

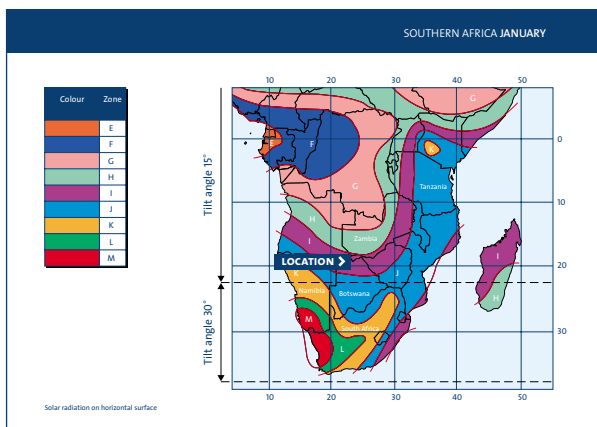
SQFLEX SYSTEM SIZING

Before starting to size the system, you need to determine three things:

- location
- total head
- required water quantity per day

Select the map for July or January, depending on which period of the year you want the system to be sized for.

The following example shows how the hardcopy version is used to select the correct SQFlex system for a person in Southern Africa.



The map shows how particular locations belong to various zones, and this is marked by different colours to make it easier to read. From the map, it is possible to ascertain two important details: the zone and the solar panel tilt angle. Our location is situated in Zone I, and the solar panel tilt angle is 15°

Now it is possible to choose the relevant sizing chart according to the given zone and colour. Here's where the total head and water requirements are used to select the correct pump and number of solar panels.

With a required total head of 40 m, and a daily water requirement of 7m³, the correct pump is an SQFlex 2.5-2. Furthermore, the number of solar panels necessary to power this SQFlex system is 8, corresponding to 344 Wp.

Southern Africa
SQFlex - Performance m³/day

Zone	Solar radiation (kWh/m ² /day)	Solar head (m)												No. of solar panels (CF-43)	Power (Wp)			
		5	10	20	30	40	50	60	70	80	90	100	110			120		
I	10.1	1.4	2.8	4.2	5.6	7.0	8.4	9.8	11.2	12.6	14.0	15.4	16.8	18.2	19.6	21.0	4	172
	12.1	1.7	3.4	5.1	6.8	8.5	10.2	11.9	13.6	15.3	17.0	18.7	20.4	22.1	23.8	25.5	5	344
II	10.1	1.4	2.8	4.2	5.6	7.0	8.4	9.8	11.2	12.6	14.0	15.4	16.8	18.2	19.6	21.0	4	172
	12.1	1.7	3.4	5.1	6.8	8.5	10.2	11.9	13.6	15.3	17.0	18.7	20.4	22.1	23.8	25.5	5	344