

Future Homes Standard & Part L 2021
Government response to consultation

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Part L 2021

The government has now responded to the Future Homes Standard / Part L consultation, confirming the standards and compliance metrics to be adopted as part of the changes to Approved Document L1A. These changes will be regulated for in December 2021 to come into effect in June 2022.

This document constitutes a brief summary of the changes to be adopted, please contact AES to discuss further.

Additional consultation documents have been released as the 'Future Buildings Standard Consultation' which will provide some further detail in some key areas and also address issues relating to overheating, Part F and the required standards for existing dwellings.

Implementation Timetable and Transitional Arrangements

To ensure that as many homes as possible are built to the updated standards, the transitional arrangements will now be applied to individual homes rather than whole developments, with a period of one year from the introduction of new regulations being imposed.

Based on the implementation timetable, developers must therefore submit building notice/initial notice by June 2022 and commence work on an individual building by June 2023 for these transitional arrangements to apply. Dwellings registered or commenced after these dates will be required to comply with the updated standards.

Future Homes Standard

The government has re-iterated the intent to adopt the more ambitious Future Homes Standard in 2025, equating to approximately 75% improvement on current standards and believes this forms a good basis for achieving the overall net zero goals.

It confirms that while no technologies will be specifically banned, fossil fuel heating systems will be effectively ruled out through the compliance targets. It is anticipated that heat pumps will be widely utilised and will continue to deliver further progress towards the net zero goal without any changes to the dwellings as the electricity grid continues to decarbonise.

A consultation on the Future Homes Standard will be launched in 2023, with legislation adopted in 2024 ready for implementation in 2025.

Compliance Standards

Domestic buildings will now have to consider four separate key compliance metrics, as follows:

CO₂ Emissions

As expected, Part L 2021 will adopt a 31% uplift in CO₂ emissions standards compared with Part L 2013. This is considered an appropriate interim step prior to the introduction of the Future Homes Standard in 2025.

Primary Energy

The new primary energy target will be adopted, taking into account efficiency of a dwelling's heating systems as well as upstream energy uses e.g. power station efficiencies, fuel transportation and conversion. Achieving this standard will therefore depend mainly on the fuel source utilised for space and water heating.

Fabric Energy Efficiency

In order to ensure 'Fabric First' approaches are prioritised, the Fabric Energy Efficiency metric will be retained that had previously been proposed to be removed. The level the target will be set at will be improved compared with the relatively relaxed standard in Part L 2013, however the exact level is now subject to further consultation through the Future Buildings Standard consultation.

Minimum standards for fabric and fixed building services

Updated minimum u-values for thermal elements will be adopted as set out in the original consultation, constituting a relatively minor improvement on current minimum standards. Likewise the worst performing building services products will be no longer be able to be specified, with standards set for boilers, heat pumps, cooling systems and lighting.

Affordability

A new affordability metric was originally proposed, to ensure that a shift to low carbon electrified heating did not lead to an unacceptable increase in energy bills for occupiers. As there are four other compliance metrics which should deliver a reduction in energy demand, the government does not intend to introduce an additional affordability metric at this time.

Heat Networks

The government wishes to continue to support low carbon heat networks, however has confirmed that technology factors will not be adopted, therefore any dwelling connected to a heat network would still need to meet the compliance metrics as for any other dwelling. In practice this is likely to mean that networks with fossil fuel heating sources, including CHP, are not viable options for meeting the updated Part L standards.

Local Authority Requirements

The consultation response clarifies that in the immediate term, the Planning and Energy Act 2008 will not be amended and therefore local authorities continue to have the power to set additional energy efficiency standards and renewable energy requirements.

This may be reconsidered alongside the introduction of the Future Homes Standard where additional targets may be less necessary or relevant.

Performance Gap & Compliance

In order to address the 'performance gap', a range of measures to ensure accuracy of as-built assessments will be introduced. A BREL (Building Regulations England Part L) compliance report will be introduced, to be signed by the energy assessor and developer to confirm the as-built calculations are accurate.

Additionally, there will be a requirement for photographic evidence to be collated during the build process for each home and provided to the energy assessor and Building Control as required. There is no restriction on the appropriate party to gather and collate this evidence – trade operatives can take these photographs.

Overheating

Significant changes to the assessment of overheating risk are proposed:

Risk-based assessment

The proposal adopts a risk-based assessment which distinguishes between Greater London (Significant Risk) and remaining England (Moderate Risk). Depending on the fabric elements (glazing exposed to the outside) and the provision of cross ventilation, the ability to limit solar gains and the removal of excess heat must be proven using the simplified methodology. A simplified assessment means that some design restrictions would be applied, or alternatively compliance can be demonstrated through dynamic simulation.

Category A & B

The maximum amount of glazing allowable and requirements on openings free areas will vary depending on whether the dwelling falls into category A or B. Most houses will fall in category A (more than 2 glazed elements and ventilation on opposite sites), and most of flats and common areas fall within category B (less than 2 glazed element or no openings on opposite sites).

Using the simplified methodology, glazing is restricted to 21% of the Gross TFA (RICS) outside greater London. Depending on the category, shutters (with means of ventilation), low window g-values (0.40 and light transmittance of 70%), or overhangs with 50° altitude cut-off on due south-facing facades only are required.

Alternatively, compliance can be proven with a dynamic simulation with requirements exceeding the parameters stated in CIBSE TM59. Following the dynamic route, comfort cooling is not prohibited but the design should meet the requirements without the need for mechanical cooling.

Noise, pollution and security

These factors need to be considered they can negatively affect the overheating strategy. The designer is required to complete a checklist declaring whether there are any security, noise or pollution issues alongside details of unit (section 1) and the chosen pathway (section 2). At completion, the building control inspector should complete section 3 (Completion Details).

Indoor noise levels, for example, can be considered at planning level and enforced via a condition. Alternatively, at completion measurements can be undertaken or desk based calculations in conjunction with the chosen overheating strategy can be provided to BCB to ensure the risks have been considered and sufficiently mitigated.

Airtightness Testing

A range of changes to airtightness testing requirements and standards will also be introduced.

Currently naturally ventilated buildings can benefit from improvements in airtightness with no lower limit. In order to avoid the risk of insufficient ventilation, this has been amended to introduce a 'credit' limit at $3.0\text{m}^3/(\text{h.m}^2)$ for naturally ventilated dwellings

The consultation had proposed to introduce 0.5 increment adjustment to reflect uncertainty in air permeability testing results, however this is considered to be already dealt with within the testing standards and is not required.

All units must now be tested, sample testing is not possible and there is no small site exemption

Pulse testing will be introduced as an alternative approved method, citing additional evidence received. A conversion formula from 4Pa test pressure to 50Pa will be included in SAP10.2 in order to ensure appropriate equivalence between testing methodologies.

CIBSE TM23 is to be revised and adopted as an independent approved methodology

Additional Technical Changes

There are a range of additional technical changes to the SAP methodology, including the assessment of thermal bridging, the requirement to more accurately assess lighting and changes to the calculation of hot water demand which are not covered within this summary document.

Changes Prior to Adoption – Fabric Energy Efficiency

There are still some aspects of the proposed amended regulations which require some clarity. Most importantly, the Future Buildings Consultation will address the target standards for Fabric Energy Efficiency, as well as provide further detail on overheating assessment and amend aspects of ventilation requirements within Part F.

At this stage it is therefore difficult to accurately predict the eventual Fabric Energy Efficiency Standard that will be adopted and the subsequent impact on minimum fabric standards likely to be required.

There is an indication on the government's preferred option, which would require dwellings to meet the requirements shown below, with the usual degree of flexibility in trading off slight improvements in one area against relaxations in another.

Element	Specification for calculation of TFE
External wall	0.18
Party wall	0.0
Roof	0.11
Ground Floor	0.13
Windows	1.2
Doors	1.0
Air test	5.0

Please contact AES to discuss any of the content of this document

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