



Department for
Communities and
Local Government

Approved Document G

Frequently Asked Questions



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Contents

Introduction	5
When do I have to comply with the “new” Part G?	5
Do I have to follow Approved Document G?	5
Requirement G1 – Cold Water Supply	5
What do the Building Regulations require?	5
Why has the concept of “softened wholesome water” been brought into the regulations and Approved Document?	6
Can softened water be used for drinking water and for water to kitchen sinks?	6
Requirement G2 and Regulations 36 and 37 of the Building Regulations 2010 – Water Efficiency	6
What water efficiency targets now have to be met?	6
When do I actually have to complete the Water Calculator?	7
Where can I find information on fittings in order to complete the water efficiency calculation?	7
How will actual water usage be monitored?	7
Requirement G3 – Hot Water Supply and Systems	7
What are the controls on the hot water supply and hot water systems?	7
Do these requirements apply to small water heaters such as water heaters of less than 15 litres that were previously exempt?	8
Is a combi boiler with a storage capacity of less than 15 litres therefore also not notifiable?	8
Does an overheat cut-out in an indirectly heated vented system have to be non-self-resetting in the same way as energy cut-outs do in directly-heated vented systems and in unvented systems?	8

Paragraph 3.60 of the Approved Document says that if a discharge pipe is connected to a soil stack the discharge pipe should be either polybutalene or cross linked polyethylene. Does this mean a polypropylene discharge pipe cannot be used? 8

Paragraph 3.60 of the Approved Document allows safety relief discharge pipes to connect to a soil stack if it can safely resist the temperature of the water discharged. Which materials are considered to be suitable? 9

If I am installing a new bathroom in an existing dwelling, do I have to fit a thermostatic mixing valve (TMV) to the bath? 9

When carrying out an emergency replacement of a vented cylinder on a like for like basis do I need to comply with all the guidance in the Approved Document? 9

Do vitreous enameled (glass lined) carbon steel storage vessels and calorifiers comply with Building Regulations requirements, as they are not mentioned in the standards listed in paragraph 3.11 of the Approved Document? 10

Requirement G4 – Sanitary Conveniences and Washing Facilities 10

What is required by G4? 10

Is a ventilated lobby needed between a toilet and a food preparation area? 10

Requirement G5 – Bathrooms 11

What bathroom provision is required by G5? 11

Requirement G6 – Kitchens and Food Preparation Areas 11

What is required by G6? 11

Which version of the Approved Document applies to my project? 12

Introduction

Revised Part G of Schedule 1 to the Building Regulations 2000 ("Part G") came into force on 6 April 2010 and the final Approved Document was published in March 2010.

The revised Part G regime involves significant updates to the previous 1992 regime as well as a significant extension to its scope. Below are FAQs to cover the main issues raised.

When do I have to comply with the "new" Part G?

Part G came into force on 6 April 2010. However, work will not be subject to these "new" provisions if:

work physically started before 6 April 2010, or
full plans were approved and conditions cleared by, or a plans certificate given to, a local authority before 6 April 2010 and work commences before 6 April 2011, or
where full plans are not required, a contract has been entered into prior to 6 April 2010 and work is commenced prior to 1 October 2010.

Details can be found in SI 2009/1219 as amended by SI 2009/2465 and SI 2010/719 and in Circular letters 05/2009, 10/2009 and 03/2010.

Do I have to follow Approved Document G?

No. The Approved Documents provide guidance about compliance with specific aspects of the Building Regulations in some of the more common building situations. There is no obligation to adopt any particular solution contained in the Approved Document if you prefer to meet the relevant requirement in some other way. However, you should check with your building control body that your proposals comply with the Building Regulations (which are reproduced in the green shaded boxes in the Approved Document).

If guidance in the Approved Document is followed there will be a presumption of compliance with the requirement(s) covered by the guidance. However, this presumption is not conclusive, so simply following guidance does not guarantee compliance in an individual case.

Requirement G1 – Cold Water Supply

What do the Building Regulations require?

Requirement G1 states that wholesome water must be supplied to:
any place where drinking water is drawn off.
any sink provided in any area where food is prepared.

It also requires that wholesome or softened wholesome water is supplied to: any washbasin or bidet provided in or adjacent to a room containing a sanitary convenience.

any washbasin, bidet, fixed bath or shower in a bathroom.

One of the reasons for setting out where wholesome or softened wholesome water should be supplied to is to clarify where it is acceptable for alternative sources of water, such as greywater and rainwater, to be used. G1(2) sets out that such alternative sources of water can be supplied to a sanitary convenience fitted with a flushing device.

Why has the concept of “softened wholesome water” been brought into the regulations and Approved Document?

The concept of “softened wholesome water” was introduced into Part G because in certain extremely hard water areas the water softening process can lead to sodium levels going beyond what is acceptable for wholesome water. This amendment makes clear that it is acceptable for such “softened wholesome water” to be supplied to washbasins, bidets, baths and showers.

Can softened water be used for drinking water and for water to kitchen sinks?

Yes, as long as the water remains wholesome after the softening process. However, the guidance to the Water Supply (Water Fittings) Regulations states that it is preferable for the cold water supply to the kitchen sink to come direct from the mains supply, in order to minimize the risk of non-wholesome water being supplied due to inadequate operation and maintenance

Requirement G2 and Regulations 36 and 37 of the Building Regulations 2010 – Water Efficiency

What water efficiency targets now have to be met?

This introduces a minimum water efficiency standard into the Building Regulations for the first time for new homes. It requires that the average water usage of a new home (including those created by a change of use) is no more than 125 litres per person per day or 110 litres/person/day if required as part of the planning permission

Estimated water usage must be calculated in accordance with the methodology set out in Appendix A of Approved Document G, unless ‘deemed to satisfy’ fittings described in Approved Document G are used.

When do I actually have to complete the Water Calculator?

We envisage that the Water Calculator will be completed initially when fittings and appliances are specified during the design stage and then revised if those fittings subsequently change. However, the provision does not require this, simply that a notice is given to the building control body within five days of the completion of work (or, where the building control body is an approved inspector, not later than the date on which the initial notice ceases to be in force under regulation 17 of the Building (Approved Inspectors etc) Regulations 2010 if that is earlier). The regulations require only that the notice states the potential consumption, however, we envisage that, in practice, a copy of the completed calculation table will be submitted to the building control body.

Where can I find information on fittings in order to complete the water efficiency calculation?

Information can be found from manufacturers and from some independent websites. The calculation should be based upon the data for the fittings actually installed.

How will actual water usage be monitored?

It will not. The provision is in terms of the estimated water usage of a home.

Requirement G3 – Hot Water Supply and Systems

What are the controls on the hot water supply and hot water systems?

With regard to supply, the provision requires that heated wholesome water (or softened wholesome water) is provided to any washbasin or bidet provided in or adjacent to a room containing a sanitary convenience, to any washbasin, bidet, bath or shower in a bathroom and to any sink provided in any area where food is prepared.

In relation to hot water systems, the provision extends the scope of the previous safety regime to all types of system (not just unvented ones). This includes new guidance in the Approved Document to ensure that all parts of the system are capable of resisting the effects of temperature and pressure. In particular, this introduces guidance to ensure cold water cisterns supplying and receiving water from hot water cisterns are properly supported, following tragedies resulting from just such failures.

In addition, it also introduces a provision that all new homes (including those created by a change of use) have the temperature of the hot water supplied to a bath limited to no more

than 48°C. It's likely that this will normally be complied with by the fitting of a thermostatic mixing valve (TMV).

Do these requirements apply to small water heaters such as water heaters of less than 15 litres that were previously exempt?

Yes, the provision applies to all hot water systems. However, to reflect the lower risk associated with such a system, the work is not notifiable to the building control body nor is there a requirement for a certificate to be produced that states the work complies with the Building Regulations (unless the associated electrical work is notifiable for the purposes of Part P).

Is a combi boiler with a storage capacity of less than 15 litres therefore also not notifiable?

Whilst a combi boiler may store less than 15 litres of hot water, it still needs to be notified as it is a) a combustion appliance and b) forms part of another fixed building service (space heating).

Does an overheat cut-out in an indirectly heated vented system have to be non-self-resetting in the same way as energy cut-outs do in directly-heated vented systems and in unvented systems?

No, sub-paragraph 3.13a simply requires that in a vented hot water storage system, "for all indirect heat sources, an overheat cut-out to disconnect the supply of heat to the storage vessel in the event of the stored water overheating" is incorporated.

This is because, for indirect heat sources on vented systems, water overheating is more likely to be for operational reasons, for example, on solar-powered systems because of a very hot day and little hot water use. In such circumstances, self-resetting reduces the inconvenience to users, by resuming normal operation as soon as the operational circumstances change, without compromising safety.

However, for direct heat sources, for example, electric immersion heaters, overheating associated with such devices is likely to be due to a failure of the device and the use of a non-self-resetting device would draw attention to the problem.

Paragraph 3.60 of the Approved Document says that if a discharge pipe is connected to a soil stack the discharge pipe should be either polybutalene or cross linked

polyethylene. Does this mean a polypropylene discharge pipe cannot be used?

As stated in its *Introduction* section, the guidance in the Approved Document is intended to provide advice on how to comply with the requirements set out in the Building Regulations and that “there may well be other ways of achieving compliance with the requirements”. The Department’s view is that it would be acceptable, subject to also complying with subparagraphs a, b and d of 3.60, for these pipes to be polypropylene to BS EN 1451-1, as recommended in BRE Information Paper 8/07.

Paragraph 3.60 of the Approved Document allows safety relief discharge pipes to connect to a soil stack if it can safely resist the temperature of the water discharged. Which materials are considered to be suitable?

Metal pipework, such as cast iron, is suitable.

For smaller hot water systems, BRE Information Paper 8/07 indicates that discharges can be made to PVCu stacks, provided that:

relief discharge is from domestic unvented hot water storage systems only – not combi boilers or sealed system boilers.

storage volumes do not exceed about 210 litres.

stacks are fully ventilated (ie. no stack cap or air admittance valve).

pipework complies with BS EN 1329-1:2000 or BS 4514:2001.

If I am installing a new bathroom in an existing dwelling, do I have to fit a thermostatic mixing valve (TMV) to the bath?

No, the requirement to ensure that the temperature of the water delivered to a bath is no more than 48°C temperature applies only to baths in new homes (including those created by a change of use) not in existing homes. However, people may want to consider the potential safety benefits of fitting a TMV, or some other means to prevent scalding, when they are adding a bath or having an existing one replaced or repaired, particularly where occupants are known to include those most at risk from scalding, that is, the very young and the very old.

When carrying out an emergency replacement of a vented cylinder on a like for like basis do I need to comply with all the guidance in the Approved Document?

Emergency replacement of a cylinder on a like-for-like basis would mean that the installation is no more unsatisfactory than before, so it would not be classed as a material

alteration and therefore not subject to building regulations as long as the work does not adversely affect the energy and safety controls.

However, where reasonably practicable, it would be good practice to provide the system with overheat protection as described in the Approved Document, including a non-resetting energy cut-out to any immersion heater. It would also be good practice to check that the support of any cold water cistern supplying the system complies with the guidance given in paragraph 3.15 of the Approved Document.

Do vitreous enameled (glass lined) carbon steel storage vessels and calorifiers comply with Building Regulations requirements, as they are not mentioned in the standards listed in paragraph 3.11 of the Approved Document?

Yes. There are no national or other standards for these products but a storage vessel or calorifier fitted with suitable safety devices that has passed a relevant pressure test, such as BS EN 89:2000 *Gas-fired storage water heaters for the production of domestic hot water*, should normally be accepted by the building control body as complying with the functional requirements of G3.

Requirement G4 – Sanitary Conveniences and Washing Facilities

What is required by G4?

This provision is similar to that contained in G1 of the previous edition of Approved Document G, but there is no longer any requirement for cleanability in the current edition. It sets out that adequate and suitable sanitary conveniences (WCs and urinals) must be provided in toilets or bathrooms and that adequate hand washing facilities must be provided in or adjacent to rooms containing sanitary conveniences. Any room containing a sanitary convenience, bidet or facility for washing hands associated with a sanitary convenience must be separate from a kitchen or area where food is prepared.

Is a ventilated lobby needed between a toilet and a food preparation area?

Part G only requires that a WC and/or associated handwashing facilities should be separated by a door from a food preparation area. In dwellings, a lobby is not needed, as illustrated in diagrams 2 and 3 in AD G.

However, for workplaces the Approved Code of Practice (ACOP) that supports the Workplace (Health, Safety and Welfare) Regulations 1992 requires that no room containing a sanitary convenience should communicate directly with a room where food is processed, prepared or eaten. Therefore, in workplaces (particularly in food businesses such as restaurants, cafes, catering businesses and shops selling food), toilets must not open directly into rooms where food is handled. If this is achieved by using a lobby, the lobby may need to be ventilated to deter air from the toilet moving to the food handling area.

Requirement G5 – Bathrooms

What bathroom provision is required by G5?

This requires that in dwellings and in buildings containing one or more rooms for residential purposes a bathroom must be provided containing a wash basin and either a fixed bath or shower.

This requirement is the same as in the previous edition but is now extended to include buildings containing one or more rooms for residential purposes for example hostels as well as to dwellings.

Requirement G6 – Kitchens and Food Preparation Areas

What is required by G6?

This is a new requirement that seeks to clarify requirements for sanitary provision. A suitable sink must be provided in any area where food is prepared.

Which version of the Approved Document applies to my project?

The table below shows which edition applies. However, the developer can choose to use a later version.

Work started or building notice, full plans application or initial notice submitted	Edition
Before 1 October 2015	2010 edition with 2010 and 2013 amendments
Between 1 October 2015 and 15 February 2016	Volume 1: 2015 edition
After 15 February 2016	Volume 1: 2015 edition with 2016 amendments

Note: The 2016 changes are included on the amendment slip issued by RIBA Enterprises for copies purchased after ??? 2015.