

## **A Guide to Part G**

### **Sanitation, hot water safety and water efficiency**

**2010 Edition**



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## Building Regulation Approved Document G

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**Part G and the accompanying Approved Document set out new and amended requirements and technical guidance related to the safety and use of water in buildings.**

**The new and amended requirements and new Approved Document came into force on the 6 April 2010.**

### **The Requirements**

Previously the requirements in Approved Document Part G were:

G1 Sanitary conveniences and washing facilities  
G2 Bathrooms  
G3 Hot water storage

The new requirements are:

#### **G1 Cold water supply**

This is a new requirement. It states the following:

- Wholesome water must be provided where drinking water is drawn off.
- Wholesome water or softened wholesome water must be supplied to any washbasin in or adjacent to a room containing for the sanitary convenience.
- Wholesome water or softened wholesome water must be supplied to any washbasin, bidet, fixed bath and shower in a bathroom
- Wholesome water must be provided to any sink provided in any area where food is prepared.

G1 then requires that there must be a suitable installation for the provision of water of a suitable quality to any sanitary convenience fitted with a flushing device. It is not stipulated that a supply of wholesome water or softened wholesome water is required therefore these devices can be served by water from other sources, for example reclaimed 'grey-water', harvested rainwater, water from wells etc, water reclaimed from industrial processes etc.

G1 also applies to domestic greenhouses, small detached buildings and extensions and to buildings, including conservatories **if they are to be served by a water supply from a dwelling.**

#### **Definition - Wholesome Water**

Wholesome water means water complying with the requirements of regulations made under Section 67 (Standards of wholesomeness) of the Water Industry Act 1991.

#### **Definition - Softened Wholesome Water**

Softened wholesome water means water which would be regarded as wholesome for the purposes of regulations made under section 67 of the Water Industry Act 1991 (standards of wholesomeness) as they apply for the purposes of Part G of Schedule 1 in accordance with paragraph (2c) but for the presence of sodium in excess of the level specified in those regulations if it is caused by a water softener or water softening process which reduces the concentrations of calcium and magnesium.

## G2 Water efficiency

Requirement G2 and the associated new regulations 17K, 20E and 12E of the Building (Approved Inspectors) Regulations 2000 set out new requirements on the water efficiency of dwellings.

Requirement G2 states that reasonable provision must be made by the installation of fittings and fixed appliances that use water efficiently for the prevention of undue consumption of water.

Building Regulation 17K requires that the potential consumption of wholesome water by persons occupying a dwelling that is newly created **through new-build or conversion** must not exceed 125 litres per person per day when calculated in accordance with the methodology set out in the CLG's document '[The Water Efficiency Calculator for New Dwellings](#)'

Information about the efficiency of products whose manufacturers are members of the [Water Efficient Product Labeling Scheme](#) can be found on the scheme's web site.

The [WRC](#) has developed an [online version of the Water Efficiency Calculator for New Dwellings](#). This methodology is in accordance with the Government's National Calculation Methodology for assessing water efficiency in new dwellings in support of The Code for Sustainable Homes and the Building Regulations Approved Document Part G, 2010.

Building Regulation 20E (and Regulation 12E of Approved Inspectors Regulations) then requires that the person carrying out the work must, within 5 days after the completion of the work, give the Building Control body a notice specifying the potential consumption of wholesome water per person per day as calculated by the above methodology in relation to the completed dwelling. A Building Control body cannot certify work to be complete until this notice has been received.

This requirement applies when a dwelling is created through new-build or conversion.

## G3 Hot Water supply and systems

Requirement G3 sets out enhanced and amended provisions on hot water supply and safety. G3 applies safety provisions to all types of hot water systems and includes **a new provision on the prevention of scalding**.

**The former G3 only related to unvented hot water storage whereas the new requirement relates to all hot water systems.**

- The first part of G3 is a new requirement that heated wholesome water or heated softened wholesome water must be supplied to any wash basin, or bidet in or adjacent to a room containing a sanitary convenience, any wash basins, bidet, fixed bath or shower in a bathroom and any sink is provided in an area where food is prepared.
- The second part of G3 is an expanded requirement that provides that any hot water system, including associated storage or expansion vessel shall resist the effects of any temperature or pressure that may occur in normal use or as a consequence of a reasonably anticipated malfunction.
- The third part of G3 is an expanded requirement that provides that any part of a hot water system that incorporates a hot water storage vessel shall incorporate precautions to ensure **that the temperature of the stored water does not exceed 100°C** and that any discharge

from safety devices is safely conveyed to a point where it is both visible and will not cause a danger to persons in or about the building.

- The final part of G3 is a new requirement intended to prevent scalding and requires that the hot water supply to any fixed bath in a newly formed dwelling must be designed and **installed with measures to ensure that the temperature of the water that can be delivered to the bath cannot exceed 48°C. This final part of G3 applies when a dwelling is created through new-build or conversion.**

G3 also applies to domestic greenhouses, small detached buildings and extensions to buildings, including conservatories **if they are to be served by a water supply from a dwelling.**

#### **G4 Sanitary conveniences and washing facilities**

The new G4 replaces the former G1. The requirements of G4 are broadly consistent with the former G1 and the revised technical guidance of the approved documents mainly serves to clarify the precise requirements. In particular, additional guidance is provided on the separation of sanitary accommodation from places used for the preparation of food.

#### **G5 Bathrooms**

The new G5 replaces the former G2. The requirements of G5 are for, practical purposes, broadly consistent with the former G2 and the revised technical guidance of the approved documents mainly serves to clarify the precise requirements.

#### **G6 Food Preparation areas**

G6 contains a new requirement that sinks must be provided in areas where food is prepared.

#### **Notification of work**

Normally, it will be necessary to notify the Building Control Body (BCB) of the proposed work. However, where work is to be carried out under a self certification scheme listed in Schedule 2A, or where work is listed in Schedule 2B as not notifiable then notification is not required.

Annex 2 provides further information on the list of competent person self certification schemes relevant to sanitation, hot water safety and water efficiency. The full and current list can be found at the following web site. [www.communities.gov.uk](http://www.communities.gov.uk) The registered person carrying out the work must provide the building occupier and the BCB with a certificate stating that the installation complies with the requirements.

Some minor works do not require the person carrying out the work to notify the BCB. Non-notifiable work is set out in Schedule 2B and includes, with may provisos such things as replacement parts, stand alone and self contained fixed hot water appliance, the replacement of a sanitary convenience, basin and sinks etc, control devices to an existing cold water supply and providing a hot water storage system with a capacity not exceeding 15 litres.

## **Exemptions**

Schedule 2 of the Building Regulations lists classes of buildings which are exempt from the Building Regulations. However, some requirements of part G do apply to some exempted buildings. This includes the requirements of G1, G3(2) and G3(3) as applied to a greenhouse that is supplied with hot or cold water from a shared dwelling. In addition the requirements of G1, G3(2) and G3(3) will apply to any small detached building of Class VI of Schedule 2. This includes conservatories of less than 30 m<sup>2</sup> floor area which, is supplied with hot or cold water from a building controlled by the regulations.