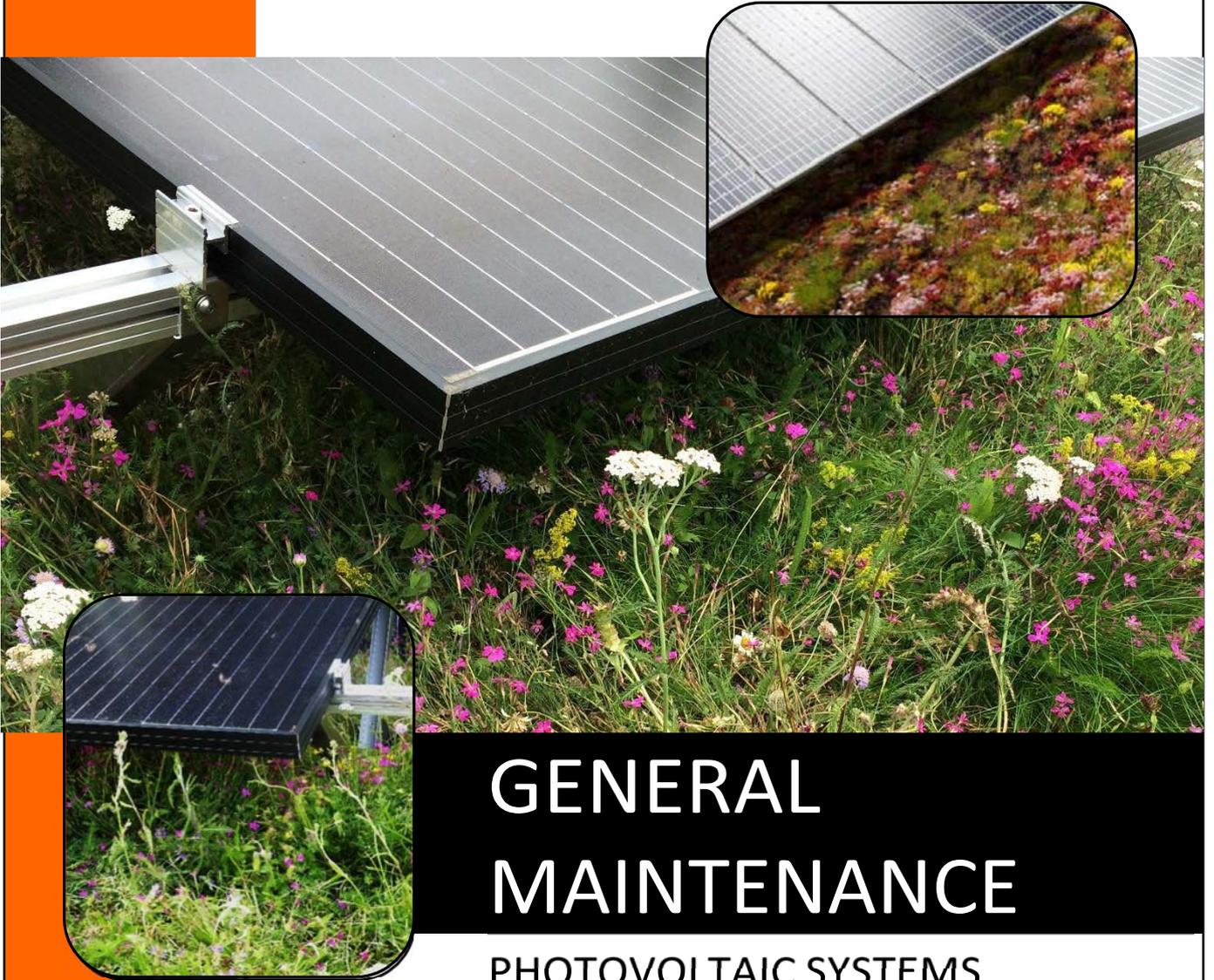


**BAUDER**



# GENERAL MAINTENANCE

PHOTOVOLTAIC SYSTEMS  
Bauder BioSOLAR

## BioSolar Maintenance Recommendations

The BioSOLAR array should be maintained by trained professionals at fixed intervals (it is recommended that this inspection is carried out annually). The following points should be checked in the process:

- Dirt on the modules: Type and degree of dirt
- Security of the anchoring system including fixings and ballast
- Condition of visible cable connectors
- Establishment of vegetation

### Maintaining the solar modules

#### Module maintenance

Please follow module manufacturer's guidelines for specific maintenance requirements. If you are unsure regarding any aspect of maintenance please contact the Bauder technical office to discuss requirements.

#### Module cleaning

Please note that cleaning the modules can increase yield. This particularly applies to dirt caused by fallen leaves or bird droppings, which could lead to partial shading. Yield decreases due to snow are negligible since these take place during seasons of lowest yield.

The tilt and self-cleaning glass nature of the solar modules ensures that dust and dirt are generally adequately removed by rain. Snow will also slide off. If the modules should become particularly dirty they should be cleaned using warmwater (not exceeding 40°C) and a soft cleaning device.

Upon request we are happy to advise on suitable cleaning agents that we have found to perform exceptionally well against streaking and fingerprints.

#### Caution!

Never use abrasive cleaners, such as pad brushes when cleaning the modules. When using high pressure washers ensure to keep a minimum distance of 50cm from the surface of the module. Use a cleaning agent with a concentration of no more than 20% glass cleaner.

### Maintaining the mounting system

The Biosolar mounting system requires minimal maintenance although a visual inspection should be carried out to ensure the following:

- Bauder extensive substrate has not eroded and correct depth of ballast is in place
- All visible fixings are secure and there has been no movement of mounts/modules
- No vegetation is growing around/through mount fixings

## Maintaining the vegetation - XF118 Wildflower Blanket, Bio-SOLAR seed mix and wildflower plug plants

The following is a guide to the maintenance necessary to keep a biodiverse green roof in good condition. The information relates to installations that have been completed for one full growing season and where establishment maintenance has been effective.

Establishment maintenance relates to the surface watering and weeding required for the first 10-12 weeks after installation is required until the planting has rooted into the growing medium, adapted to its location and can be considered established.

### What to Expect from a Bauder Biodiverse Green Roof System

There is a common misconception that extensive green roofs, and sedum plants in particular, are always green and that from ground level they resemble grass. This is misleading, as they consist mainly of low growing, drought tolerant sedums, wild flowers, grasses, moss and herbs. . Where XF118 wildflower blanket is used it is likely to change over time as the planting adapts to the new growing environment.

A variation in type and density of vegetation growth is expected beneath the BioSolar modules due to the shading impact of the panels. Our BioSolar planting mix is chosen specifically to allow the vegetation to adapt and thrive in these varying conditions.

For a complete copy of our Biodiverse green roof maintenance guidelines please visit [www.bauder.co.uk/technical-centre](http://www.bauder.co.uk/technical-centre)

### General Vegetation Maintenance

The Bauder biodiversity green roofs meet designed to meet BREEAM requirements will include a species mix selected to provide a balanced plant community on the roof and will require basic maintenance if this is to be sustained in the long term.

Maintenance is best carried out annually, during spring and autumn. Some deposited leaf litter may be considered as contributory to the bio-diverse environment, which is acceptable so long as provision is made to ensure that this has no negative effect on other plants or the PV array.

**Note** - Specifically designated biodiversity areas should be disturbed as little as possible during maintenance so as not to upset any micro-habitats that may have colonised.

### Preliminary Maintenance Procedures

- In the late autumn the vegetation is to be strimmed back to a 50-70mm height and the unwanted waste matter removed and lowered to ground level for composting/disposal.  
**Care must be taken to ensure that any solar cables are moved out of the way before any strimming/cutting takes place**
- In the spring apply an 80g/m<sup>2</sup> dressing of Bauder slow release organic fertiliser to the vegetated surface.

- We recommend removing unwanted leaf litter that has fallen onto the roof surface in the spring and autumn, to ensure that this does not smother the vegetation beneath.
- Open the lids of all inspection chambers and ensure they are free from blockage and water can flow freely.
- Any vegetation which has encroached into drainage outlets, inspection chambers, walkways and the vegetation barriers (pebbles) should be removed. If movement/settlement of the pebble vegetation barrier has occurred, additional washed stone pebbles similar to the existing should be added.
- Remove any weed growth that will exceed 30mm in height, is invasive or undesirable (if necessary this can be sprayed with a Glyphosate based herbicide). Any vegetation that shades the modules, however thin **will** have an impact on PV output and must be cropped
- Damage to the landscaping should be reported to the building owner.

## BAUDER GREEN ROOF MAINTENANCE SERVICE

With over 30 years' experience in the design and supply of green roofs throughout the UK and Ireland Bauder can offer unparalleled experience and expertise in green roof maintenance including sedum, biodiverse and wildflower.

### Our Service

Bauder's experienced team will provide you with a tailor-made maintenance programme for your green roof. A typical Bauder Maintenance Programme Includes:

- Full inspection and evaluation of your green roof
- Application of organic slow release granular fertilizer
- Removal of leaves and debris
- Removal of unwanted vegetation
- Inspection and clearance of outlets
- Examination and testing of irrigation

This work is undertaken by Bauder's experienced maintenance engineers who will carry out the necessary risk assessments and comply with all current health and safety legislation throughout the duration of the work. Finally, you will be provided with a bespoke report with photographic verification outlining the condition of the planting and any areas requiring on going treatment.

To discuss your specific requirements, please call our green roof service team for a no obligation quote.

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