Part G Consultation - Review of Water Efficiency Standards in the Building Regulations 2010 (23 September-16 December 2025)

Good Homes Alliance draft v2

Link to main consultation page: Review of Water Efficiency Standards in the Building Regulations 2010 - Defra - Citizen Space

Consultation questions:

Do you agree that the 'mandatory water efficiency standard', should be amended from 125 l/p/d to 105 l/p/d? Y/N

a) If you answered no to the previous question, please provide additional information to explain your answer. Select all that apply.

Response: Yes

The Good Homes Alliance's Water Efficiency and Reuse in Housing Design Guide demonstrates how higher standards are both necessary and achievable to meet National Water targets, a reduction of 20% by 2038. The guide provides evidence to show how a fittings-based approach and practical deployment of water reuse (rainwater / greywater) on new developments can reduce water use to well below 105l/p/day.

The GHA guide also highlights that current design-based l/p/d targets routinely under-estimate real use, with smart meter data frequently shows substantially higher actual consumption, and so we would support a methodology that is more transparent and is tested with smart meter data.

Lowering the minimum standard to 105 l/p/d is appropriate, and should be paired with:

1. An updated calculation method that reflects fittings and reuse
2. Clear verification/compliance steps and product labelling (MWEL)

The GHA guide shows multiple case studies where fittings alone have met below 100L/p/day, and achieve below 90 l/p/d when coupled with water reuse.

Please refer directly to the guide for evidence: https://kb.goodhomes.org.uk/wp-content/uploads/2025/07/Water-Guide-GHA-July-2025_FINAL.pdf

Do you agree that the 'optional technical water efficiency standard', should be amended from 110 l/p/d, where there is a clear local need such as in areas of serious water stress, to 100 l/p/d? Y/N
a) If you answered no to the previous question, please provide additional information to explain your answer. Select all that apply.

Response: No

We propose a stricter optional standard of 85 L/p/day.

Where local water stress exists, a higher optional standard is justified. There are local planning examples (Greater Cambridge, Sussex North, London) applying stricter targets and there are projects that have met or beaten the proposed 100 l/p/d through fittings, reuse and offsets. Making the optional standard 85 l/p/d aligns national policy with what leading LPAs and developers are already delivering. In addition to this, a reduction from 105 l/p/d to 100 l/p/d is not a considerable reduction and should not be difficult to achieve. However, Defra should explicitly require a fittings-based calculator or equivalent to ensure the optional standard is measured consistently.

Do you agree with the suggested updates to the water calculator? Y/N
a) If you answered no to the previous question, please provide additional information to explain your answer. Select all that apply.

Response: No

However, while we agree that the current litres-per-person-per-day (l/p/d) calculator requires updating, we believe the proposed revisions still fall short of what is needed.

The existing calculator was designed around outdated assumptions that no longer reflect measured behaviour, modern fittings, or current evidence from monitored case studies. The Good Homes Alliance (GHA) has long supported a **fittings-based approach**—this aligns broadly with Option 2 of Part G, but we believe it could be significantly tightened and supported with greater detail and clarity.

There is also a wider question as to whether this is an opportunity to reconsider the calculator's necessity altogether. If retained, it should only be in a far simpler and more transparent form. Multiple water pressures within a single area already make implementation overly complex; simplification should be a core principle, focusing on what is proven to work.

Feedback from building control officers suggests that the current system allows fittings to be specified that may "compensate" on paper but are not necessarily the fittings installed or actually used in practice. Compliance is therefore difficult to verify on site, especially when officers would need knowledge of thousands of product brands. The calculator also excludes relevant end-uses such as hot tubs and omits the potential role of rainwater butts as compensators.

Evidence presented in the GHA guide and multiple monitoring studies shows that measured consumption can be substantially lower when efficient fittings and rainwater/greywater systems are actually implemented—reinforcing the case for a modernised, fittings-driven methodology. However, the fittings assumptions proposed in Annex A do not appear to align with the fitting specifications or usage patterns set out in the FHH report, which creates confusion and risks undermining consistency across policy and guidance.

There are concerns about specific new assumptions—for example, the addition of a flat 10 litres per person per day for leakage—which do not align with how fittings-based performance is expected to translate into lower whole-home consumption. If fittings flow rates have not changed, it is unclear how the proposed changes achieve meaningful reductions.

If a fittings-based approach is to be adopted, it is essential that the underlying assumptions, specification requirements and usage patterns are correct, transparent, and aligned with the broader evidence base. We therefore suggest that:

- Government should clarify whether the intention is to move fully towards a fittings-based method and, if so, publish a clear and robust fittings specification for consultation (potentially replacing Annex A).
- Any approach must be consistent with the Mandatory Water Efficiency Labelling (MWEL) scheme, which is urgently needed and strongly supported.
- The ability to trade between fittings—while offering flexibility—must be evaluated carefully, as it may create compliance risks or unintended outcomes.

In summary, while we support updating the water calculator, we do **not** believe the current proposed approach is correct

Do you agree with the suggested updates to the fittings-based approach as set out in Annex A the Approved Document? Y/N
a) If you answered no to the previous question, please provide additional information to explain your answer. Select all that apply.

Response: No

Whilst a fittings-based methodology is transparent, procurement-friendly and tied to measurable product attributes, but as the previous question, there are concerns about the verification steps, and there is a strong need to link it to labelling. A fittings approach as future-proof and compatible with the proposed MWEL product labelling, and the GHA guide demonstrates via model specifications and case studies that a fittings approach (plus reuse where feasible) can deliver the revised standards. Annex A should therefore be updated to reflect modern fittings performance (current flow/flush figures), include explicit treatment of rainwater/greywater systems, and incorporate verification steps (e.g., spot checks, product labelling references).

Do you agree that the Approved Document, which can be found at Annex A, reflects the current industry practice for the revised water efficiency standard as detailed in The Building Regulations 2010, Schedule 1, Part G2, Para 36? Y/N
a) If you answered no to the previous question, please provide additional information to explain your answer. Select all that apply.

Response: No

Annex A does not reflect current industry practice; rather, it reflects the regulatory **backstop**. In practice, the sector is already achieving higher performance than the assumptions embedded in the Approved Document, and there is substantial evidence—both from monitoring and Post-Occupancy Evaluation (POE)—that the built standard often diverges from predicted performance under the existing methodology.

We have numerous examples demonstrating significantly better outcomes using modern approaches. Many local authorities, housing associations and developers now employ a **fittings-based** methodology, often combined with rainwater and greywater reuse, and supported by emerging product labelling schemes such as MWEL. These approaches are delivering lower measured consumption and more reliable predictions, and they far exceed what is captured in Annex A.

The specification in Annex A is therefore **not** reflective of good practice. In several places, the fittings assumptions, use factors and calculation approach do not align with what the industry is currently implementing, nor with the evidence base from recent guidance and the FHH report.

Annex A should be updated so that it:

- Recognises modern best practice, not just minimum regulatory backstops.
- Provides clearer and more accurate fittings tables, consistent with what leading authorities and developers are already using.
- Explicitly incorporates rainwater and greywater reuse methodologies, which are already deployed in practice.
- Offers examples of verification approaches (e.g., Part G sign-off through metering or smart-meter checks), in recognition of the persistent gap between predicted and POE-measured performance.
- Aligns fully with the forthcoming Mandatory Water Efficiency Labelling (MWEL) scheme.

In summary, while Annex A may reflect the minimum regulatory standard, it does **not** represent current industry practice. We recommend that the Approved Document be revised to align with demonstrated best practice and the direction of travel in water efficiency policy and implementation.

If you are a devolved administration, please advise of any potential impact on Wales, Scotland or Northern Ireland by the proposals outlined in this consultation. If possible, please provide evidence to support your comments.

Response: No comment

Please provide any feedback you have on the potential impact of the proposals outlined in this consultation document on persons who have a protected characteristic. If possible, please explain your answer.

Response: No comment

Wider questions:
These questions sit outside the options for consideration in the consultation above. The answers will inform broader policy thinking in this area, including any areas for future review.

Do you think that there are issues with compliance to the water efficiency standard(s) within the Building Regulations 2010?
a. Yes
b. No
c. Please provide additional information to explain your answer.

Response: Yes

There is a gap between predicted/design l/p/d and measured consumption (smart-meter evidence shows measured averages 145 l/p/d vs common design assumptions 110 l/p/d). This gap arises from:

- calculators and rules that rely on outdated assumptions;
- inconsistent treatment of external uses and reuse systems; and
- limited post-occupancy verification (few schemes use smart-meter data to confirm actual performance).
- It can be the case where what's installed hasn't matched the spec and it is hard to compare as there are so many fittings.
- Lack of resource for compliance checks.

Improving compliance therefore requires:

- updating the calculator to a fittings-based method aligned with MWEL;
- stronger verification (smart meter / post-occupancy sampling); and
- clearer guidance for local authorities and building control on enforcement.
- Simplification and spot checking.

Do you agree that the 5 l/p/d external water use, should be removed? Y/N? Please provide information to explain your answer.

Response: Yes

The fixed 5 l/p/d external allowance is blunt and doesn't reflect variability in external demand (urban apartments vs houses with gardens) or the increasing use of on-site rainwater/greywater for irrigation and external uses. While we understand that 'Wholesome Water' is a current barrier, the GHA guide demonstrates that rainwater harvesting and reuse can substantially reduce potable external demand and that external demand should be modelled or assessed contextually (or supplied from reused water) rather than retained as a universal fixed allowance.
The blanket 5 l/p/d figure could be removed if the guidance/calculator replaces it with:

(a) a method to model actual external demand by unit type;
(b) and/or an option to credit rainwater/greywater systems used for external demand; and (c) local planning controls to manage high-external-use developments. This keeps regulation fair and technically accurate.

Where feasible every home should have a water butt for rain water harvesting for external use. Enabling Water Smart Communities is looking at incentives for water butts.

Do you agree that local planning authorities and local building control and registered building control approvers have effective procedures to deliver water efficiency measures through the Building Regulations?

1 Yes
2 No
3 Please provide additional information to explain your answer.

Response: No

Some LPAs (London, parts of Sussex, Greater Cambridge) are leading practice and enforcing fittings-based requirements and water neutrality but nationally practice is mixed and enforcement inconsistent. Many LPAs still rely on the old 125 l/p/d baseline and lack standard procedures for verifying fittings, reuse systems or using post-occupancy metering data. To be effective at scale requires: clearer national guidance (approved calculation method), training and resources for local building control, and standardised evidence requirements for compliance (product MWEL labels, design statements, and post-occupancy metering).

In short, currently it is too complex and can be simplified with the strengthening of compliance particularly as there are potentially non standard approached with fractured feedback loops between officers and authorities.

Do you agree with the approach set out in this consultation to review alignment of the Mandatory Water Efficiency Label (MWEL) with the Building Regulations 2010 and (AD-G) through guidance, post introduction and review of the MWEL?

1 Yes
2 No

3 Please provide additional information to explain your answer.

Response: Yes

Alignment between a mandatory product-level label (MWEL) and Part G will make compliance transparent and procurement-friendly. Moving to a fittings-based approach compatible with product labelling; MWEL will help ensure product flows/flush volumes used in calculations are realistic and verifiable at procurement and on site. The alignment should include: cross-referencing MWEL in Annex A, requiring labelled products in compliance evidence, and guidance on treating non-labelled legacy products**.**

There may be an opportunity here to align Part G with MWEL which is due out in 2026.

If there was an opportunity to remove l/p/d from the Building Regulations 2010 and replace the metric, what metric would you suggest as an alternative? Please explain your answer.

Response:

Primary recommendation: mandatory post-occupancy verification supported by consumption data

The strongest and most reliable alternative to l/p/d is a system where compliance is confirmed not only at design stage but also **after occupation**, ensuring homes perform as intended. This addresses the long-standing gap between design predictions and real-world water use.

Key elements include:

- **Mandatory Post-Occupancy Evaluation (POE)** for a sample of new homes (e.g., 10%).
- Water consumption data must be provided as part of POE. Smart meters can support this, but the essential requirement is **mandatory reporting**, not the specific meter technology.
- Verification would check that predicted performance—based on fittings and reuse systems—is actually being achieved in practice.
- This approach introduces meaningful, evidence-based compliance rather than relying on inputs and assumptions that cannot be verified on site.

This model mirrors what is often required to validate energy performance and would significantly strengthen compliance and real-world outcomes in water efficiency.

Secondary recommendation: a clear fittings-based specification

To support the verification framework, design-stage compliance should be based on a **transparent, fittings-based specification** rather than per-capita consumption calculations. This shifts regulation away from assumptions about occupancy and behaviour and focuses on the actual performance of the installed kit.

This specification would set maximum thresholds for:

- WC flush volumes
- Shower flow rates × assumed duration
- Tap flow rates × assumed use durations
- Appliance water consumption
- Plus a defined approach for rainwater and greywater reuse systems, particularly important for water-stressed areas.

A fittings-based model is procurement-friendly, directly aligns with the forthcoming **Mandatory Water Efficiency Labelling (MWEL)**, and offers simplicity for building control.