

Annex A

RESPONSE FORM

Proposals for amending Part G (Hygiene) of the Building Regulations and Approved Document G: Consultation

Respondent Details:	
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Is your response confidential? If so please explain why. (See disclaimer on page 9) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Comments:	

Provision is made throughout this questionnaire for you to provide additional comments. If, however you wish to provide more detailed comments on any aspect of the consultation then please feel free to append additional materials and supplementary documents, clearly marked and cross referenced to the relevant questions, as necessary.

The Department of Communities and Local Government wishes to engage better with its stakeholders by automatically notifying you of changes to the regulations and approved documents and of consultations on building regulations issues. Because of the UK Data Protection Act 1998 we need your consent before we can do this. Please indicate your consent by ticking the consent box below.

I/We hereby consent to the recording, storage and processing of my/our personal information by the Department of Communities and Local Government, and any data processor you may use, for the purpose of enabling stakeholder engagement

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Commercial Developers	<input type="checkbox"/>	Local authority – other (please specify)	<input type="checkbox"/>
Housing Association (Registered Social Landlords)	<input type="checkbox"/>	Fire & Rescue Authority	<input type="checkbox"/>
Property Management	<input type="checkbox"/>	Other non-governmental organisation	<input checked="" type="checkbox"/>
Builder – Main Contractor (commercial/volume housebuilder)	<input type="checkbox"/>	Householder	<input type="checkbox"/>
Builder – Small Builders (repairs/maintenance/extensions)	<input type="checkbox"/>	Trade body or association	<input type="checkbox"/>
Builder – Specialist Sub Contractor	<input type="checkbox"/>	Research/academic organisation	<input type="checkbox"/>
Manufacturer	<input type="checkbox"/>	Professional body or institution	<input type="checkbox"/>

Architects	<input type="checkbox"/>	Testing bodies	<input type="checkbox"/>
Civil/Structural Engineer	<input type="checkbox"/>	Specific interest or lobby group	<input type="checkbox"/>
Consultancy	<input type="checkbox"/>	Journalist/media	<input type="checkbox"/>
Individual in practice, trade or profession	<input type="checkbox"/>	Insurer	<input type="checkbox"/>
Local authority – Building Control	<input type="checkbox"/>	Other (please specify):	<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>
Geographical Location			
England	<input checked="" type="checkbox"/>	Wales	<input type="checkbox"/>
England and Wales	<input type="checkbox"/>	Other (please specify)	<input type="checkbox"/>

Cold Water Services

Q1. Requirement G1(1) would incorporate the requirements of existing legislation and standards on the provision of water and would provide a better understanding and visibility of requirements for water supplies in buildings. Some stakeholders have suggested that this requirement for the supply of water to all buildings would aid compliance and should not bring about additional costs. However, we would like to consider this further. Do you agree that this proposal would be beneficial and would not bring extra costs?

Yes: **No:** **Don't know:**

Comments: The proposal would be beneficial, but potential costs may be associated with grey water / rainwater systems already in place which do not meet the "suitable quality" mentioned in G1 (2).

Q2. Requirement G1(1) would clarify the provisions for the supply of a wholesome water supply to buildings (subject to the exemptions in the Building Regulations) where drinking water is drawn off, where food is prepared or where sanitary appliances are used for personal washing. Is it reasonable to expect all buildings in this context to be connected to a wholesome supply of water?

Yes: **No:** **Don't know:**

Comments: (e.g. are there any additional types of buildings that should be excluded?)

Q3. Requirement G1(1) specifies that wholesome water be provided to locations where drinking water is drawn off, where food is prepared and where sanitary appliances are used for washing (e.g. basins, baths, showers). Are there any other points in a building (including dwellings) where you would consider wholesome water is essential?

Yes: **No:** **Don't know:**

Comments: Whilst guidance allows for clothes washing with non wholesome water, the guidance should be clear that dishwashing machines should always be supplied with wholesome water. Water supplied to refrigerators with water dispensers and ice makers should also be wholesome.

There is ambiguity on outdoor use. Outdoor taps which are supplied with non-potable water should be clearly marked as such. Any water used to supply children's paddling pools / recreation areas, hot tubs, or swimming pools should also conform to standards outlined in the Bathing Water Regulations.



Q4. Requirement G1(2) specifies those locations where a supply of water is considered essential, but where wholesome water is not necessarily needed. Is it safe and reasonable to allow the use of water from non-wholesome sources to be used in (i) dwellings and (ii) in other buildings for WCs, urinals, external taps and laundry (subject to the exclusions in the guidance in this document)?

Yes: **No:** **No opinion:**

Comments: (e.g. are there any types of buildings where the use of non-wholesome water should not be allowed?)

Q5. It is expected that bringing together the various requirements to provide water to buildings will support better compliance. More consistent guidance would be beneficial to those seeking to comply and would assist consistent interpretation. Do you agree that it is helpful to include this guidance in the Approved Document? Are you satisfied with the guidance as drafted?

Yes: **No:** **Don't know:**

Comments: (e.g. what else should the guidance cover?)

It would be beneficial to include requirement G1 (1.7) for non-wholesome water as a requirement for wholesome water as well. Retention time in cold water supplies, as well as isolation from heat sources, will reduce the risk of legionella. To this end, it may be beneficial to include "minimising retention times and ambient temperature gains" in section G1 (1) d), pipe lagging should be recommended as both a safety measure and a means of reducing domestic consumption through avoiding large waiting times for desired water temperature at the point of use.

Q6. Have we included sufficient detail in terms of the risk assessment and testing or specification of treatment systems that should be necessary to allow use of water from non-wholesome sources whilst protecting health within a building?

Yes: **No:** **Don't know:**

Comments: Waterwise agrees that agreed minimum standards in non-wholesome water are a significant gap in regulation and welcomes the introduction of a British Standard. Should the standard not be prepared in time, the current guidelines seem sufficient with the following comments: The WRAS guidelines referred to in the document classify non-wholesome water as "Class B" water, and state that designer should "apply all relevant codes of practice published by government and professional agencies" but does not provide specific values for elements such as ph, BOD, turbidity, faecal coliform count etc. We have been unable to access the BSRIA

Technical Note, but subject to this containing details on levels of risk associated with quality indicators and types of use, these will be sufficient.

Q7. Is this guidance on appropriate sources and uses of non-wholesome water in dwellings sufficient?

Yes: No: Don't know:

Comments: See above.

Water Efficiency

Q8. Is this guidance on appropriate sources and uses of non-wholesome water for buildings other than dwellings sufficient?

Yes: No:

Comments:

Q9. Do you agree this requirement effectively implements the Government's policy for improving water efficiency in new homes, as signalled in its July 2007 statement? If no, please explain why not.

Yes: No: No opinion:

Comments:

In general, provisions for non-dwelling buildings will need to encourage the up-take of efficient fittings and fixtures where the code for sustainable homes does not. For instance, in an office building, the maximum consumption of 125 litres/head/day will be easily met. Therefore a benchmark beyond the 125 litres/head/day (Such as those provided by watermark (www.adsm.com/docs/Final%20Report_version%202_short.pdf) and those provided by CIRIA for hotels and office spaces (<http://www.ciria.org.uk/acatalog/C657.html>) may be more appropriate. If this is not possible, then regulation applying to individual fixtures and fittings may be required.

Q10. A method of calculation for water use is provided in the Code for Sustainable Homes. We propose a simplified version of this calculation for use where dwellings will be supplied only with wholesome water. Do you agree that a simplified version of the

calculation should be used in these situations?

Yes: **No:** **No opinion:**

Comments: The standard calculation should be simplified compared to the full calculator used for the Code. However, the simplified version should be as close as possible to the first page of the Code calculator and this fact should be emphasised in order to encourage developers of all sizes to consider aiming for water efficiency standards of Code Level 3 and above.

Q11. We propose that the water use calculation method provided in the Code for Sustainable Homes should be used where the design includes alternative water sources to demonstrate a greater level of water efficiency. Do you agree that the full calculation be used in these situations?

Yes: **No:** **No opinion:**

Comments:

Q12. Some of our stakeholders have expressed concern that the low flows in drains and sewers resulting from the proposed reductions in water use could lead to problems with blockages in drains and sewers. Do you agree that this may be an issue and if so do you have any substantial evidence of this?

Yes: **No:** **No opinion:**

Comments: Waterwise considers the question of low flow in drains and sewers to be inconclusive based on existing information. However, we understand the problem to be divided between older sewerage systems (which were designed under conditions of much lower per capita consumption than current rates and so will not be significantly affected), and those in new developments. When considering low flow rates in new developments, we feel that the key issue is enforcing an effective pipe gradient to account for water efficiency in new build. As such this is a regulatory issue connected to infrastructure, rather than an issue of appropriate flow rates.

Hot Water Services

Q13. Is it reasonable to expect a supply of heated wholesome water to be provided in all personal washing facilities and to sinks used in association with food preparation and washing up?

Yes: **No:** **No opinion:**

Comments:

Q14. Do you agree that it should now be a Requirement of the Building Regulations that all parts of hot water systems including cold water cisterns which could receive high temperature discharges from vented hot water storage systems should be able to withstand the effects of temperature and pressure that may occur either in normal use or in the event of such malfunctions as may reasonably be anticipated. ?.

Yes: **No:** **No opinion:**

Comments:

Q15. Do you agree that this requirement should apply to (a) new installations; (b) replacement of parts of installations including cisterns?

(a) new installations?

Yes: **No:** **No opinion:**

(b) replacements?

Yes: **No:** **No opinion:**

Comments:

Q16. The amendment of G3(3) is proposed to address failures of the temperature control devices in vented hot water systems. Is it reasonable to bring control of vented systems into the Building Regulations?

Yes: **No:** **Don't know:**

Comments:

Q17. If you agree that vented systems should be brought into the building regulations, in which cases should this apply:

(a) new installations?

Yes: **No:** **No opinion:**

(b) when replacing a hot water boiler?

Yes: No: No opinion:

(c) when replacing a hot water storage vessel (cylinder)?

Yes: No: No opinion:

Comments:

Q18. Do you agree that primary thermal storage systems containing more than 15 litres of water should be treated the same as other hot water storage systems under the proposed requirement G3:

(a) where the thermal store is used to heat domestic hot water?

Yes: No: No opinion:

(b) where the thermal store is only used for space heating?

Yes: No: No opinion:

Comments:

Q19. Do you agree with the view that the requirement in G3(4) (G3(b) in the existing Regulations) should be removed?

Yes: No: No opinion:

Comments:

Q20. Are you aware of other appropriate approaches to ensuring safety of all controlled hot water storage systems?

Yes: No: Don't know:

Comments:

Q21. Industry has advised that the proposed requirements and guidance for hot water systems outlined above are in line with current good practice in the industry. Their inclusion in the Approved Document will help raise awareness of such practice and ensure that clear guidance is available to all parts of the industry to support compliance.

However they should result in no additional costs to industry. Do you agree with this assessment? Please provide details of which elements of the proposals you believe will add cost or benefits, and what you think the additional costs will be and who you think they will fall on.

Yes: No: No opinion:

Comments:

Q22. Do you consider that there would be additional costs to Building Control Bodies as a result of the introduction of any of the above proposals, and, if so are you able to provide us with information on these?

Yes: No: No opinion:

Comments:

Q23. We would like to introduce controls to limit water temperatures at hot water outlets; however the current cost benefit analysis does not support a regulatory change (costs are currently assessed at about three times the benefits). Are you able to provide more information which we could use in further analysis of the costs and benefits? Please provide any additional information you can.

Yes: No: No opinion:

Comments:

Q24. If further evidence is forthcoming which reduces the gap between costs and benefits in the initial analysis, would you wish to see a provision which controlled the temperature at hot water outlets?

Yes: No: No opinion:

Comments: TMVs valves reduce the risk of legionaire's disease whilst protecting the user from scalding. Protection against this disease should be included as a benefit. In addition, there are potential savings in hot and cold water consumption due to a reduced time taken to achieve a desired temperature in showering /taps. In public buildings, the benefits of avoiding legal actions due to scolding should be included.

More generally, we would suggest that a cost-benefit analysis which involves injury or fatalities in vulnerable groups should be treated with caution. In our view it would be advisable to follow the scottish example and introduce an upper temperature limit of 48 C.

Q25. If you support the principle of introducing temperature control on hot water outlets in dwellings, subject to the preparation of a supporting Impact Assessment, which sanitary appliances would you like to see included?

(a) baths?

Yes: No: No opinion:

(b) showers?

Yes: No: No opinion:

(c) washbasins?

Yes: No: No opinion:

(d) bidets?

Yes: No: No opinion:

(e) kitchen sinks?

Yes: No: No opinion:

Comments:

Q26. If temperature controls were introduced, subject to the preparation of a supporting Impact Assessment, do you agree that all controlled outlets should be limited to 48°C? If No please state which outlets should be controlled to different temperatures and give details of the proposed temperature and why?

Yes: No: No opinion:

Comments:

Q27. If temperature controls were introduced, subject to the preparation of a supporting Impact Assessment, do you think that the same level of protection should be applied in buildings other than dwellings, and if so, which sanitary appliances would you like to see included?

(a) baths?

Yes: No: No opinion:

(b) showers?

Yes: No: No opinion:

(c) washbasins?

Yes: No: No opinion:

(d) bidets?

Yes: No: No opinion:

(e) kitchen sinks?

Yes: No: No opinion:

Comments: "Buildings other than dwellings" may include those with a large vulnerable population, such as schools, retirement homes, or hospitals. Vulnerable groups include the young, sick, or elderly. Waterwise has recently written the draft water management guidance document for Healthcare Facilities and has recommended TMVs as an effective means to simultaneously protect users from legionella and scolding. Therefore, the need for TMVs may be greater or smaller in non-dwelling buildings depending on who uses the building.

Q28. If temperature controls were introduced, subject to the preparation of a supporting Impact Assessment, to which types of work would you like to see regulations applied?

(a) the erection or extension of a dwelling or the creation of a dwelling by material change of use?

Yes: No: No opinion:

(b) the erection or extension of a building with rooms for residential purposes (e.g. residential homes, hostels, hotels) or the creation of rooms for residential purposes by material change of use?

Yes: No: No opinion:

(c) the erection or extension of any new building?

Yes: No: No opinion:

(d) the replacement of a sanitary appliance and/or associated taps which are controlled fittings in any building?

Yes: No: No opinion:

(e) the replacement of a sanitary appliance and/or associated taps which are controlled fittings in a dwelling?

Yes: No: No opinion:

(f) the replacement of a sanitary appliance and/or associated taps which are controlled fittings in a building with rooms for residential purposes?

Yes: No: No opinion:

Comments:

Q29. For vented hot water storage systems, we have proposed that systems incorporating one safety device in addition to the vent pipe and any thermostat would meet the requirements of G3(3). Do you agree that this is adequate to ensure the safety of people in the building?

Yes: No: No opinion:

Comments:

Q30. For vented hot water storage systems, we have proposed that systems with a boiler overheat control would meet the requirement G3(3). Do you agree?

Yes: No: Don't know:

Comments:

Q31. Should the provision for third party approval in paragraphs 3.18 be retained? Please provide reasons

Yes: No: Don't know:

Comments:

Q32. Paragraphs 3.19 and 3.20 contain provisions on marking of unvented hot water storage systems that were previously included in BS7206 but not in the replacement standard BS EN 12897. Do you agree that the Approved Document should include provisions for marking of unvented hot water storage systems with:

a) the information listed in 3.19? If no please state which items should not be included and give your reasons?

Yes: No: Don't know:

Comments:

b) the information listed in 3.20? If no please state which items should not be included and give your reasons?

Yes: No: Don't know:

Comments:

Q33. Do you agree that unvented hot water storage systems over 45kW, but less than 500 litres in capacity are normally supplied by a manufacturer as packages or units?

Yes: No: Don't know:

Comments:

Q34. If so should the provision for third party approval in paragraphs 3.18 be extended to cover these systems? Please provide reasons for your answer.

Yes: No: Don't know:

Comments:

Q35. If the guidance permits the use of temperature resistant plastic pipes for the discharge pipe D2, will it be possible to adequately distinguish the pipe material from other plastic pipes in order to ensure that the correct grade of pipe is used? If Yes, please explain how this might be achieved.

Yes: No: Don't know:

Comments:

Q36. It is proposed to permit the termination of a discharge pipe in a soil stack provided the soil stack is made from a suitably temperature resistant material. Do you believe it will be possible to ensure that a soil stack is made from a temperature resistant material particularly where the soil stack is in a service duct? If Yes, please explain how this might be achieved.

Yes: No: No opinion:

Comments:

WCs and Associated Facilities

Q37. Requirement G4 (4) would apply to other buildings such as institutions, hotels etc which may be workplaces and covered by current requirements. Do you agree that the Building Regulations the right place for this Requirement and that this change would not impose additional costs or other burdens?

Yes: **No:** **No opinion:**

Comments:

Q38. Are the changes to the wording of the guidance and the inclusion of diagrams 2 and 3 helpful in clarifying how WCs and associated hand washing facilities are provided in relation to kitchens in dwellings? If no, what alternative changes would you like to see?

Yes: **No:** **No opinion:**

Comments:

Q39. References to other sources of guidance and standards on the scale of provision of WCs, urinals and hand washing facilities in buildings other than dwellings has been added to aid in the design of buildings. Do you agree it is appropriate and helpful to include this in Approved Document G?

Yes: **No:** **No opinion:**

Comments:

Q40. Is it appropriate to include guidance on the performance of chemical and composting toilets in the Approved Document G?

Yes: **No:** **No opinion:**

Comments:

Bathrooms

Q41. The application of this Requirement is currently limited to dwellings. Do you consider that there is a need for a new requirement for the provision of adequate bathing facilities in buildings containing rooms for residential purposes e.g. hostels, hotels etc..?

Yes: No: No opinion:

Comments:

Food Preparation Areas

Q42. The introduction of a new Requirement has been proposed to align Part G with current practice. Stakeholders advise us that this will impose no new burdens. Do you agree that it would be beneficial to include this new requirement, and that it will introduce no additional cost or other burdens?

Yes: No: No opinion:

Comments:

Sanitary Appliances

Q43. The Requirement to install appliances to allow adequate cleaning is currently limited to WCs, urinals and washbasins. Is it reasonable to extend this to include other appliances (and which ones)?

Yes: No: No opinion:

Comments: Both taps and showers, particularly those with aerator fittings, are vulnerable to a build up of calcite deposits in hard water areas and have been known to serve as potential areas of bacterial growth. Making these easy to maintain would increase the performance to the fittings and reduce the risk of infections.

Q44. The Requirement to design appliances through the correct choice of profile and materials to allow adequate cleaning is currently limited to WCs, urinals and washbasins. Some stakeholders have suggested this should be extended to include baths, shower trays, sinks, bidets, taps and shower hoses/heads. Do you agree this is necessary?

Yes: No: Don't know:

Comments:

Q45. Some stakeholders have suggested that there is no need for a Requirement on cleanability of baths, shower trays and cubicles, sinks, bidets, taps and shower hoses/heads. Do you agree?

Yes: No: Don't know:

Comments:

Q46. If the Requirement (on cleanability), and the guidance, was either removed or was extended to include other sanitary appliances, would this have implications for products currently on the market? Please specify.

Yes: No: Don't know:

Comments: In general, manufacturers of shower and tap head fitting have taken maintenance into account, as such a requirement for cleanability would be a confirmation of best practice.

Q47. It has been suggested that we might consider new guidance for slip-resistance on shower and bath surfaces. This has not yet been included and your views are sought. Do you think guidance on this in Approved Document G would be appropriate?

Yes: No: Don't know:

Comments: Industry tends to agree that the popularity of wet-rooms and walk-in shower and baths is growing, slip-resistant surfaces would be beneficial in these cases.

Q48. If there is a place for this guidance, which surfaces and products might it cover?

(a) shower trays

Yes: No: No opinion:

(b) baths

Yes: No: No opinion:

(c) wet rooms

Yes: No: No opinion:

(d) other products/surfaces

Yes: No: Don't know:

Comments:

Impact Assessment

Q49. There are a number of proposed changes to Approved Document G. Those listed under Option 2 of the Impact Assessment are considered not to be a change in current practice and reflect guidance in standards and the Water Regulations Guide. Do you agree with stakeholder views that these changes would not lead to additional costs, and are you able to provide additional information on this?

Yes: No: Don't know:

Comments:

Q50. The benefits and costs of introducing temperature control to sanitary appliances have been presented in this Impact Assessment. Do you think these benefits and costs are reasonably represented? If you are able to provide additional information for use in the modelling, please note this in the comments.

Yes: No: No opinion:

Comments:

Q51. Introducing in-line blending valves to new build properties, extensions and changes of use impose significant costs which greatly exceed the financial benefits of this measure. Whilst we would like to support the introduction of these to control the temperature on bath taps in order to start addressing the most severe and fatal injuries from hot tap water associated with baths, we cannot justify a proposal to do this. Are you able to provide us with additional information to inform our assessment of the costs and benefits of these?

Yes: No:

Comments:

Other Comments: (e.g. Do you find the guidance helpful?)