

# Solar PV Grant Scheme: Technical Bulletin

Solar PV Installation Guidance  
Series 2023-04-001 SPV



## Introduction

Microgeneration is undergoing increasing popularity with homeowners. This is a big opportunity for your business. However, if we are going to scale up together, we need to bring about improvements in the efficient management of installs.

This document describes the issues and related clarifications that commonly arise on the programme.

SEAI requires that registered companies and their installers pay close attention to the contents of this document and use it for training purposes.

Installation must be carried out in accordance with the relevant:

- SEAI Domestic Technical Specifications and Standards (DTSS) and
- SPV Contractor's Code of Practice (COP).

In Appendix 2 of the Quality Assurance and Disciplinary Procedures (QADP) there is a full list of checks, used by SEAI inspectors. Use these checks as part of your own Quality Management System before signing and submitting DOWs to SEAI. <https://www.seai.ie/publications/Quality-Assurance-and-Development-Programme-for-Solar-PV.pdf>

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## 1. Location of automatic isolation (shunt)

Over recent months our inspections unit have noted several instances of excessively long runs of DC cable on both the roof and the exterior of buildings. In a bid to limit this occurrence and therefore any related risk of shock or interference, guidance was issued in January regarding the location of the shunt. It has since been noted that this has resulted in the shunts occasionally being placed in locations that create their own risks in terms of installation and maintenance.

To clarify our position, reduce the risk of shock in the event of a fire and to eliminate long runs of DC cabling, SEAI recommend that the automatic isolation (shunt) be placed as close *as practicable* to the array.

In addition, installers should be cognisant when siting the shunt so as to be:

- Safe during installation.
- Safe during maintenance.
- Safe during visual inspection.
- Ensure effectiveness of isolation at reducing risk of electrocution in the event of a fire.

For Roof mounted systems, where the circuit from the solar PV modules *enters* the building, automatic isolation should be within 1.5m of the solar PV modules where practicable but, no more than 1.5m from where it enters the building.

For Roof mounted systems, where the circuit from the solar PV modules *does not enter* the building, automatic isolation should be within 1.5m where practicable of the solar PV modules.

For ground mounted systems, automatic isolation must be within 1.5m of the solar PV modules.

In all scenarios, care must be taken to ensure the DC cable is appropriately protected from external forces i.e., use of conduit or SWA cable etc.

## 2. Labelling

Labelling continues to be the highest noncompliance on the scheme. It is essential that all Safety and Information labels are in place. Inspector feedback notes the main labelling issues are:

- Warning Dual supply and isolation points label missing or not clearly visible inside meter cabinet. (or placed externally where prone to UV light degradation).
- Warning Dual supply and isolation points label missing on sub board
- Main Isolation point not labelled at sub-board
- Warning Live DC Cable label missing on DC cables and containment of DC cables.
- Pay particular attention to sub-boards and make sure to make yourself aware of the location of these in sheds, garages, outhouses etc.

We would ask you to please pay particular attention to labelling and brief the above and any feedback received from inspectors or through reworks to your wider installation teams. We have companies that have a 100% pass rate on labelling which shows that it can be done and is a testament to their general approach to quality management.

### 3. Inverter Non-Compliance

Another non-compliance that has seen an increase recently is where the Inverter is not set to Irish Grid Settings.

All inverters must comply with EN50549 with Irish Protection Settings as per ESB Document DTIS-230206-BRL (Conditions Governing the Connection and Operation of Microgeneration). This is available on the ESB website [https://www.esbnetworks.ie/docs/default-source/publications/conditions-governing-the-connection-and-operation-of-micro-generation-policy.pdf?sfvrsn=fccb2515\\_17](https://www.esbnetworks.ie/docs/default-source/publications/conditions-governing-the-connection-and-operation-of-micro-generation-policy.pdf?sfvrsn=fccb2515_17)

### 4. Installation of String Inverters

There have been cases that inverters are being mounted on block walls but don't have the required 150mm clearance all round. Please note in all cases, whether it is Class 0 or fire resistant on a block wall, that a minimum 150mm clearance is required from combustible materials.

Reference found in the SPV Code of Practice, Section 4.0 Components and Installation Requirements, 4.5.2 Inverters and Power Converters – Installation Requirements  
*'Where string inverters are not installed on a fire resistance surface (such as attic spaces), they must be installed on a fire-resistant substrate (Class 0) which extends to a minimum of 150mm beyond the edge of the inverter.'*

### 5. Shared Homeowner Documents

When it comes to providing links on the Shared Homeowner documents, SEAI's firewalls will no longer allow us to open and view documents that are shared from Dropbox or Google Drive.

Can you please ensure that where you are sharing from storage you use either  
**Microsoft OneDrive or SharePoint**

### 6. Post Works BER Assessments for Solar PV Grants

At present the Solar PV scheme has a high number of homeowners that are unable to find a BER assessor in their local area to carry out a post works BER, following the installation of their Solar PV system.

We are helping to resolve this issue by matching homeowners with BER Assessors that are available within a reasonable timescale. This will help resolve a major issue for homeowners.

We recently contacted all registered BER assessors to get an expression of interest in carrying out post works BER's and what areas they are ready to cover in the very near future. There was a high response rate, so we collated this list, broke it down by county and shared it with all homeowners currently waiting for a post works BER on their solar installation. Thereafter, it is the responsibility of the homeowner to contact the assessor to arrange their BER.

Once this BER is published, SPV team can immediately process their application for payment.

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