

## General Maintenance Photovoltaic Arrays

BauderSOLAR system





Revision: V6 February 2022

## **General maintenance procedures**

## BauderSOLAR PV systems

The BauderSOLAR array should be maintained by trained professionals at fixed intervals and it is recommended that an inspection is carried out annually and the modules cleaned to maintain efficiency, with electrical maintenance occurring a minimum of every three years.

All maintenance ensures that the PV array continues to perform, and that any potential problems are identified at an early stage. Any failures of the system resulting from a lack of maintenance may not be covered under the guarantee.

- Ensure safe access can be gained to the roof and that relevant Health and Safety procedures are followed.
- Ensure due care and attention is observed during inspection and maintenance of the array to prevent damage to the waterproofing system.

#### Inspection should comprise checking:

- Dirt on the modules, the type and levels soiling.
- Security of the anchoring system including fixings and safety pins.
- Condition of electrical connections, isolators and inverter.

#### 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

Cleaning the modules can increase yield. This particularly applies to dirt caused by fallen leaves or bird droppings which can lead to partial shading. Yield decreases due to snow are negligible since these take place during the months of lowest yield.

With the passage of time, dirt and dust may accumulate on the glass surface of the module, reducing the power output of the module. We recommend regular cleaning of modules to ensure maximum power output, especially in low rainfall areas.

- Modules should be cleaned using warm water. All types of soft foam materials, non-woven fabrics, soft sponges and soft brushes may be used.
- Avoid using tools, abrasive materials, abrasive chemicals and cleaning fluids.

#### Maintaining the electrical system

An annual inspection of isolators and inverters is recommended. A full electrical health check to inspect connectors etc, should be undertaken every 2-3 years. As a minimum the following should be carried out:

- Functionality of the electrical connections, isolators and inverters.
- Measurement of string voltage and currents.

#### Maintaining the mounting system

The PV array should only be maintained by trained professionals at fixed intervals. A minimum of every 3 years is recommended. The following points should be checked in the process:

- Security of the anchoring system.
- Integrity of the roof membrane.

# Contractors currently recommended to maintain BauderSOLAR systems

Maintenance can be carried out by any suitably trained contactor/operative. The following list is a non-exhaustive list of recommended contractors:

#### CJ Electrical

Unit 7 Edison Close, Ipswich, Suffolk, IP3 9GU 01473 276688 www.cjelectrical.co.uk/

#### **Envirolec Smart Energy Solutions**

Unit 2 Hope Lane, Eltham, London, SE9 3TP 020 8090 0270 www.envirolec-ses.co.uk

#### **Greenbridge Renewables**

27 Kendal Road, Kirkby, Liverpool, L33 2ED 0151 345 6739 www.gb-r.co.uk/

#### **Parker Technical Services**

Head Office:
Tannochside Business Park,
4 Kilmartin Place,
Uddingston, G71 5PH
01698 381224
www.edwinjamesgroup.co.uk/businesses/ej-parker

#### **Pioneer Contracting**

1 The Moorings, Worsley, Manchester, M28 2QE 0161 950 2873 www.pioneercontracting.co.uk

#### **PV Plus**

3 Radcliffe Court, Southampton, SO14 oPH 02380 170215 www.pv-plus.co.uk

#### **Ren Energy**

Woodbastwick Road, Blofield Heath, Norwich, NR13 4RR 01603 713448 www.renenergy.co.uk

#### **Solar Sense**

Helios House, Brockley Lane, Backwell, Bristol, BS48 4AH

01275 461800 http://www.solarsense-uk.com