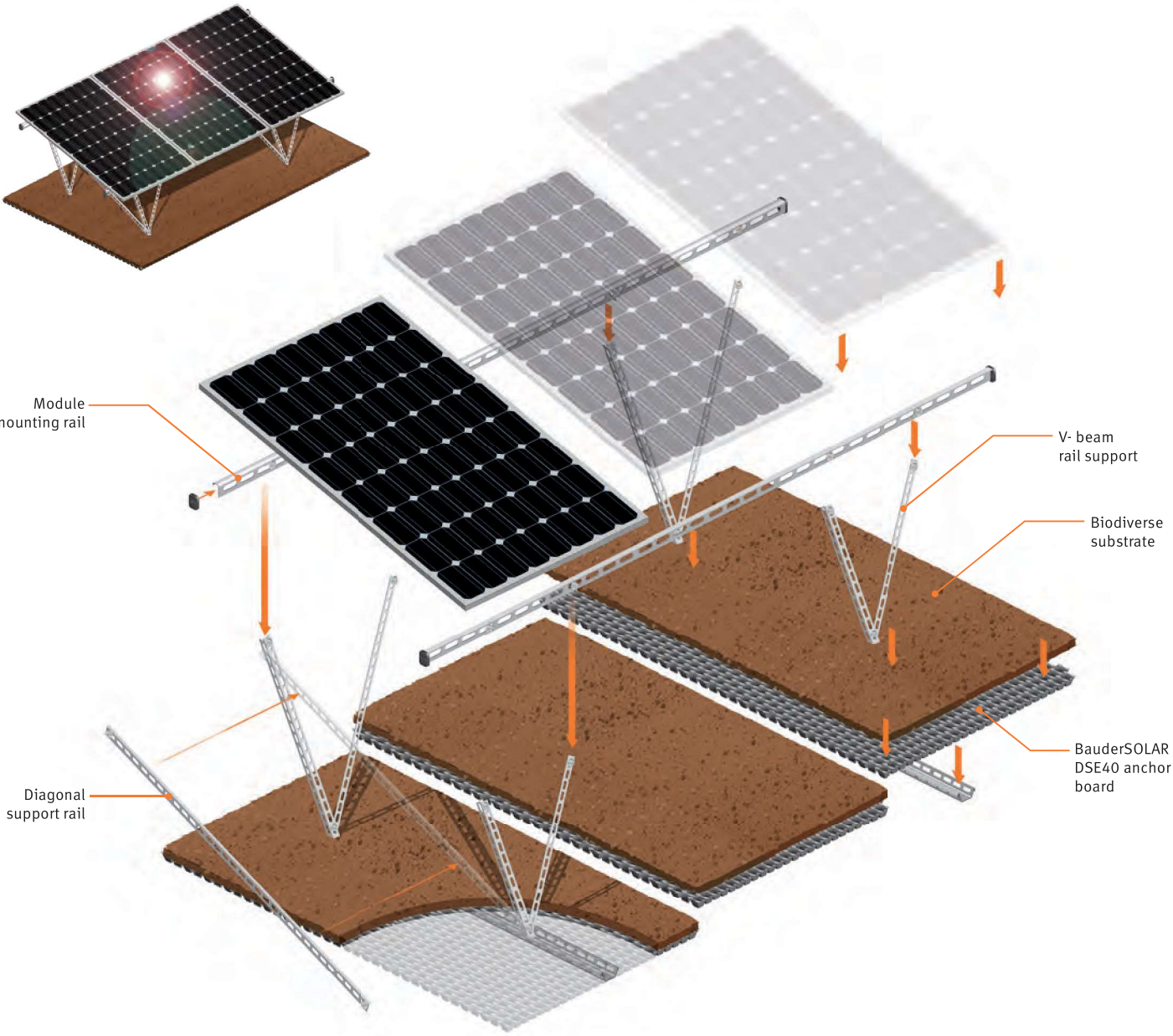
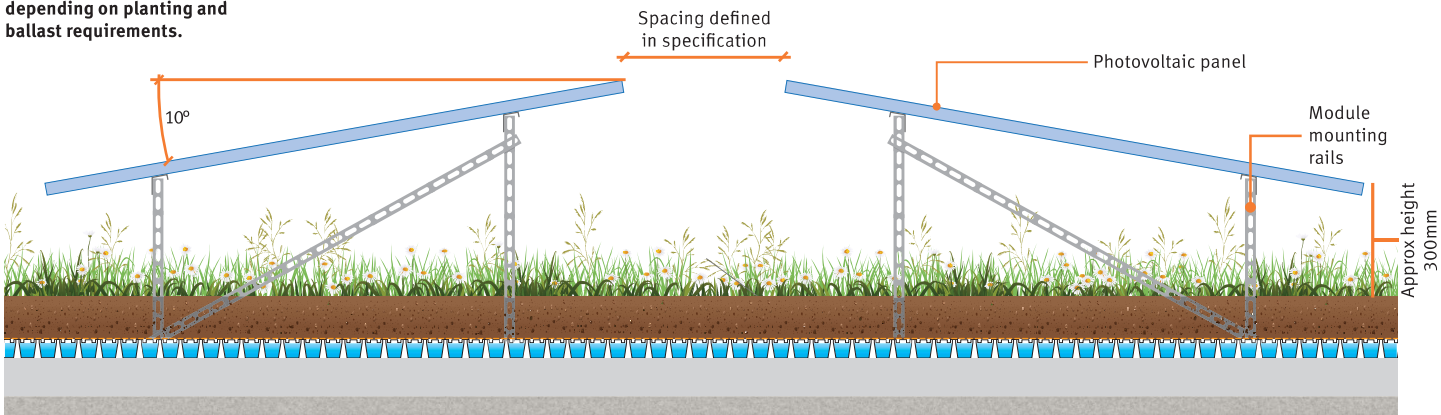


BauderSOLAR G LIGHT System



Substrate depth variable depending on planting and ballast requirements.



BauderSOLAR G LIGHT with a Blue Roof Solution

Incorporating a rooftop SuDS to attenuate stormwater on a flat roof for up to a 48 hour period

Integrating the BauderBLUE STORMcell system where heavy rainfall drains into the attenuating cavity forming layers that is then restricted at the outlet to meet defined discharge rates for the site.

The BauderSOLAR G LIGHT is combined with the BauderBLUE STORMcell blue roof system that creates a void space beneath the green roof components and uses the BauderBLUE ST adjustable outlet flow restrictor to limit rainwater leaving the roof via the drainage system.

The BauderGREEN RWR 100 creates the void space and is manufactured to achieve >95% cavity. The green roof components installed atop the RWR 100 also contribute to water storage for SuDS and support the vegetation.

Plus points

- Maximises environmental opportunities for the flat roof.
- Attenuates precise volumes of rainwater.
- Depth of substrate to meet needs of the vegetation.
- Full design support and blue roof calculations to meet discharge rates for the site.
- Comprehensive range of guarantee packages to suit project and cover requirements and comply with client's insurance company requirement.

Vegetation options

- BauderGREEN WB native species wildflower blanket.
- BauderGREEN Plugs.
- BauderGREEN Flora 3 biosolar and shade tolerant seed mix.



BauderBLUE ST adjustable blue roof outlet flow restrictor



Department of Engineering
Cambridge University

BUILDING BOARD

Roof Size:	1,610m ²
Waterproofing:	Bauder Total Green Roof System
Specifier:	R H Partnership Architects
Main Contractor:	SDC Limited
Approved Contractor:	Voland Roofing

Waterproofing the Roof for the PV Array

Ensuring the PV array is secure and the building is watertight

The waterproofing system is a key element in the success of the solar PV array and specific systems from our portfolio are suited to the different solar solutions.

Your area technical manager will work with you to select the right Bauder waterproofing system for the type of solar PV system being specified on each roof area.

When the BauderSOLAR G LIGHT system is specified, a root resistant cap sheet is used.

Reinforced bitumen membrane systems

Noted for their lifespan and ability to sustain foot traffic as well as loads associated with the installation and maintenance of a solar, biosolar green, or blue roof.

- BauderSOLAR F • BauderSOLAR F XL
- BauderSOLAR G LIGHT • BauderSOLAR G LIGHT with BauderBLUE STORMcell



Reinforced bitumen membrane system

Hot melt structural waterproofing

Cost-effective waterproofing specified primarily for new build construction of protected, inverted, or buried roofs such as podiums and plazas.

- BauderSOLAR G LIGHT • BauderSOLAR G LIGHT with BauderBLUE STORMcell



Hot melt

Single ply system

Lightweight and advantageous if the project has load bearing considerations.

- BauderSOLAR F • BauderSOLAR F XL



Single ply system

Technical Support Service for Roofs with a Solar PV System

Supporting you in the design of a PV solution to meet project requirements and budget

Our technical managers are based nationwide and play a vital role in the success of every project from conceptual stage through to hand-over and sign-off of the Bauder installation.

We assist you with the design of the detailing, writing the specification for the flat roof solution, and recommend suitable approved contractors to tender for the project. The service is without charge, and we work with you to ensure your roof specification meets all your needs.

Working with you to understand

- ▣ Drivers for solar PV installation.
- ▣ Building's energy consumption.
- ▣ Useable non-shaded roof space.
- ▣ Budget.
- ▣ Waterproofing system requirements.
- ▣ Funding opportunities available.
- ▣ Meeting any planning constraints.
- ▣ Energy generation requirements.

Our service to you delivers

- ▣ Detailed PV specification package.
- ▣ Proposed waterproofing system.
- ▣ Array layout roof plan.
- ▣ Number of panels and orientation.
- ▣ System output.
- ▣ Carbon savings.
- ▣ Wind load calculations.
- ▣ Electrical design and inverter sizing.
- ▣ Budget costing.
- ▣ Green or blue roof integration and vegetation scheme for BauderSOLAR G LIGHT system.
- ▣ Comprehensive range of guarantee packages to suit project and cover requirements.

Our installations

Bauder approved contractors deliver the installation of our roofing systems and they receive the support and expert advice they need to ensure a high-quality roof solution.

Once your roofing works commence, our experienced team of site technicians will monitor and inspect the workmanship to ensure that our standards are fulfilled.



Project Studies

Sybil Andrews Academy, Suffolk

BauderSOLAR F

Sybil Andrews Academy was designed so that the building can be adapted as the Academy grows. Working closely with the architect and the client, Bauder developed a bespoke specification package to maximise the solar output from the available roof space and satisfy all relevant local planning conditions.

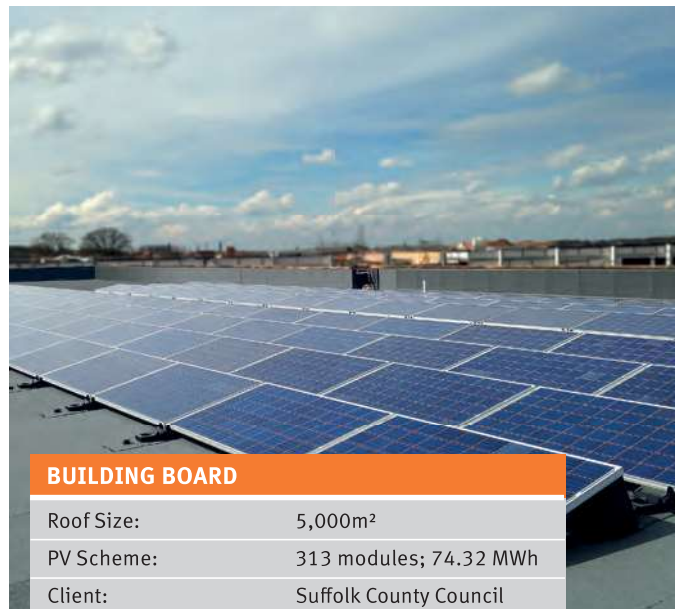
Advocacy

Paul Denton, Concertus Design and Property

Consultants: *“Bauder’s comprehensive system portfolio of waterproofing and solar solutions made the specifications straight forward as we were able to select an integrated solution delivered from a single source supplier.”*

System summary

Solar PV BauderSOLAR F
Waterproofing Bauderflex RBM system



BUILDING BOARD

Roof Size:	5,000m ²
PV Scheme:	313 modules; 74.32 MWh
Client:	Suffolk County Council
Specifier:	Concertus Design and Property Consultants Ap-
proved Contractor:	GRM Roofing
PV Installer:	Chelsfield Solar

University of West England, Bristol

BauderSOLAR F

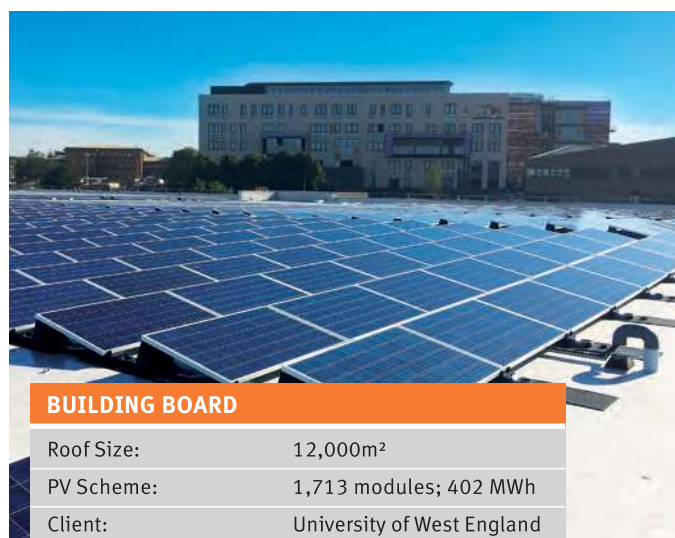
UWE quadrupled its solar generating capacity through the installation of 1,731 solar panels during roof refurbishment, enabling it to produce over 400 MWh of electricity each year and making it the largest solar panel array in the UK university sector.

Advocacy

Fabia Jeddere-Fisher, Energy Engineer at UWE: *“The system we chose means the panels are welded into place, reducing load, and the need for roof penetrations and thereby risk of leaks. The University will use 100% of the power generated. As a large organisation we want to set an example for others to undertake similar projects.”*

System summary

Solar PV BauderSOLAR F
Waterproofing Bauder Thermofol System



BUILDING BOARD

Roof Size:	12,000m ²
PV Scheme:	1,713 modules; 402 MWh
Client:	University of West England
Specifier:	Parsons Brinckerhoff
Approved Contractor:	Mitie Tilley Roofing
PV Installer:	Dulas

Project Study

Department of Engineering, Cambridge University

BauderSOLAR G LIGHT with BauderBLUE STORMcell

This new build project in the centre of Cambridge combines a Sustainable urban Drainage Solution (SuDS) with vegetation and renewable energy in a warm roof construction.

Synopsis

The client identified sustainability as being a key driver in the design of the roof, and also sought a single source supplier that could provide a guarantee for both workmanship and products. The Bauder team created the solution bringing together the entire roof requirement for a single guarantee.

The challenge

The roof deck was constructed using a pretensioned concrete plank roof structure. Due to the large span of these planks, the dead load weight to the roof was restricted requiring a measured approach to the design of the solar PV, green and blue roof.

To achieve the flat deck, with no backfalls, the final deflection of the fully loaded roof was calculated and the concrete deck was screeded to give a flat finish.

System summary

Solar PV	BauderSOLAR G LIGHT
Waterproofing	Bauder Total Green Roof System
Green roof	Bauder biodiverse substrate with native species
Blue roof	BauderBLUE STORMcell

Highlights

- Deck deflection calculated and screed finish ensured compliance to BS 6229:2018.
- Warm roof construction with 160mm BauderPIR FA-TE insulation.
- Unified approach to the design of the solution.
- Full Bauder support for technical advice, design, installation monitoring and inspections.



BUILDING BOARD

Roof Size:	1,610m ²
PV Scheme:	40 modules; 9.91MWh
Specifier:	RH Partnership Architects
Approved Contractor:	Voland Roofing
Main Contractor:	SDC Limited
PV Installer:	Voland Limited

UNITED KINGDOM

Bauder Limited
70 Landseer Road, Ipswich, Suffolk
IP3 0DH, England
T: +44 (0)1473 257671
E: info@bauder.co.uk
bauder.co.uk

IRELAND

Bauder Limited
O'Duffy Centre, Carrickmacross,
Co. Monaghan, Ireland
T: +353 (0)42 9692 333
E: info@bauder.ie
bauder.ie

Respecting the planet

Reducing use of materials



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