Revision: V3 21/09/2022



TECHNICAL DATA SHEET

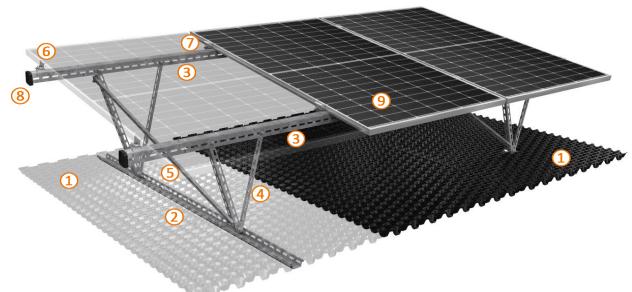
BauderSOLAR G LIGHT Biosolar Photovoltaic Mounting System

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

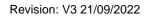
Intended Use

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 penetrating the waterproofing to secure the units to the roof, maximising the available area for vegetation.

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			
1	BauderSOLAR DSE 40 Anchor Board		Pre-cored Bauder DSE 40 Drainage Board			
	or BauderSOLAR RE 40 Anchor Board					
	Material		HDPE, black			
	Weight (dry)	kg/m2	1.8			
	Material nominal thickness	mm	1.8			
	Depth	mm	40			
	Water storage capacity	l/m2	13.5			
	Filling capacity (for mineral drain etc)	l/m2	21.0			
	Support surface underside	%	42			
	Compressive strength	Kpa	80			
	Dimensions	mm	1040 x 2030			
	Ballast	kg/m2	BS EN 1991 Eurocode 1 + BS EN 1991-1-1/ related load calculation for wind protection			





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Part Unit Value	
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Profile	rails		
2	BauderSOLAR BS-4 BauderSOLAR BS-2 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
3	BauderSOLAR MTR 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
4	BauderSOLAR VT 745 BauderSOLAR VT 545 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
5	BauderSOLAR DLE Diagonal support		
	Material		Powder coated steel - S250GD+ Z275 (Zinc)
	Dimensions (L x W x H)		1245 x 30 x 15; Thickness 1.5
	Weight	kg	0.952
Access	sories		
6 & 7	BauderSOLAR MKL (mid) BauderSOLAR EKL (End) Module Clamp Set	Piece	Module clamping hooks with thread (zincmagnelis- coating) pre-assembled
8	BauderSOLAR EK-L (left) BauderSOLAR EK-R (right) Module carrier rail end caps	Piece	Polypropylene



Revision: V3 21/09/2022

TECHNICAL DATA SHEET

PRODUCT INFORMATION AND TECHNICAL PERFORMANCE				
Characteristic	Test method	Unit	Value	
Weight	EN 1848-1	Kg/m²	176kg/m²*	

^{*}Includes weight of Bauder BTRS roof system with 160mm PIR insulation and saturated Biodiverse green roof based on a substrate depth of 100mm

CERTIFICATION AND ENVIRONMENTAL INFORMATION			
International Standards Organisation (ISO)	ISO 9001:2015 Quality Management Certificates EN1271 (UK) and 70499/03-15_e (Germany). ISO 14001:2015 Environmental Management Certificates A10552 (UK) and 70499/03-15_d (Germany).		
	ISO 50001 :2011 Energy Management Certificate 70499/03-15_c (Germany).		

INSTALLATION GUIDANCE

Bauder Biosolar G2 is designed to be installed by a Bauder approved and trained contractor only. Please see Bauder Biosolar 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.

Bauder Biosolar G2 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.

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.

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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