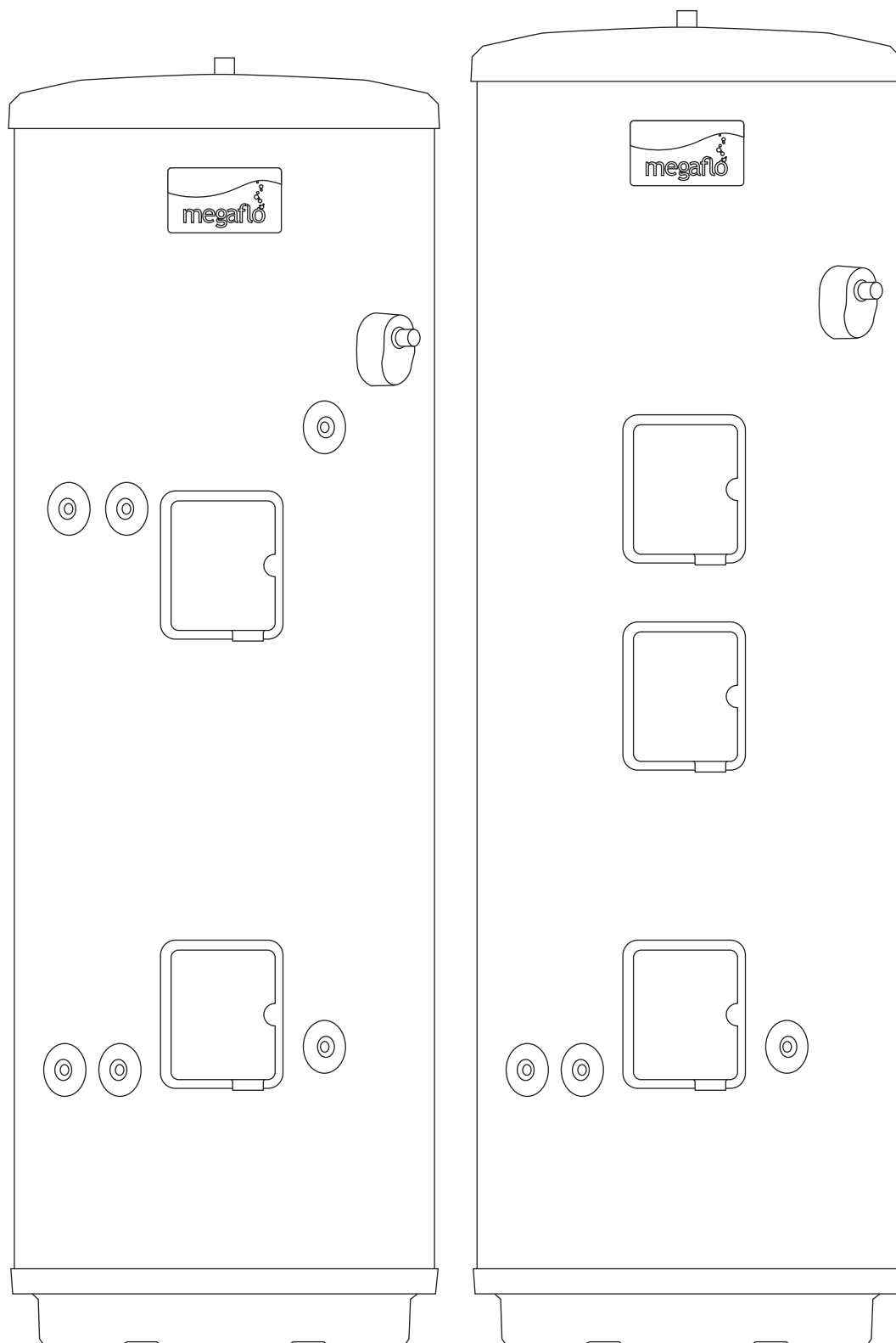




MEGAFLO **Eco Solar**

## Technical data

---



FOR THE ULTIMATE IN HOT WATER PERFORMANCE AND COMFORT





## COMPONENTS

THE FOLLOWING COMPONENTS ARE SUPPLIED AS STANDARD WITH MEGAFLO **Eco Solar**

FACTORY FITTED IMMERSION HEATER(S) AND THERMAL CONTROLS.

INDIRECT MODELS: LONG-LIFE SUPERLOY 825 ALLOY SHEATHED ELEMENTS AS STANDARD.

DIRECT MODELS: TITANIUM ELEMENTS AS STANDARD.

COLD WATER INLET CONTROL KIT COMPRISING OF:

0.35 MPa (3.5 bar) PRESSURE REDUCING VALVE

0.8 MPa (8 bar) PRESSURE RELIEF VALVE (BS EN 1567, BS EN1491, EN 13959)

¼ TURN ISOLATING VALVE

LINE STRAINER

NON-RETURN VALVE

FACTORY FITTED TEMPERATURE AND PRESSURE RELIEF VALVE SET AT 90°C / 1 MPa (10 bar)  
(BS EN 1490)

22mm TUNDISH

ADDITIONAL THERMOSTAT AND THERMAL CUT OUT (INDIRECT MODELS ONLY)

SOLAR CONTROL THERMAL CUT OUT

24 LITRE DHW EXPANSION VESSEL WITH BRACKETS

DRAIN VALVE

WIRING CENTRE (INDIRECT MODELS ONLY)

22mm 2 PORT MOTORISED VALVE (INDIRECT MODELS ONLY)





## TECHNICAL SPECIFICATION

Maximum supply pressure to incoming mains cold water combination valve (supplied)	1.6 MPa (16 bar)
Minimum recommended supply pressure and flow rate	0.15 MPa (1.5 bar) – 20 litres per minute
Operating pressure	0.35 MPa (3.5 bar)
Inner water container	High grade Duplex stainless steel
Thermal insulation (nominal thickness 60mm)	CFC/HCFC free, fire retardant expanded polyurethane foam with zero ozone depletion Global warming potential (GWP) = 3.1
Pressure relief valve	0.8 MPa (8 bar)
Immersion heater rating (A.C. supply only)	3kW @ 240V 2.8kW @ 230V
Solar / Auxiliary coil hydraulic resistance @ 15 l/min	0.0002 MPa (0.002 bar)
Connections	22mm male connections Secondary return ½" BSP female connection

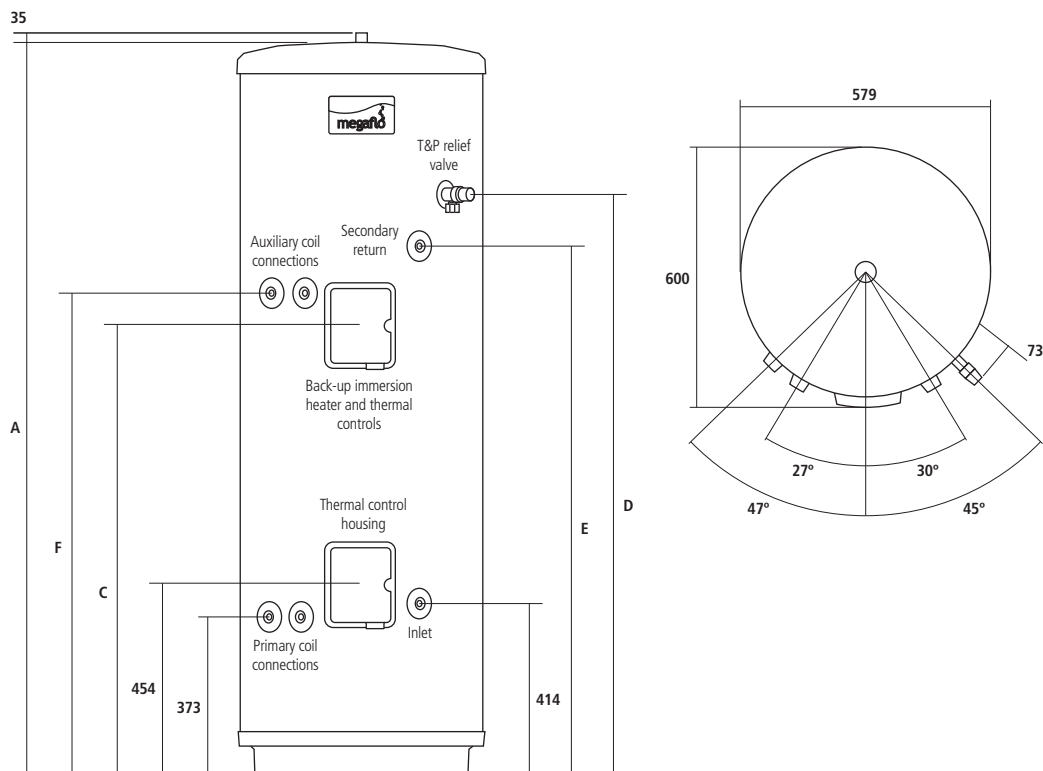
The unit must be fitted by a suitably qualified installer in accordance with current building regulations. Please contact your local Building Control Body for further advice.





# MEGAFLO Eco Solar

## Indirect models



Model	190 i	210 i	250 i	300 i
<b>A</b> Height (mm)	1387	1489	1738	2053
<b>C</b> Back Up Element Control Housing (mm)	814	949	1068	1255
<b>D</b> T&P valve (mm)	1020	1184	1378	1693
<b>E</b> Secondary Return (mm)	925	1095	1258	1573
<b>F</b> Auxiliary Flow and Return (mm)	735	1039	1142	1438
<b>Product code</b>	<b>95050511</b>	<b>95050513</b>	<b>95050515</b>	<b>95050517</b>
Nominal capacity (litres)	190	210	250	300
Auxiliary volume	120	120	145	175
Expansion vessel size (litres)	24	24	24	24
Insulation thickness (mm)	60	60	60	60
Immersion heater rating (kW)	1 x 3	1 x 3	1 x 3	1 x 3
Weight empty (kg)	45.5	47.5	56.5	66.5
Weight full (kg)	235.5	257.5	306.5	366.5
Solar coil surface area (m <sup>2</sup> )	1.1	1.1	1.1	1.1
Auxiliary coil heat transfer – primary flow 15 l/min (kW)*	18	18	18.7	24.5
Standing heat loss (kWh/24h)	1.32	1.41	1.56	1.84
Standing heat loss (kWh/year)	481.8	514.65	569.4	671.6
Max flow at 3.5 bar (l/min)**	70	70	70	70
Max flow at 1 bar (l/min)**	40	40	40	40
Heat up time Δt 45K primary flow 15 l/min (mins)	21	21	24.5	22.5

\*At primary flow temperature 80°C (15l/min). \*\*MCWS static pressure (Calculated using nominal capacities).  
All MEGAFLO Eco cylinders are manufactured from high grade Duplex stainless steel.

POTABLE WATER EXPANSION VESSEL				
<b>Model</b>	<b>190</b>	<b>210</b>	<b>250</b>	<b>300</b>
Litres	24	24	24	24
Pre-set pressure (bar)	3	3	3	3
Connection (mbsp)	¾	¾	¾	¾
<b>A</b> Height (mm)	492	492	492	492
<b>B</b> Diameter (mm)	280	280	280	280

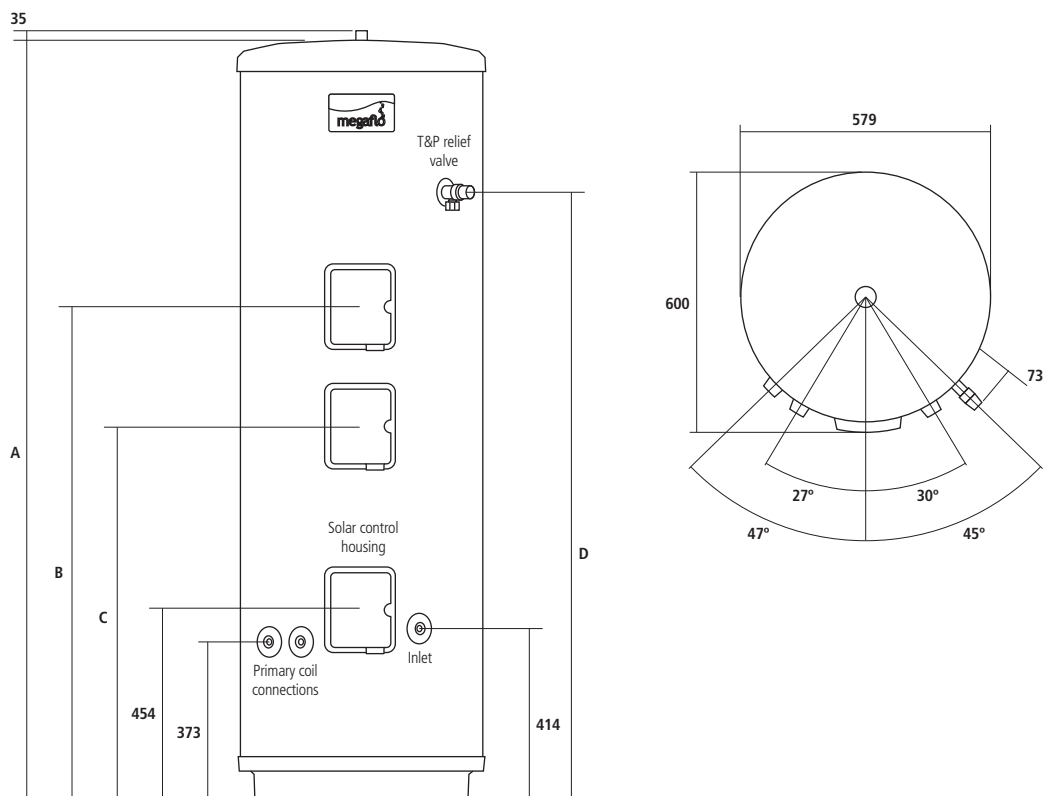


FOR THE ULTIMATE IN HOT WATER PERFORMANCE AND COMFORT  
FOR SPECIFICATION ADVICE TEL: 01603 420220 OR EMAIL: SPECIFIER@HEATRAESADIA.COM



# MEGAFLO Eco Solar

## Direct models



Model	170 D	210 DD	260 DD	300 DD
<b>A</b> Height (mm)	1229	1489	1802	2053
<b>B</b> Auxiliary Element Control Housing (mm)	-	1103	1167	1444
<b>C</b> Back Up Element Control Housing (mm)	794	829	888	983
<b>D</b> T&P valve (mm)	925	1184	1441	1693
<b>Product code</b>	<b>95050527</b>	<b>95050512</b>	<b>95050528</b>	<b>95050516</b>
Nominal capacity (litres)	170	210	260	300
Auxiliary Volume	120	140	170	200
Expansion vessel (litres)	24	24	24	24
Insulation thickness (mm)	60	60	60	60
Immersion heater rating (kW)	1 x 3	2 x 3	2 x 3	2 x 3
Weight empty (kg)	37.8	42.5	47.3	61.5
Weight full (kg)	207.8	252.5	307.3	361.5
Solar coil surface area (m <sup>2</sup> )	1.1	1.1	1.1	1.1
Standing heat loss (kWh/24)	1.25	1.41	1.63	1.84
Standing heat loss (kWh/year)	456.25	514.65	594.95	671.6
Max flow at 3.5 bar (l/min)**	70	70	70	70
Max flow at 1 bar (l/min)**	40	40	40	40
Heat up time lower 3(kW)	126	150	178	220
Heat up time upper & lower (6kW)	N/A	75	89	110
Heat up time upper boost 3kW	N/A	60	60	60

\*\*MCWS static pressure.

All MEGAFLO Eco cylinders are manufactured from high grade Duplex stainless steel.

POTABLE WATER EXPANSION VESSEL				
<b>Model</b>	<b>170</b>	<b>210</b>	<b>260</b>	<b>300</b>
Litres	24	24	24	24
Pre-set pressure (bar)	3	3	3	3
Connection (mbars)	3/4	3/4	3/4	3/4
<b>A</b> Height (mm)	492	492	492	492
<b>B</b> Diameter (mm)	280	280	280	280



FOR THE ULTIMATE IN HOT WATER PERFORMANCE AND COMFORT  
FOR SPECIFICATION ADVICE TEL: 01603 420220 OR EMAIL: SPECIFIER@HEATRAESADIA.COM



# MEGAFLO Eco Solar

## Installation guidance

### OUTLET / TERMINAL FITTINGS

The MEGAFLO **Eco Solar** can be used in conjunction with most types of terminal fittings.

It is advantageous in many mixer showers to have balanced hot and cold supplies, in these instances the balanced cold water supply should be teed off the supply to the MEGAFLO **Eco Solar** immediately after the cold water combination valve (see illustration on page 8). Branches to cold drinking outlets should be taken before the valve.

Outlets situated higher than the MEGAFLO **Eco Solar** will give outlet pressures lower than that at the heater, a 10m height difference will result in a 1 bar pressure reduction at the outlet fitting.

**NOTE:** Terminal fittings should have a rated operating pressure of at least 0.8 MPa (8 bar).

### LIMITATIONS

The MEGAFLO **Eco Solar** unvented water heater should not be used in any of the following circumstances:

Solid fuel boilers or any other boiler in which the energy input is not under effective thermostatic control unless additional and appropriate measures are installed.

Gravity circulation primaries.

Steam heating plant unless additional and appropriate safety devices are installed.

Ascending spray type bidets or any class 5 back syphonage risk requiring that a type AA, AB, AD or AG air gap is employed.

Water supplies that have either inadequate pressure / flow rate or where the supply may be intermittent.

Situations where it is not possible to safely convey any discharging water from the safety valves.

Areas where water consistently contains a high proportion of solids, e.g. suspended matter that could block the strainer, unless adequate filtration can be ensured.

### INSTALLATION REQUIREMENT

The installation must be carried out in accordance with the appropriate Building Regulations & Technical Standards. England & Wales – G3. Scotland – Section 4.9. Northern Ireland – P5. Furthermore in accordance with the Water Fittings Regulations (England & Wales) or Water Byelaws (Scotland).

Control of Solar Primary Circuit – Temperature control of the MEGAFLO **Eco Solar** must be carried out using a suitable proprietary solar differential temperature controller.

### WATER SUPPLY

It should be noted that the incoming mains water supply will be supplying both the hot and cold water requirements.

It is recommended that the maximum water demand is assessed and the water supply checked to ensure the demand can be met.

**NOTE:** A high mains water pressure will not always guarantee high flow rates.

Wherever possible the main supply pipe should be in 22mm or greater.

The minimum mains water supply requirements should be 0.15 MPa (1.5 bar) working pressure and 20 litres per minute flow rate. At these values outlet flow rates may be poor if several outlets are used simultaneously. The higher the available pressure and flow rate the better the system performance will be.

The MEGAFLO **Eco Solar** has an operating pressure of 3.5 bar which is controlled by the Cold Water Combination Valve. This valve can be connected to a maximum mains supply pressure of 1.6 MPa (16 bar).

The water supply must be of wholesome water quality (Fluid Category 1 as defined by the Water Regulations 1999).

The MEGAFLO **Eco Solar** is to be used for the storage of wholesome water (max.250mg/l chloride).

### ELECTRICAL SUPPLY

The MEGAFLO **Eco Solar** must be earthed.

The MEGAFLO **Eco Solar** is suitable for AC supply only.

Electrical installation must be carried out by a competent electrician and be in accordance with the latest I.E.E. wiring regulations

### SECONDARY CIRCULATION

If a secondary circulation system is required it is recommended that it be connected to the MEGAFLO **Eco Solar** as shown in the diagram on page 8.

The secondary return pipe bore should be sized accordingly and fitted with an appropriate check valve to prevent backflow. A suitable WRAS approved bronze circulation pump will be required.

**NOTE:** On larger systems, due to the increase in water content, it may be necessary to fit additional expansion volume to the secondary system by fitting an external expansion vessel to the circuit. This should be done if the capacity of the secondary system exceeds 10 litres.

As a guide:

Pipe capacities  
15mm O/D = 0.13 litres per metre  
(10 litres = 77m)

22mm O/D = 0.38 litres per metre  
(10 litres = 26m)

28mm O/D = 0.55 litres per metre  
(10 litres = 18m)

**NOTE:** The traditional solution of bringing a secondary return circuit through the cold water inlet is not allowed under regulations. The introduction of warm water at this point will disrupt the performance of the differential temperature controller and solar performance will be affected.





## WHICH UNIT TO USE

The choice of capacity for traditional cylinders is based on the hot water requirements of the dwelling. With solar cylinders the usable hot water will vary due to a number of factors such as siting of solar panels, time of year and weather conditions. For this reason, when choosing a solar cylinder you should ensure that sufficient usable hot water will be available during winter months where solar gain is at its lowest.

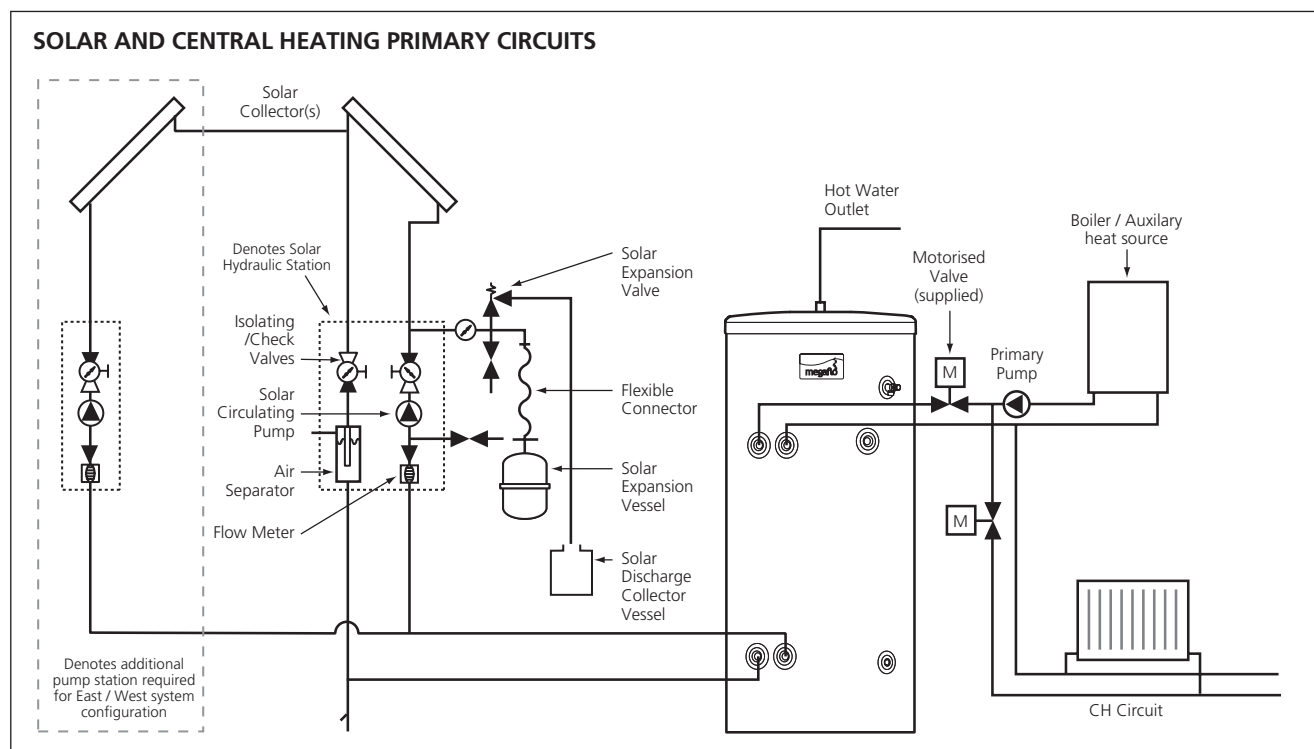
For example a non-solar dwelling of three inhabitants with a bath and a shower would normally require a 145 litre indirect cylinder.

A portion of the cylinder capacity must be dedicated to solar only, therefore the same dwelling with a solar system would require a 250 litre indirect solar cylinder which would provide 145 litres of hot water during periods where there is little or no solar gain. Some applications may require larger water quantities or higher recovery rates, therefore it is important to calculate the hot water requirement before selecting the cylinder capacity.

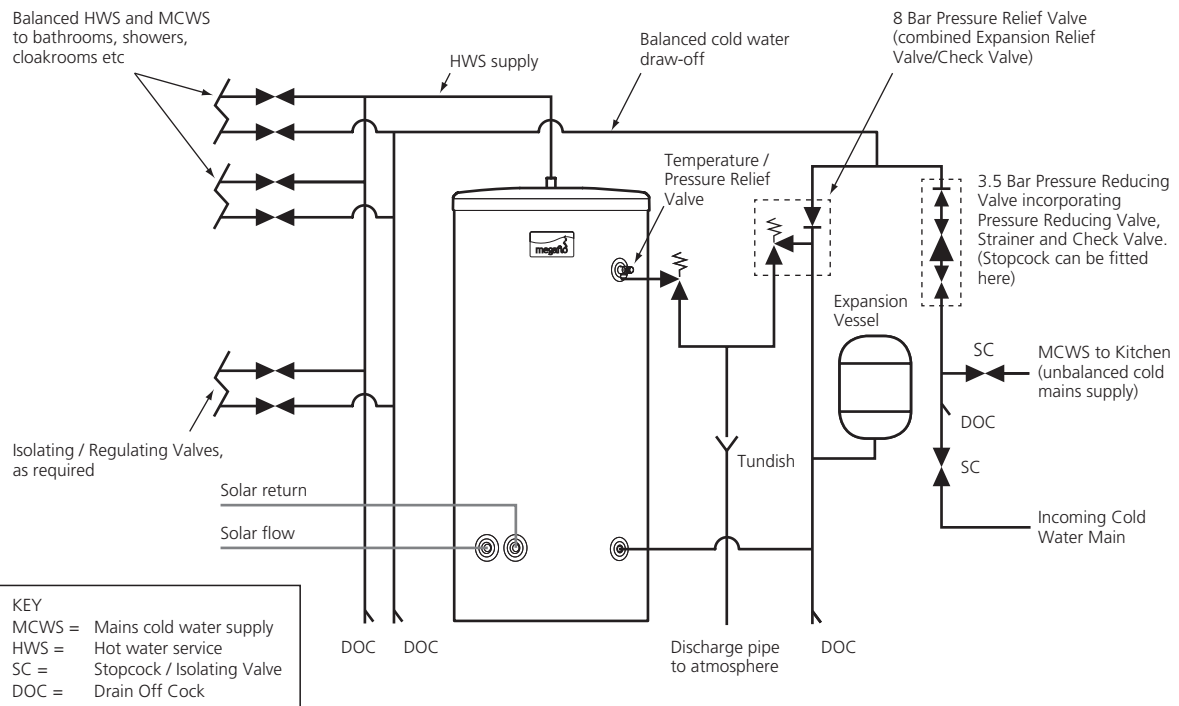
Indirect cylinders												
No. of beds	No. of baths / showers	Max. occupancy	On Roof panels	In Roof panels	Tube	Cylinder volume (litre)	Dedicated solar (litre)	On Roof (l/m <sup>2</sup> )	In Roof (l/m <sup>2</sup> )	Tube (l/m <sup>2</sup> )	Max. property size (m <sup>2</sup> )	Auxiliary volume (litre)
1	1	2	1	1	20	190	70	38	31	35	60	120
2	1	2	1	1	20	210	90	49	39	45	95	120
3	1	3	2	1	20	250	105	29	46	53	123	145
3	2	4	2	2	20	250	105	29	23	53	123	145
4	1	4 or 5	2	2	30	300	125	34	27	42	164	175
4	2	4 or 5	3	2	30	300	125	23	27	42	164	175
4 or 5	2	5	3	2	30	300	125	23	27	42	164	175

Direct cylinders												
1	1	1	1	1	10	170	70	38	31	70	60	100
1	2	2	1	1	20	210	70	38	31	35	60	140
2	2	3	2	1	20	210	70	19	31	35	60	140
2	2	4	2	2	20	260	90	24	20	45	60	170
3	2	4	2	2	20	260	90	24	20	45	95	170
3	3	4	3	2	30	300	100	18	22	33	95	200
4	3	5	3	2	30	300	100	18	22	33	113	200

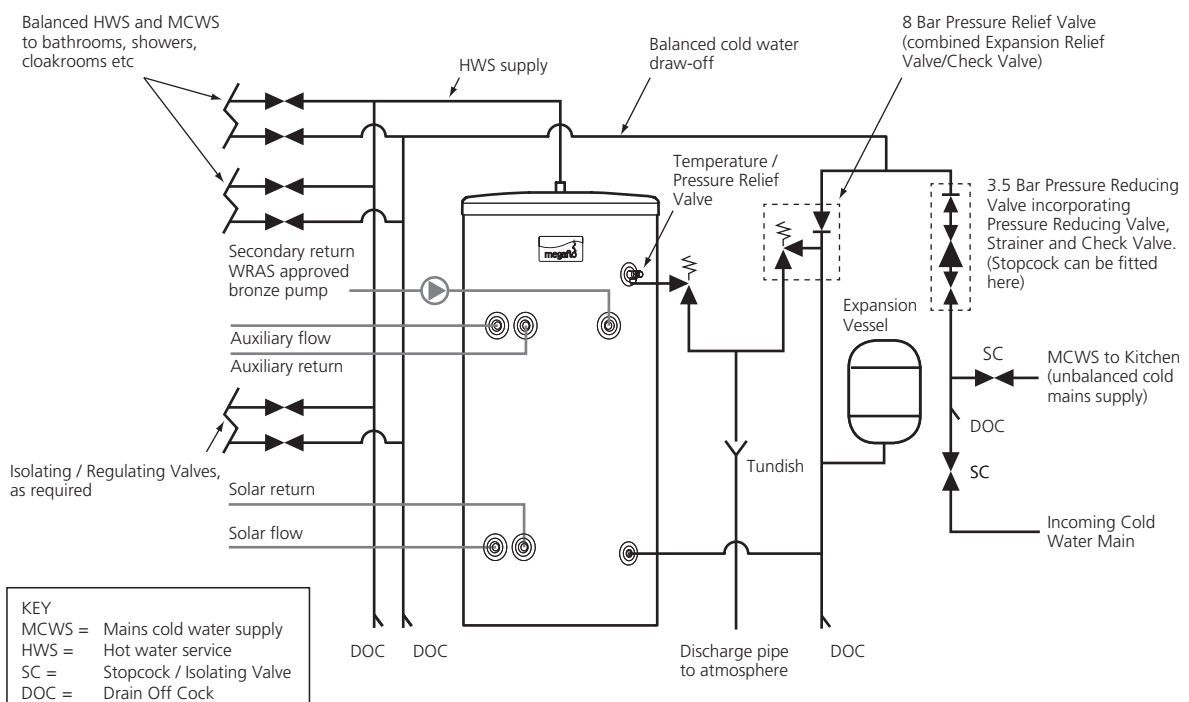
On-roof absorber area – 1.84 m<sup>2</sup>, in roof absorber area – 2.28 m<sup>2</sup>, tube absorber area – 1.00 m<sup>2</sup>. All cylinders are SAP compliant provided the maximum property size is not exceeded.



### TYPICAL INSTALLATION – DIRECT



### TYPICAL INSTALLATION – INDIRECT







	MEGAFLO 200 P ( 2.0 m <sup>2</sup> Portrait) for On Roof and In Roof and A frame	MEGAFLO 200 H (2.0 m <sup>2</sup> Landscape) for On Roof and In Roof and A frame	MEGAFLO 250 P (2.5 m <sup>2</sup> Portrait ) In Roof application only
<b>Collector</b>			
Type	Frame Collector	Frame Collector	Frame Collector
Material	Aluminium Extrusion 1.5mm	Aluminium Extrusion 1.5mm	Aluminium Extrusion 1.5mm
Colour	Grey RAL 7016	Grey RAL 7016	Grey RAL 7016
Wall thickness	1.5mm	1.5mm	1.5mm
<b>Connection Grommet</b>			
Material	Silicone	Silicone	Silicone
<b>Glass Cover</b>			
Material	Low iron matt texture glass	Low iron matt texture glass	Low iron matt texture glass
Thickness	3.2mm	3.2mm	3.2mm
Glass to frame seal	Black EDPM	Black EDPM	Black EDPM
<b>Absorber</b>			
Type Meander/Harp/Gate	Meander	Meander	Meander
Absorber plate Material	Alanod Mirotherm 0.4 wall thickness	Alanod Mirotherm 0.4 wall thickness	Selectively Coated Aluminium 0.4 wall thickness
Absorber Manifold Construction	Laser welded	Laser welded	Laser welded
<b>Insulation</b>			
Material	Glasswool	Glasswool	Glasswool
Density kg/m <sup>2</sup>	40 kg/m <sup>2</sup>	40 kg/m <sup>2</sup>	40 kg/m <sup>2</sup>
Thermal conductivity W/m	0.04	0.04	0.04
Lateral insulation	No	No	Yes
<b>Backcover</b>			
Material	Aluminium sheet 0.6mm thickness	Aluminium sheet 0.6mm thickness	Aluminium sheet 0.6mm thickness
<b>Specification</b>			
Absorber area	1.89m <sup>2</sup>	1.89m <sup>2</sup>	2.37m <sup>2</sup>
Zero loss co-efficient n0	0.794	0.801	0.814
Heat loss co-efficient a1	4.31 w/m <sup>2</sup>	3.81	3.639 w/m <sup>2</sup> K
Heat loss co-efficient a2	0.012W/m <sup>2</sup> K	0.018W/m <sup>2</sup> K	0.009W/m <sup>2</sup> K
Height	1753mm	1147	2187mm
Width	1147mm	1753	1147mm
Depth	87mm	87mm	87mm
Weight empty	34.3 kg	35	47kg
Maximum pressure	10bar	10bar	10bar
Shutdown temperature	213°C	213°C	198.1°C
<b>Evacuated Tubes Technical Detail</b>			
Number of tubes	10	20	30
Height	1996mm	1996mm	1996mm
Width	709mm	1418mm	2127mm
Depth	97mm	97mm	97mm
Weight	25kg	55kg	81kg
Maximum pressure	8 bar	8bar	8bar
Shutdown Temperature	286°C	286°C	286°C
Aperture area	1.07m <sup>2</sup>	2.15m <sup>2</sup>	3.23m <sup>2</sup>
Zero loss co-efficient n0	0.781	0.773	0.779
Heat loss co-efficient a1	1.44w/m <sup>2</sup> K	1.43w/m <sup>2</sup> K	1.07W/m <sup>2</sup> K
Heat loss co-efficient a2	0.0062W/m <sup>2</sup> K	0.0059W/m <sup>2</sup> K	0.0135W/m <sup>2</sup> K



## MEGAFLO Eco Solar

# Collector Kits and Accessories

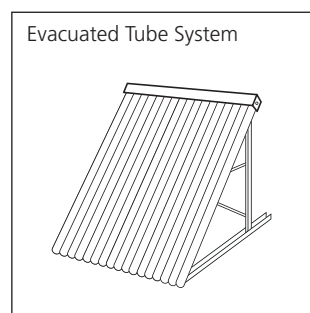
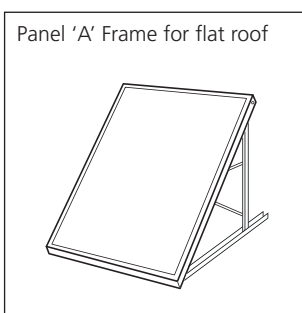
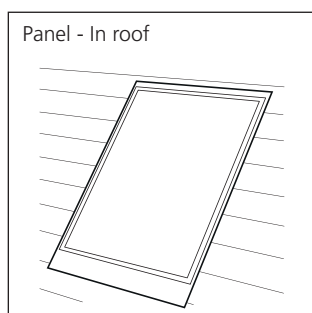
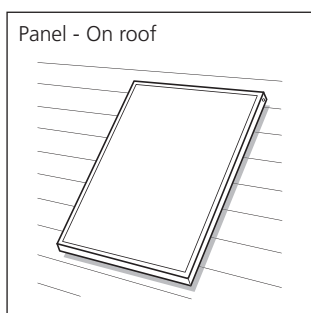
Components On Roof Kits	Components In Roof Kits	Components 'A' Frame Kits	Components Evacuated Tube kits
Portrait / Landscape Panels	Portrait / Landscape Panels	Portrait / Landscape Panels	Portrait / Landscape Panels
Mounting Rails and Brackets	Mounting Rails and Brackets	Mounting Rails and Brackets	Mounting Rails and Brackets
MEGAFLO Solar Pump Station	Flashing kit	'A' Frames	'A' Frames
Solar Expansion Vessel	MegaFlo Solar Pump Station	MegaFlo Solar Pump Station	MegaFlo Solar Pump Station
Differential Temperature Controller	Solar Expansion Vessel	Solar Expansion Vessel	Solar Expansion Vessel
Connecting Tubes	Differential Temperature Controller	Differential Temperature Controller	Differential Temperature Controller
Heat Transfer Fluid	1 m Connecting Tubes	Connecting Tubes	Connecting Tubes
	Heat Transfer Fluid	Heat Transfer Fluid	Heat Transfer Fluid

Code	Flat plate ( Solar Thermal panels)	
7210449	MEGAFLO Solar 1 x 2 m <sup>2</sup> Panel On Roof Slate / Tile	Portrait
7210450	MEGAFLO Solar 2 x 2 m <sup>2</sup> Panel On Roof Slate / Tile	Portrait
7210451	MEGAFLO Solar 3 x 2 m <sup>2</sup> Panel On Roof Slate / Tile	Portrait
7210452	MEGAFLO Solar 1 x 2 m <sup>2</sup> Panel On Roof Slate / Tile	Landscape
7210453	MEGAFLO Solar 2 x 2 m <sup>2</sup> Panel On Roof Slate / Tile	Landscape
7210454	MEGAFLO Solar 3 x 2 m <sup>2</sup> Panel On Roof Slate / Tile	Landscape
7210455	MEGAFLO Solar 1 x 2 m <sup>2</sup> Panel In Roof for Tiles	Portrait
7210456	MEGAFLO Solar 2 x 2 m <sup>2</sup> Panel In Roof for Tiles	Portrait
7210457	MEGAFLO Solar 3 x 2 m <sup>2</sup> Panel In Roof for Tiles	Portrait
7210465	MEGAFLO Solar 1 x 2 m <sup>2</sup> Panel In Roof for Slate	Portrait
7210466	MEGAFLO Solar 2 x 2 m <sup>2</sup> Panel In Roof for Slate	Portrait
7210467	MEGAFLO Solar 3 x 2 m <sup>2</sup> Panel In Roof for Slate	Portrait
7210470	MEGAFLO Solar 1 x 2 m <sup>2</sup> Panel In Roof for Slate	Landscape
7210471	MEGAFLO Solar 2 x 2 m <sup>2</sup> Panel In Roof for Slate	Landscape
7210472	MEGAFLO Solar 3 x 2 m <sup>2</sup> Panel In Roof for Slate	Landscape
7210460	MEGAFLO Solar 1 x 2 m <sup>2</sup> Panel In Roof for Tiles	Landscape
7210461	MEGAFLO Solar 2 x 2 m <sup>2</sup> Panel In Roof for Tiles	Landscape
7210462	MEGAFLO Solar 3 x 2 m <sup>2</sup> Panel In Roof for Tiles	Landscape
7210458	MEGAFLO Solar 1 x 2.5 m <sup>2</sup> Panel In Roof for Tiles	Portrait
7210459	MEGAFLO Solar 2 x 2.5 m <sup>2</sup> Panel In Roof for Tiles	Portrait
7210468	MEGAFLO Solar 1 x 2.5 m <sup>2</sup> Panel In Roof for Slate	Portrait
7210469	MEGAFLO Solar 2 x 2.5 m <sup>2</sup> Panel In Roof for Slate	Portrait
7210473	MEGAFLO Solar 1 x 2 m <sup>2</sup> Panel 'A' Frame Flat roof mounting	Portrait
7210474	MEGAFLO Solar 2 x 2 m <sup>2</sup> Panel 'A' Frame Flat roof mounting	Portrait
7210475	MEGAFLO Solar 3 x 2 m <sup>2</sup> Panel 'A' Frame Flat roof mounting	Portrait
7210476	MEGAFLO Solar 1 x 2 m <sup>2</sup> Panel 'A' Frame Flat roof mounting	Landscape
7210477	MEGAFLO Solar 2 x 2 m <sup>2</sup> Panel 'A' Frame Flat roof mounting	Landscape
7210478	MEGAFLO Solar 3 x 2 m <sup>2</sup> Panel 'A' Frame Flat roof mounting	Landscape

Code	Panel East West Array kits	
720835001	MEGAFLO Solar 1 x 2m <sup>2</sup> Panel On Roof East/West Array Slate or Tile	Portrait
720835201	MEGAFLO Solar 1 x 2m <sup>2</sup> Panel On Roof East/West Array Slate or Tile	Landscape
720835401	MEGAFLO Solar 1 x 2m <sup>2</sup> Panel In Roof East/West Array - Tile	Portrait
720835601	MEGAFLO Solar 1 x 2m <sup>2</sup> Panel In Roof Landscape 2m <sup>2</sup> East/West Array - Tile	Landscape
720888001	MEGAFLO Solar 1 x 2m <sup>2</sup> Panel In Roof East/West Array - Slate	Portrait
720888201	MEGAFLO Solar 1 x 2m <sup>2</sup> Panel In Roof East/West Array - Slate	Landscape
720835801	MEGAFLO Solar 1 x 2.5m <sup>2</sup> Panel In Roof East/West Array	Portrait
720888401	MEGAFLO Solar 1 x 2.5m <sup>2</sup> Panel In Roof East/West Array	Landscape

Code	Evacuated Tubes	
7210521	MEGAFLO Solar 20 x Evacuated Tube kit On Roof for Slate/Tiles	Portrait
7210522	MEGAFLO Solar 30 x Evacuated Tube kit On Roof for Slate/Tiles	Portrait
7210524	MEGAFLO Solar 20 x Evacuated Tube kit Flat Roof	Portrait
7210525	MEGAFLO Solar 30 x Evacuated Tube kit Flat Roof	Portrait
7210532	MEGAFLO Solar 20 x Evacuated Tube kit Building Facade	Portrait
7210534	MEGAFLO Solar 30 x Evacuated Tube kit Building Facade	Portrait
5130243	10 tube extension for 20 tube slate / tile kit	Portrait
5129980	10 tube e/w array kit	Portrait

Code	Multifit Accessories
5122762	6 x 22mm High Temperature Pipe Compression fittings Male
5122763	6 x 22mm High Temperature Pipe Compression fittings Female
5122764	2x22mm High Temperature Pipe Compression fittings -Tee
5122238	30m Flexible Stainless Steel pipe kit
5119549	Ferrox S1 Solar Fluid Suitable for tubes or panels
5130234	Electric Fluid filling pump
5122761	Fluid Filling hand pump
5122237	13m Solar Sensor wire
5122235	Immersion Heater Relay
5119559	Refractometer Antifreeze test kit
720294601	Solar safety valve discharge vessel



FOR THE ULTIMATE IN HOT WATER PERFORMANCE AND COMFORT  
FOR SPECIFICATION ADVICE TEL: 01603 420220 OR EMAIL: SPECIFIER@HEATRAESADIA.COM



### EU DIRECTIVES:

- Pressure Equipment Directive 97/23/EC.
- Low Voltage Directive (LVD) 2006/95/EC.
- Electromagnetic Compatibility (EMC) Directive 2004/108/EC.

### LEGISLATION:

- Building Regulations Part G and Part L (England and Wales).
- Scottish Building Standards Section 4 and Section 6.
- Building Regulations (Northern Ireland) Parts F1 and F2 and Part P.
- Water Supply (Water Fittings) Regulations (England and Wales).
- The Water Byelaws 2004 (Scotland).
- Water Supply (Water Fittings) Regulations (Northern Ireland).

### STANDARDS:

- Relevant clauses of the following standards are complied with:
  - EN 12897 – Specification for indirectly heated unvented cylinders.
  - EN 60335-2-21 – Safety-Particular requirements for storage water heaters.
- The stainless steel materials used comply with the relevant clauses of:
  - EN 10088 – Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes.

### COMPONENTS SUPPLIED COMPLY WITH THE FOLLOWING STANDARDS:

- BS EN 1490 Building Valves – Combined Temperature and Pressure Relief Valves.
- BS EN 1491 Building Valves – Expansion Valves.
- BS 6144 Specification for Expansion Vessels Using An Internal Diaphragm For Unvented Water Supply Systems.
- BS EN 1567 Building Valves – Water Pressure Reducing Valves and Combination Reducing Valves.
- BS EN 60730-1 Automatic Electrical Controls – For households and similar use. Part 1: General Requirements.
- BS EN 60730-2-8 Automatic Electrical Controls – Particular Requirements for Electrically Operated Water Valves.
- BS EN 13959 Anti-pollution Check Valves.

### THE USE OF THESE WATER HEATERS WILL AID IN COMPLIANCE WITH:

- Health and Safety Executive Approved Code of Practice L8: The control of legionella bacteria in water systems.
- BS EN 806 Parts 1 to 5: Specification for installations inside buildings conveying water for human consumption.
- BS 8558 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings.
- Chartered Institute of Building Services Engineers Guide B and Guide F.

### MANUFACTURED IN A FACTORY APPROVED TO:

- BS EN ISO 9001.
- OHSAS 18001.
- ISO 14001.

### APPROVALS:

- Kiwa Certification Number: 1011701.
- Nemko Certification Number: P10213136/A3.
- MCS Approvals:
  - 250 Horizontal - BBA 0075/04
  - 250 Vertical - BBA 0075/03
  - 200 Horizontal - BBA 0075/02
  - 200 Vertical - BBA 0075/01.





## Notes

---



MEGAFLO, HURRICANE WAY,  
NORWICH, NORFOLK, NR6 6EA

MEGAFLO may introduce modifications to their products from time to time. Consequentially the details given in this brochure are subject to alteration without notice.

## Contacts

Specification Advice Hotline

T: 01603 420220

F: 01603 420229

E: [specifier@heatraesadia.com](mailto:specifier@heatraesadia.com)

[www.heatraesadia.com](http://www.heatraesadia.com)



Please recycle this product once you have finished with it.

PART OF **HEATRAESADIA**

95 900 836 Issue 1 May 2014