

## TECHNICAL DATA SHEET

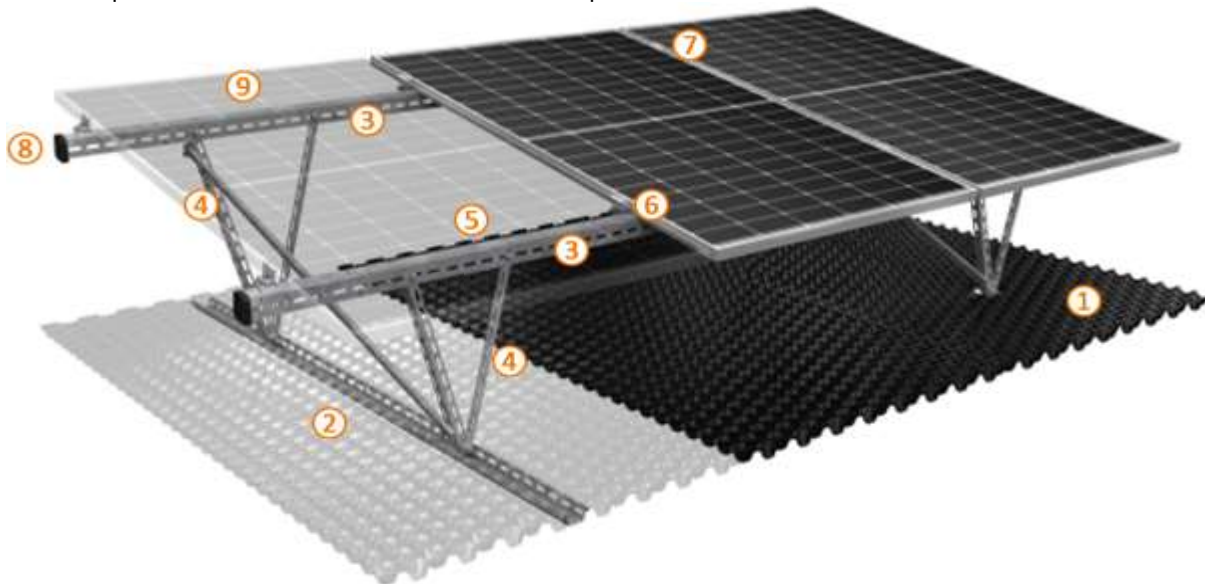
# BauderSOLAR G LIGHT Biosolar Photovoltaic Mounting System

BauderSOLAR G LIGHT is an integrated solar PV mounting system specifically for Bauder biodiverse or extensive green roofs and BauderBLUE STORMsub blue roofs.

### Intended Use

BauderSOLAR G LIGHT is designed for applications where both a green roof and solar PV solution are required together to meet project requirements. The green roof substrate and vegetation provide the ballast mechanism for the entire solution which removes the need for additional ballast or mechanical fixings to secure the system to the roof. This installation method maximises the area available for vegetation whilst the raised profile of the panels allows for strong plant growth and safe maintenance access.

Bauder Biosolar should be used in conjunction with our BauderFlora 3 seedmix which contains both drought and shade tolerant herb and wildflower species and is suitable for roofs with a fall of up to 5°.



Part	Unit	Value
<b>1</b> BauderSOLAR DSE 40 Anchor Board or BauderSOLAR RE 40 Anchor Board		Pre-cored Bauder DSE 40 Drainage Board
Material		HDPE, black
Weight (dry)	kg/m <sup>2</sup>	1.8
Material nominal thickness	mm	1.8
Depth	mm	40
Water storage capacity	l/m <sup>2</sup>	13.5
Filling capacity (for mineral drain etc)	l/m <sup>2</sup>	21.0
Support surface underside	%	42
Compressive strength	Kpa	80
Dimensions	mm	1040 x 2030
Ballast	kg/m <sup>2</sup>	BS EN 1991 Eurocode 1 + BS EN 1991-1-1/ related load calculation for wind protection

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Profile rails		
<b>2</b>	<b>BauderSOLAR BS-4</b> <b>BauderSOLAR BS-2</b> Base rail	
	Material	Powder coated steel - FVZS420GD+ZM310AC (Zinc Magnesium)
	Dimensions (L x W x H)	mm 3994 (BS-4) or 1994 (BS-2) x 36 x 72.2; Thickness 3
	Weight	kg/unit 13.06/6.52
<b>3</b>	<b>BauderSOLAR MTR</b> Module carrier rail	
	Material	Powder coated steel - FVZS420GD+ZM310AC (Zinc Magnesium)
	Weight	kg/unit 15.59
	Dimensions (L x W x H)	mm 4700 x 61.9 x 47.5; Thickness 3
<b>4</b>	<b>BauderSOLAR VT 745</b> <b>BauderSOLAR VT 545</b> V-beams	
	Material	L- Profiles: Powder coated steel FVZS250GD+ZM310AC (Zinc-Magnesium), including Adapter + Screw
	Dimensions (Pre-assembled L x W x H)	BauderSOLAR VT 745 = 749 x 399 x 54 BauderSOLAR VT 545 = 550 x 343 x 54 Thickness 2
	Weight	kg Long -1.50 Short - 1.15
<b>5</b>	<b>BauderSOLAR DLE</b> Diagonal support	
	Material	Powder coated steel - S250GD+ Z275 (Zinc)
	Dimensions (L x W x H)	1190 x 30 x 15; Thickness 1.5
	Weight	kg 0.95
Accessories		
<b>6 &amp; 7</b>	<b>BauderSOLAR MKL (mid)</b> <b>BauderSOLAR EKL (End)</b> Module Clamp Set	Piece
		Module clamping hooks with thread:  Counterholder: Zinc magnesium  Screw: M8x45mm stainless steel  Clamp: middle and end clamp aluminum (zincmagnelis- coating) pre-assembled
<b>8</b>	<b>BauderSOLAR EK-L (left)</b> <b>BauderSOLAR EK-R (right)</b> Module carrier rail end caps	Piece
		Polypropylene
<b>9</b>	<b>BauderSOLAR MTRV</b>	Piece
		Powder coated steel - FVZS420GD+ZM310AC (Zinc Magnesium)

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### PRODUCT INFORMATION AND TECHNICAL PERFORMANCE

Characteristic	Test method	Unit	Value
Weight	EN 1848-1	Kg/m <sup>2</sup>	176kg/m <sup>2</sup> *

\*Approximate system weight. Includes weight of Bauder BTRS roof system with 160mm PIR insulation and saturated Biodiverse green roof, BauderSOLAR G LIGHT mounting system and solar module, based on a substrate depth of 100mm

### CERTIFICATION AND ENVIRONMENTAL INFORMATION

International Standards Organisation (ISO)	<p>ISO 9001:2015 Quality Management Certificates EN1271 (UK) and 70499/03-15_e (Germany).</p> <p>ISO 14001:2015 Environmental Management Certificates A10552 (UK) and 70499/03-15_d (Germany).</p> <p>ISO 50001 :2011 Energy Management Certificate 70499/03-15_c (Germany).</p>
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### INSTALLATION GUIDANCE

BauderSOLAR G LIGHT is designed to be installed by a Bauder approved and trained contractor only. Please see BauderSOLAR G LIGHT installation guidelines for a full breakdown of the system installation methodology.

The number of mounts and fixings required will vary from project to project. Please contact Bauder for a project specific technical report for further information. Windload and snowload calculations will also be provided on a project specific basis and will determine ballast requirements and substrate depths.

BauderSOLAR G LIGHT can be installed on slopes of up to 5° and is intended to be used with Bauder Biodiverse and substrate based extensive green roofs only.

Specific test standards and results are stated in Bauder product datasheets and our specification service should be used to confirm suitability to each individual project.

### STORAGE GUIDANCE

The product should be stored dry, protected against weathering, and must not be exposed to temperatures exceeding 35°C.

The products must not be exposed to a direct naked flame or other ignition sources, or to solvents or other chemicals.

Ensure the product(s) are clear of buildings and any other storage areas.

Where there are storage containers on site, these may be suitable for storing products.

Bauder reserves the right to update this data set without prior notice and this document is uncontrolled if printed or stored. Always confirm the latest version is used for the adoption of this product, available from our website: [bauder.co.uk/technical-centre](http://bauder.co.uk/technical-centre).

Intended use of this product should be verified with Bauder to ensure suitability and compliance with applicable guidance, regulations, legislations, project requirements, specifications, and installation techniques.

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