Gledhill
the cylinder specialist

SunSpeed

Hot water cylinder designed for use with solar panels

SUPPLIERS TO THE MERCHANT TRADE FOR OVER 35 YEARS

SunSpeed

Sunspeed is a domestic hot water cylinder designed for use with solar panels, with cylinder capacities ranging from 120 to 332 litres.

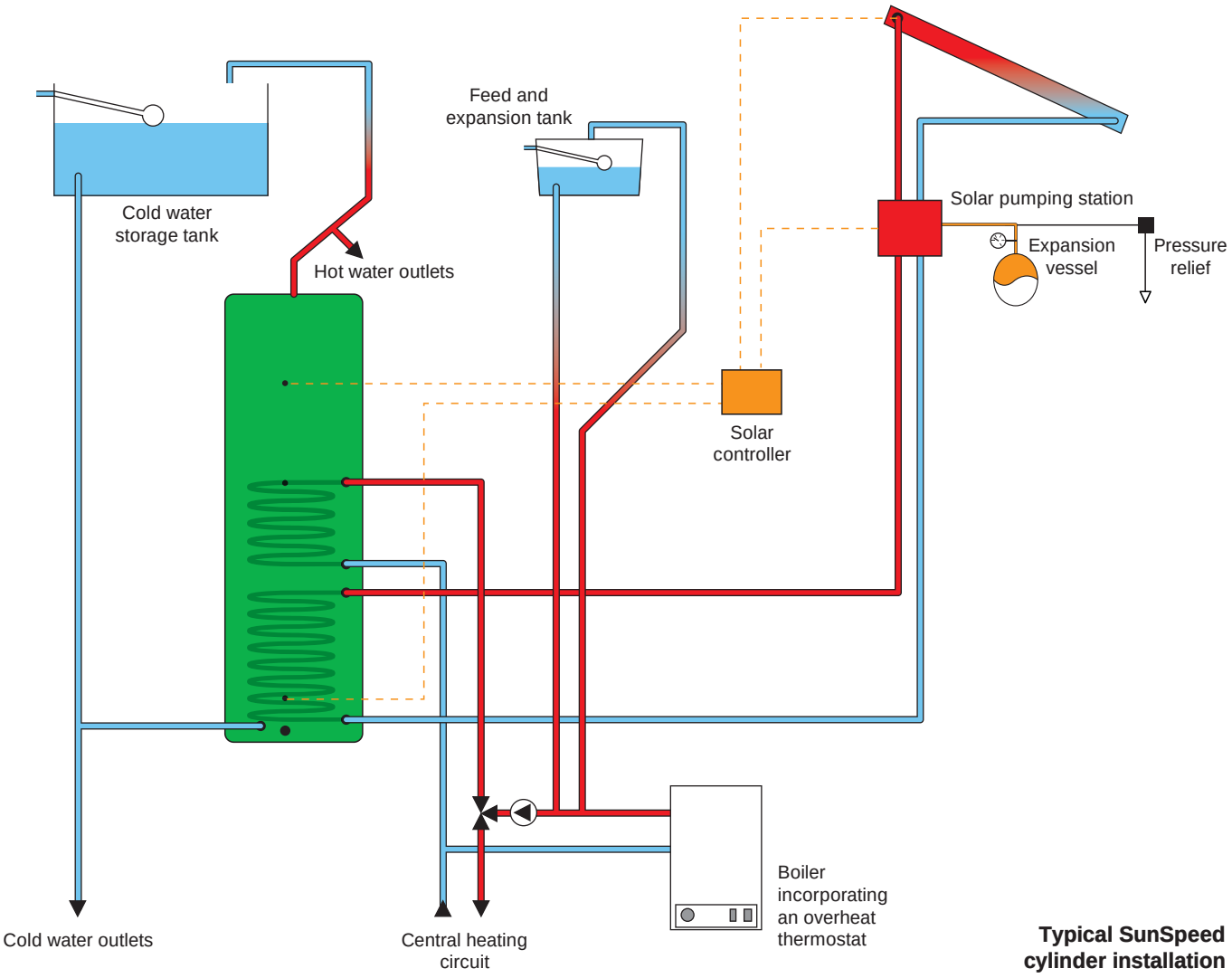
It is a copper cylinder with two heat exchangers, one for solar input and one for a boiler input.

The dedicated solar volumes range from 34% to 51% with the majority exceeding 40% enabling the best use of the solar panels. These dedicated solar volumes allow maximum suitable solar panels surface area from 2.7m^2 to 6.7m^2. The surface area of the solar heat exchanger coil is designed to exceed Building Regulations requirements.

The boiler coil comes into play in the cooler months of the year as the solar input diminishes. A correctly sized cylinder will ensure enough hot water is available to the householder during these months as the dedicated solar volume will not be heated by the boiler. The boiler coil is sized appropriate to the cylinder and gives a recovery time of less than 26 minutes with sizes to meet all regulations.

The SunSpeed is an open vented cylinder which makes the location of the cylinder more flexible because the cylinder does not require a safety discharge pipe and makes it inherently safe. It is made from recyclable materials and we will buy back and recycle all our cylinders at the end of their lives if replaced by a Gledhill cylinder.

The SunSpeed cylinders are insulated using 35mm HCFC free EnviroFoam to comply with Part L1A and L1B of the Building Regulations. This insulation incorporates Polyol which is derived from Rapeseed oil - a fully renewable resource, with an industry leading Global Warming Potential of 0.7. It also provides exceptionally low standing heat loss.



Typical SunSpeed cylinder installation

The selection of the correct cylinder is based on;

1. Matching the solar panel to the dedicated volume and heat exchanger size (For every square metre of solar panel the dedicated solar volume needs to be 25 litres and the heat exchanger surface area must be at least 0.1m^2)
2. Matching the cylinder volume to the house and its occupants.

The following table is to be used as a selection guide only.

SunSpeed Model Selection		
Bedrooms	**Bathrooms**	**Model Required**
1-2	1	Sun120, Sun140, Sun155
2-3	1	Sun150, Sun 165, Sun170, Sun175
3-4	1 + En-suite	Sun190, Sun205, Sun220
4-5	2	Sun270, Sun330

SunSpeed Technical Specification								
Cylinder	**Nominal overall capacity (litres)**	**Cylinder size (mm)**	**Overall dimensions (mm)**	**Heat loss (kW/24hr)**	**Dedicated solar volume (litres)**	**Surface area of solar coil (m^2)**	**Back up heat exchanger performance (kW)[4]**	**Recovery time (minutes)**
Sun120	120	1050 x 400	1085 x 470	1.71	41	0.27	13.1	19
Sun140	138	1200 x 400	1235 x 470	1.87	55	0.27	13.1	20
Sun155	150	1300 x 400	1325 x 470	1.96	61	0.27	14.7	19
Sun165	163	1400 x 400	1435 x 470	2.05	66	0.27	14.9	21
Sun175	175	1500 x 400	1535 x 470	2.15	78	0.34	14.9	21
Sun150	150	1050 x 450	1085 x 520	1.95	60	0.27	14.9	19
Sun170	174	1200 x 450	1235 x 520	2.09	77	0.34	14.9	21
Sun190	190	1300 x 450	1335 x 520	2.20	84	0.34	16.7	20
Sun205	206	1400 x 450	1435 x 520	2.31	92	0.40	16.3	22
Sun220	222	1500 x 450	1535 x 520	2.42	109	0.47	16.4	22
Sun270	269	1800 x 450	1835 x 520	2.75	132	0.61	19.6	26
Sun330	332	1800 x 500	1835 x 570	3.22	170	0.67	19.6	26

Notes:

1. The maximum working head on all SunSpeed cylinders is 10m.
2. The maximum working pressure of the solar coil is 6 bar.
3. The maximum working pressure of the primary coil is 3 bar.
4. The back up heat exchanger performance is calculated at 0.25l/s with a flow temperature of 80˚C.