



RECTANGULAR COPPER HOT WATER TANKS



McDONALD ENGINEERS
HOT WATER SYSTEMS

energy efficient hot water cylinders since 1945

The CUBEflow range of copper hot water tanks are available as either a traditional Combination tank, providing gravity hot water, or as a Thermal Store unit, delivering mains pressure hot water.

The range has a selection of models that can be heated electrically, or indirectly by a gas or oil boiler, multifuel stove or log burner, solar thermal, heat pump, or a combination of these sources.

A standard range of units are available, but we also manufacture bespoke tanks and can provide advice on sizing, design and a survey service if required.

WHY CHOOSE CUBEflow

- Flexibility – CUBEflow tanks can be designed to fit the space available
- Saves space - designed to take 27% less space than a cylinder, freeing up space for other uses.
- Reduces heat loss – as there is less surface area
- Low maintenance – CUBEflow tanks have no annual service requirements

THE ADVANTAGES OF COPPER

- It's more efficient than stainless steel at transferring heat from the primary coil to domestic water.
- A natural biocide, copper has unrivalled bacteria killing properties
- It's a proven material for water storage
- Copper is 100% recyclable



ELECTRIC COMBINATION UNITS

Suitable for use with Economy 7 and Economy 10 cheap rate electricity tariffs.

Capacity Litres	Width mm	Depth mm	Height mm	Full Weight Kilos	Max Daily Heat Loss	Application Guide
115	545	420	1065	150	1.10 K.W.H.	1 Person - No Bath
120	475	425	1285	158	1.15 K.W.H.	1-2 Persons - No Bath
135	545	470	1065	175	1.30 K.W.H.	1-2 Persons - With Bath
144	475	475	1285	185	1.35 K.W.H.	1-2 Persons - With Bath
160	545	450	1285	196	1.54 K.W.H.	2-3 Persons - With Bath
180	545	485	1285	218	1.73 K.W.H.	3-4 Persons - With Bath
210	545	570	1285	265	2.00 K.W.H.	All Others
225	545	575	1285	285	2.26 K.W.H.	All Others



OPTIONS:

- Fitted Immersion Heater
- Plugs
- Draincock
- Solar Option



INDIRECT SEALED SYSTEM COMBINATION UNITS

Suitable for use with sealed system boilers, district heating or central boiler schemes, where expansion of the primary system water is accommodated elsewhere in the system. Heat pump units also available.

Capacity Litres	Width mm	Depth mm	Height mm	Full Weight Kilos	Max Daily Heat Loss	Application Guide
115	545	520	865	153	1.10 K.W.H.	1-3 persons
135	545	580	865	176	1.30 K.W.H.	3-5 persons
160	545	670	865	199	1.54 K.W.H.	5-6 persons
180	545	735	865	221	1.73 K.W.H.	6-7 persons



OPTIONS:

- Fitted Immersion Heater
- Draincock
- Heatpump option
- Solar Option



INDIRECT COMBINATION UNITS

Suitable for open vented gravity systems (multi fuel or log burner), fully pumped gas/oil boiler primary systems and sealed systems.

The unit incorporates both a cold feed cistern and a primary feed and expansion tank, to fully separate the primary and domestic systems.

CUBEflow Rapid provides a readily available solution in an emergency replacement situation. It is designed to pass through most loft hatches or into most hot water tank cupboards. The latter may require the tank bearers to be lowered to keep the top of the tank at the same height. (Normally available from stock)

Capacity Litres	Width mm	Depth mm	Height mm	Full Weight Kilos	Max Daily Heat Loss	Gravity	Fully Pumped
100L	545	545	865	133	0.96 K.W.H.	1 Person	1 Person
115	560	560	865	155	1.10 K.W.H.	1-2 Persons	1-3 Persons
120 CUBEflow Rapid	480	480	1205	162	1.12 K.W.H.	2-3 Persons	3-4 Persons
135	590	590	865	175	1.30 K.W.H.	3-4 Persons	3-5 Persons
160	545	545	1195	214	1.54 K.W.H.	4-5 persons	5-6 Persons
180	545	545	1285	229	1.73 K.W.H.	5-6 persons	6-7 Persons



OPTIONS:

- Fitted Immersion Heater
- Draincock
- Solar Option
- Plug



ELECTRIC THERMAL STORE

This is a floor standing Thermal Store Mains Pressure System. The store itself is Vented and heated by immersion heaters to high temperature. The hot water for taps, comes directly from the mains and passes through a specially designed heat exchanger, which draws heat from the surrounding thermal store of water. This water then passes through a thermostatic mixing valve, which blends it to the correct temperature for the taps. The unit can be fitted anywhere in the home. Suitable for use with off peak electricity tariffs.

Capacity Litres	Width mm	Depth mm	Height mm	Heat Loss kw/24hrs	Property Type
100	570	495	865	1.18	1 bed with shower
150	570	495	1285	1.28	1 – 2 bed with bathroom/en suite shower
210	570	585	1285	1.48	2 – 3 bed with bathroom and en suite shower
300	640	640	1285	1.48	3 – 4 bed with 2 bathrooms and en suite shower



- OPTIONS:**
- Mounted on frame for above washing machine
 - Solid fuel connection
 - Draincock
 - Solar option



INDIRECT THERMAL STORE

This is similar to the Electric unit above, but the thermal store is heated indirectly by a coil linked to either a sealed system boiler, or a district central boiler plant. A back-up Immersion can also be fitted as well as additional connections for solid fuel.

Capacity Litres	Width mm	Depth mm	Height mm	Heat Loss (kw/24hrs)	Property Type
150	570	495	1285	1.28	2-3 bed with bathroom/en suite shower
210	570	585	1285	1.48	3-4 bed with 2 bathrooms and en suite shower



- OPTIONS:**
- Backup immersion heater
 - Mounted on frame for above washing machine
 - Solid fuel connection
 - Draincock
 - Solar option

In the interest of continued development, the manufacturers reserve the right to change the specification and design without notice.



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