

# FAQ Sheet

## 2010 Building Regulations, Part G - What can Honeywell offer?



### What is Part G?

Part G is an approved legal document that came into force on 6th April 2010 and will apply to all planning applications received after that date, it is not retrospective and therefore the earlier 1992 edition will apply to planning applications approved before that date.

### What does it cover?

The approved document is now in 6 parts as opposed to the original 3:-

- Part G1 – Cold water services
- Part G2 – Water Efficiency
- Part G3 – Hot Water Services
- Part G4 – WC's and associated facilities
- Part G5 – Bathrooms
- Part G6 – Kitchen and food preparation areas

There is also a new water efficiency calculator designed to comply with the requirements of maximum water consumption per day of 125 litres/person.

### Design of hot water storage systems - Vented

#### What do the new Building Regulations, Part G mean for controls on a vented cylinder in a domestic installation?

There is a requirement in part G.3 to fit controls to **vented** cylinders which is causing confusion.

*In the Secretary of State's view requirement G3(3) will be met for a hot water storage system that has a vented storage vessel if:*

- the storage vessel has a suitable vent pipe connecting the top of the vessel to a point open to the atmosphere above the level of the water in the cold water storage cistern and over it*
- in addition to the thermostat, either the heat source or the storage vessel is fitted with a device that will prevent the temperature of the stored hot water at any time exceeding 100°C*
- the hot water system has pipework that incorporates a provision for discharge from the safety devices to an appropriate place open to the atmosphere where it will cause no danger to persons in or about the building*

All three requirements must be met.

Honeywell advise that:

**A vented cylinder in a traditional open vented stored hot water system with a Boiler Interlock will satisfy these requirements, because the overheat thermostat in a boiler and the vent pipe will prevent the water at any time exceeding 100°C.**

- a. All open **vented** cylinders need an open vent (not a primatic cylinder).
- b. A device that will prevent the temperature of the stored hot water exceeding 100°C is that same vent pipe. (For hot water to exceed 100°C, due to the laws of physics, it would need to be under pressure, or have impurities in e.g. salts)
- c. The requirement for a **vented** cylinder to have pipework for discharging hot water from safety devices will be satisfied by an overflow from the header tank. (The references to safety valves are left over from draft requirement for a temperature and pressure relief valve that was to be fitted to a **vented** cylinder, but any discharge is still required to be conducted away safely)

Later in the document, G3(13) carries a reference to fitting a temperature relief or combined temperature and pressure relief valve to a **vented** cylinder. These may be fitted, but will never be made to operate.

Under normal circumstances, for control of a vented hot water storage cylinder, an **L641A1039** cylinder thermostat is suitable.

# FAQ Sheet



## What can Honeywell offer for VENTED cylinders under Part G3 – Hot water services?

If your building control officer insists on extra controls installation one of the following may be installed:-

Listed below are the paragraph numbers and the Honeywell solution.

3.13a If the cylinder has a pocket – **L6188C2008** insertion thermostat with manual reset

If no pocket then - **L6190C2004** pipe thermostat with manual reset which may be mounted on the flow pipe adjacent to the boiler.

If a combined water thermostat and safety cut-out are required then use **L6191B2005U** which provides a control setting of 25°C to 95°C and a trip point of 40°C to 110°C that has a manual reset and is complete with a well assembly.

3.13b – “an appropriate safety device, for example a temperature relief valve or combined temperature and pressure relief valve to safely discharge the water in the event of significant overheating”

We can offer the **TP152** temperature and pressure relief valve which is available in a number of preset configurations; this does however require a tapping in the cylinder to accommodate it.

## Prevention of scalding – Point of use

3.65 *The hot water supply temperature to a bath should be limited to 48°C by use of an inline blending valve or other appropriate temperature control device, with a maximum temperature stop and a suitable arrangement of pipe work.* We can offer the TM300 TMV which is WRAS and Buildcert approved thereby carrying the TMV2 approval.

3.68 *The length of the supply pipes from the thermostatic mixing valve to the outlet should be kept to a minimum.* There is no specified minimum, but the shorter the better for both control performance and protection from legionella. A **TM300** thermostatic mixing valve is suitable.

Both of these points apply to newly built bathrooms, whether in a new home or an existing home. This requirement does not apply to baths replaced in situ.

## What can Honeywell offer for UNVENTED cylinders under Part G3 – Hot water services?

Listed below are the paragraph numbers and the Honeywell solution.

3.18a “A non self resetting energy cut-out to disconnect the supply of heat to the storage vessel in the event of the storage vessel overheating.”

It is normal that **unvented** cylinders are supplied by the manufacturer with a full set of pressure and temperature safety devices, however if not:

If the cylinder has a pocket – **L6188C2008** insertion thermostat with manual reset

If no pocket then - **L6190C2004** pipe thermostat with manual reset which may be mounted on the flow pipe adjacent to the boiler.

If a combined water thermostat and safety cut-out are required then use **L6191B2005U** which provides a control setting of 25°C to 95°C and a trip point of 40°C to 110°C that has a manual reset and is complete with a well assembly.

3.18b “A temperature relief valve or combined temperature and pressure relief valve to safely discharge the water in the event of serious overheating”

We can offer the **TP152** temperature and pressure relief valve which is available in a number of preset configurations; this does however require a tapping in the cylinder to accommodate it.

## Prevention of excessive temperatures – Thermal store

3.64 *If a cylinder is capable of exceeding 80°C under normal operating conditions (this is normally only heat stores or for cylinders connected to solar collectors), then a thermostatic mixing valve should be fitted as a tempering valve to reduce the distribution temperature to 60°C.* A **TM300** thermostatic mixing valve is suitable.