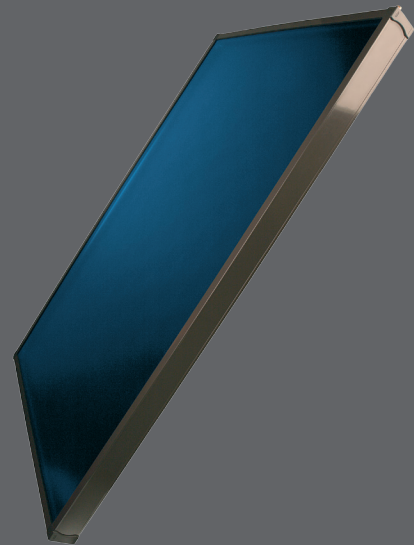


# SunMaxx™

## M2 Premium Flat Plate Solar Collector



The M2 premium flat plate collector is a bold new step in the solar thermal industry. Combining advanced technologies and manufacturing processes from around the world, the M2 is able to offer cutting-edge performance and premium quality with highly competitive pricing.

Through numerous innovations in design, SunMaxx ensures that each customer receives a solar thermal product that represents the cutting edge of worldwide technology. SunMaxx M2 flat plate collectors are an industry leader in efficiency, durability, heat output, and price, thanks to a perfected process of engineering, design, and manufacturing.

Its innovative absorber mounting and laser welded fixing is perfected for its serpentine Aluminum and Copper based absorbers. The time saving mounting system of the M2 collector is safe, cost effective, convenient and simple for any installation

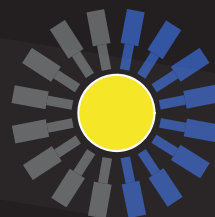
surface. The versatility of these collectors makes them suitable for all types of solar heating applications, including residential, commercial, agricultural and industrial systems.

The M2 Solar Collector features not only cutting edge performance, but an elegant, functional appearance. The glass absorber coating, sleek aluminum siding, and perfected mounting method makes the M2 resemble an aesthetic skylight.

SunMaxx solar collectors are independently tested and certified by the world's leading solar energy authorities to ensure that each product is a global leader in reliability, heat output, and return on investment. The M2 solar collector is solar keymark, ISO, and UL certified and is pending SRCC certification.

### Features:

- Advanced, high performing serpentine flat plate solar collector
- Easy, streamlined mounting and installation process
- Sleek, aesthetic design resembling a skylight
- Laser-welded aluminum absorber
- meander pipe absorber
- 2 connections at top, along length or on front
- powder-coated aluminum frame (75 mm section height)
- 3.2 mm solar clear glass with 88% transmission
- absorber area 21.53ft<sup>2</sup> (2.0 m<sup>2</sup>)
- gross area 23.14 ft<sup>2</sup> (2.15 m<sup>2</sup>)
- 6 year warranty
- Solar Keymark Certified
- SRCC certification pending

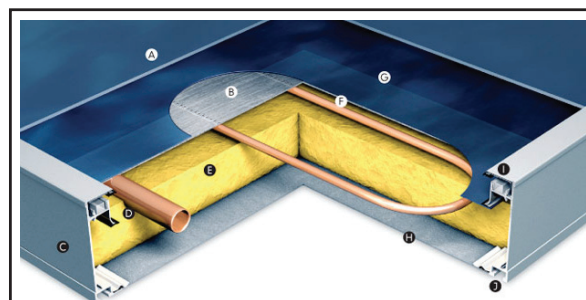
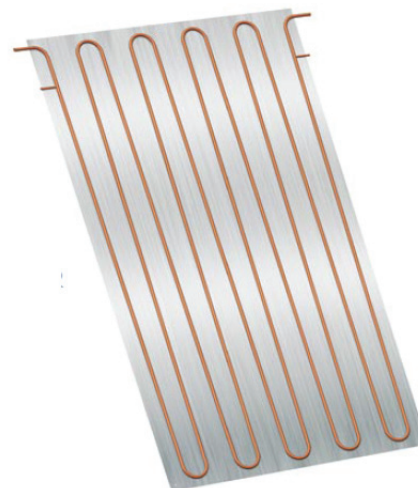


# Technical Specifications & Features

## Series Specifications

Type of Construction	Flat Plate Collector for on-roof, in-roof, flat-roof, and facade mounting
Absorber Type	Al-sheet and Cu-tubes Serpentine Absorber with .47" (ø12 mm)
Measurement	74" x 45.3" (1,870 x 1,150 mm)
Gross area	23.14 ft <sup>2</sup> (2.15 m <sup>2</sup> )
Height	3" (75 mm)
Absorber area (net)	21.53ft <sup>2</sup> [=aperture area] (2.0 m <sup>2</sup> )
Total Weight dry	75lbs (34 kg)
Liquid content	.46Gal (1.73 l)
Efficiency $\eta_0$	77.6 %, related to the aperture area
Heat loss coefficient a1	3.95 W/(m <sup>2</sup> K)
Heat loss coefficient a2	0.0165 W/(m <sup>2</sup> K <sup>2</sup> )
Max. stagnation temperature	375°F (191 °C)
Absorber coating	Highly selective on Aluminium [eta plus_al]
Absorption	95 %
Emission	5%
Covering	Low iron, structured, solar safety glass [ESG]
Transmission of covering	88 %
Impact resistance of covering	Cover passed the optional impact resistance tests following EN12975-2.
Nominal flow	0.352 Gal/min (80 l/h) [low flow conditions: 0.176 (40 l/h)]
Nominal pressure loss	0.87 psi (60 mbar) [low flow conditions: 0.44 psi (30 mbar) water/propylene-glycol 68°F (20°C)]
Hydraulic connection	Series connection with collectors side-by-side
Collector connection	2 connectors at on side, 0.47in (12mm) for compression fittings
Max. operation pressure	145psi (10 bar)
Heat insulation	Mineral wool 1.2" (30 mm)
Collector case	Aluminium frame, powder coated
Angle of inclination	20 – 90°
permissible wind and snow load	2016 lbs/ft <sup>2</sup> (3 kN/m <sup>2</sup> ) suction, 2687 lbs/ft <sup>2</sup> (4 kN/m <sup>2</sup> ) pressure
Recommended heat transfer fluid	Antifreeze mix based on propylene-glycol
Guarantee	6 years for functionality and weathering resistance

Absorber



- A) Solar glass
- B) Al-absorber sheet
- C) Powder-coated aluminium frame
- D) Collector pipe
- E) Mineral wool insulation
- F) Meander tube
- G) Highly selective absorber coating
- H) Bottom plate made of aluminium
- I) Secure glass fixing
- J) Revolving groove for assembly

2917 State Hwy 7, Bainbridge, NY 13733  
 P: 888.SOLAR11 (Integrated Products)  
 P: 877.SUNMAXX (Solar Thermal)  
 www.siliconsolar.com | www.sunmaxxsolar.com

© 2008 Silicon Solar Inc - All Rights Reserved | shw-pcs-005 | last revised: 11/2008

In order to maintain the highest standards of service and knowledge of the latest solar technologies, Silicon Solar is a proud member of:

