

# How to Incorporate a SolShare Solar PV System into a SAP Assessment UK Version B2

# 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**' to improve each flat's EPC rating. The SolShare can be installed by any approved 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 the SAP requirements for each flat – allocating more of the PV array to flats that need 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 <u>each flat</u>, 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?

There are three options for how a PV array can be assessed according to SAP 10.2:

- 1. PV array serving one dwelling
- 2. PV array serving multiple dwellings, connected
- 3. PV array serving multiple dwellings, not connected

The SolShare system is a shared system serving multiple dwellings. Given this, it may seem as though the appropriate SAP category is option 2 'PV array serving multiple dwellings, connected'. However, this is **not correct**. Option 2 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 guarantees that a set proportion of solar energy will be delivered to each flat based on the set amount of kWp that has been proportioned to it during commissioning. It therefore falls under option 1 'PV array serving one dwelling'.

Option 3 is not appropriate as it refers to a PV array that is simply connected behind the landlord meter.

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# 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.

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

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

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