



## DATA SHEET

## Solar Water Heater SWD



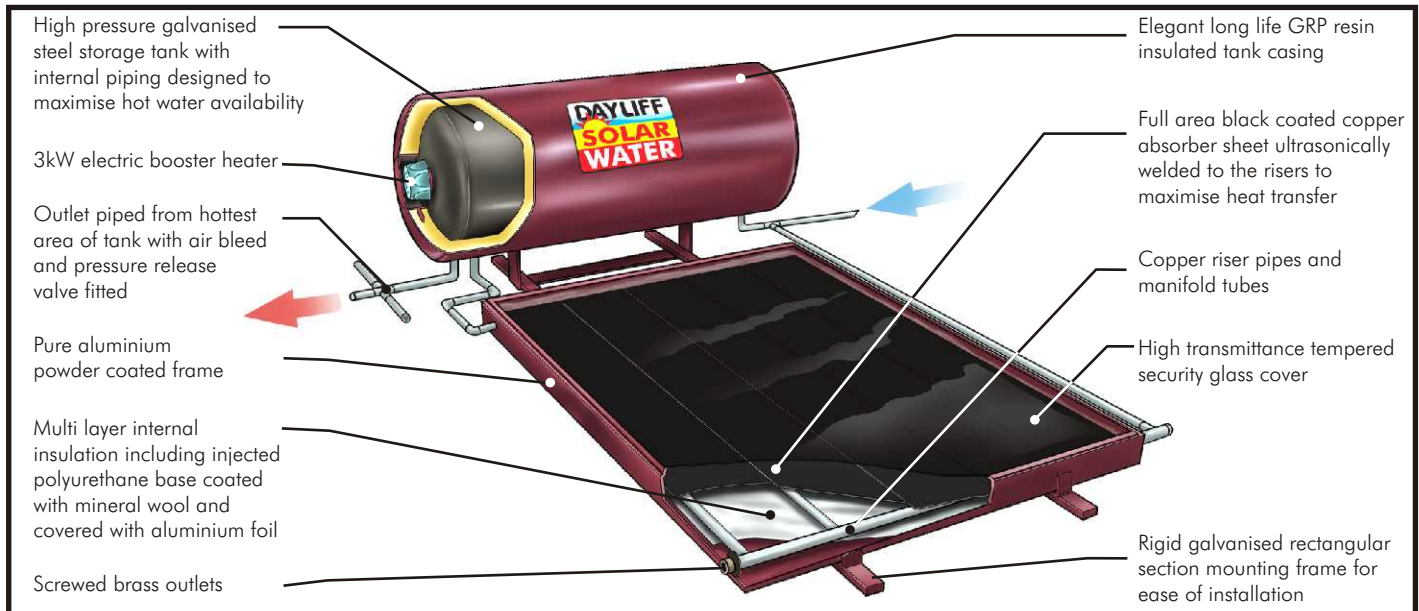
The advantages of solar heated hot water systems, especially in Africa's equatorial climates, are widely acknowledged - considerable energy cost savings and abundant hot water as well as associated environmental benefits. The principal is well established, a solar collector heats the water which is stored in a close coupled tank, the heating process being enhanced by the 'thermosyphon principle'. This occurs when there is a temperature differential in the system which provides natural water circulation, thus maximising heating efficiency.

Using this tried and tested principle Dayliff SWD Solar Water systems have been engineered using a combination of carefully matched imported and locally manufactured components. The result is a high specification, high quality product that provides dependable and efficient water heating, particular features including:-

- High efficiency solar collectors sourced from Ezinc, one of the world's largest manufacturers, which incorporate full area copper absorption plates ultrasonically welded to copper circulation tubes, advanced specification insulation and tempered security glass to provide energy absorption of up to 95%.
- Long life hot water storage tanks including resin insulated GRP casing for indefinite life, heavy duty galvanised steel cylinder internally piped to optimise hot water availability and a built in electric booster.
- Galvanised steel mounting frame and supplied complete with all fittings including air bleed and pressure release valve for simple installation.

Dayliff Solar Water systems use the direct heating principle and various sizes are available to suit most domestic and small institutional applications. They are effective and robust products designed to give many years of trouble free operation, the benefits of assured Davis & Shirliff quality, advanced design and high specification components in an economical and efficient package providing an unbeatable solution for all hot water heating requirements.

## DESIGN FEATURES



## SPECIFICATIONS

Model	SWD160S	SWD160L	SWD220S	SWD220L	SWD320S	SWD320L
<b>System Tank Size (Litres)</b>	160		220		320	
<b>Typical Household (People)</b>	5		7		10	
<b>Collector Model</b>	1XSuperline S	1XSuperline L	1XSuperline L	2XSuperline S	1XSuperline XXL	2XSuperline L
<b>Collector Area (M<sup>2</sup>)</b>	1.7	2.3	2.3	3.4	2.9	4.6
<b>Collector Weight (kgs)</b>	32	41	41	64	51	82
<b>Collector Fluid Capacity (litres)</b>	2.2	2.8	2.8	4.4	3.3	5.6
<b>Max Heat Output/Day (kWhrs)</b>	9	12	12	18	15	24
<b>Min Heat Output/Day (kWhrs)</b>	6	8	8	12	10	16

### NOTE

- Standard output systems (S Models) should be used in hot locations and high output systems (L Models) in more temperate ones. However hot water availability will vary throughout the year depending on prevailing irradiation levels and electric boosters may be necessary on cooler days..
- Maximum heating output is based on average irradiation levels of 6000W/m<sup>2</sup>/day prevailing in September - March and minimum Heating output is based on average irradiation levels of 4000W/m<sup>2</sup>/day prevailing in June/July and are for indicative purposes only.

## OPERATING CONDITIONS

**Water Quality:** Water outside the following limits should be appropriately pre-treated:

**Clarity:** clear, **TDS:** <600mg/l, **Hardness:** <200mg/l CaCO<sub>3</sub>, **Saturation Index:** >0.8<1.0,

**Test Pressure:** Tank - 5Bar, Collector - 14Bar

**Max Operating Pressure** - 3.5Bar

**Max Flow Rate** - 2m<sup>2</sup>/hr

## DIMENSIONS

Dimensions (mm)	SWD160S	SWD160L	SWD220S	SWD220L	SWD320S	SWD320L
<b>A</b>	920	1200	1200	1940	1200	2500
<b>B</b>	1920	1890	1890	1920	2440	1890
<b>C</b>	2700	2680	2680	2700	3220	2680
<b>D</b>	1080	1080	1480	1480	1880	1880
<b>E</b>	600	600	600	600	600	600
<b>F</b>	700	700	700	700	700	700
<b>Empty Weight (kgs)</b>	100	110	135	170	180	220
<b>Full Weight (kgs)</b>	260	270	355	395	490	540

NB. Contents herein are not warranted. The right is reserved to amend specifications without notice.

AVAILABLE FROM



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