

How to Incorporate a SolShare Solar PV System into a SAP Assessment UK Version A1

INTRODUCTION TO THE SOLSHARE

Allume manufacture the world's only hardware for connecting multiple flats to a single rooftop solar PV system. It offers a simple and affordable method to improve the sustainability credentials of new-build and existing apartment buildings, while reducing the electricity bills for the households living within them.

As the SolShare connects flats directly to solar PV, it qualifies for SAP 10.2 solar PV credits under 'PV array serving one dwelling', improving EPC ratings. The SolShare can be installed by any renewable energy installer, qualifies for MCS accreditation, and is approved for installation within any DNO.

You can learn more about Allume and the SolShare via this 10-minute video presentation.

INTRODUCTION TO THIS DOCUMENT

When a SolShare system is designed, the proportion of the total solar PV array associated to each flat is set. Typically, the PV array is divided up in line with what the SAP requirements are for each flat – allocating more of the PV array to flats that needs a larger increase in their SAP score.

This document explains how to input the kWp into the SAP assessment for a flat that has been connected to a solar PV array via a SolShare. It also explains why a SolShare solar system is classed as 'PV array serving one dwelling' and provides a working example.

If you have any questions or require more technical information, like datasheets and installation manuals, please contact Allume:

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A. HOW TO INPUT A SOLSHARE PV ARRAY INTO SAP FOR FLATS?

When a SolShare system is designed, the proportion of the total solar system that is to be associated to each connection is set. This provides a defined kWp value that is associated to each flat. Following installation, the solar installer will generate an MCS certificate for each flat, specifying this kWp value.

This kWp value is inputted into the SAP assessment under 'PV array serving one dwelling'.

B. WHY IS IT 'PV ARRAY SERVING ONE DWELLING?

The SolShare system is a shared system serving multiple dwellings. Given this, it may seem as though the appropriate SAP category is 'PV array serving multiple dwellings, connected'. However, this is **not correct**. 'PV array serving multiple dwellings, connected' assumes that the generated solar from the shared PV array is delivered to the connected flats without the ability to ensure that each flat receives a set amount of generated energy.

The SolShare does guarantee a set proportion of solar energy will be delivered to each flat based on the amount of kWp that has been proportioned to it during commissioning, so falls under 'PV array serving one dwelling'.

C. EXAMPLE

Here's an example of a 20 kWp system connected to 11 single-phase flats and a three-phase Landlord supply. The kWp in the last column is the value that each connection has associated to it. This value will be shown on each flat's individual MCS certificate and will be used for the SAP assessment.

Note that there are only 4 connections on L2 so they can have a higher solar allocation.

Total system size (kWp)	Phase	System size per phase (kWp)	Connections	Connection allocation	kWp associated to the connection
oile (mop)	Thase	phase (RVP)	Landlord supply	20%	1.33
			Flat 1	20%	1.33
	L1	6.67	Flat 4	20%	1.33
			Flat 7	20%	1.33
			Flat 10	20%	1.33
			Landlord supply	25%	1.67
			Flat 2	25%	1.67
20.00	L2	6.67	Flat 5	25%	1.67
			Flat 8	25%	1.67
			No connection	0%	0.00
			Landlord supply	20%	1.33
			Flat 3	30%	2.00
	L3	6.67	Flat 6	25%	1.67
			Flat 9	15%	1.00
			Flat 11	10%	0.67

To take some examples for the SAP assessment:

- Flat 1 will have a 1.33 kWp system associated to it
- Flat 3 will have a 2.00 kWp system associated to it
- Flat 9 will have a 1.00 kWp system associated to it