

BENNETTS ASSOCIATES

The RT Hon Robert Jenrick, MP
Secretary of State for Housing,
Communities & Local Government,
MHCLG
2 Marsham Street, London, SW1P 4DF

04th February 2020

Dear Secretary of State,

Bennetts Associates' Response to the Part L and Part F Consultation

Our Homes account for 27% of the UK's total carbon emissions, and so we believe that new homes need to be zero carbon as soon as possible. The Future Homes Standard needs to be the tool to achieve that, yet it continues to develop on a methodology that is both fundamentally flawed and unambitious. Based on proposals, homes built in 2020 under the new standard, could be less efficient than those built in 2013 and it is our view that no home built this year should add to the already mammoth retrofit challenge that we will need to undertake to get to net-zero.

Furthermore, the proposed regulations would prevent local authorities from setting higher standards in planning policy, tying the hands of ambitious cities that have their own net-zero targets and preventing pockets of leadership and innovation that could drive forward change across the whole country.

Last week, the LETI Climate Emergency Design Guide was released, giving a clear direction for how the industry could meet net-zero targets. Consultants from across the industry came together, sharing knowledge and volunteering time, so that they could change the regulations in a way that would reduce fuel poverty and give us a chance of meeting climate targets. We believe the government should be using the findings of this body of work, which supports similar efforts from other industry groups such as the UK Green Building Council, as the basis for the Future Homes Standard.

Please find attached our detailed response to the consultation questions.

Yours sincerely



Peter Fisher
Director
For Bennetts Associates

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Q1

Do you agree with our expectation that a home built to the Future Homes Standard should produce 75-80% less CO2 emissions than one built to current requirements?

- a. Yes
- b. No – 75-80% is too high a reduction in CO2
- c. No – 75-80% is too low a reduction in CO2**

If no, please explain your reasoning and provide evidence to support this.

Based on the best industry guidance available at this time all buildings need to operate as net-zero as soon as possible, and at least by 2030. That means that legislation to enable that sort of performance needs to be in place well before 2030 allowing the industry a clear trajectory that must be followed.

The current Part L does not support built environment professionals in achieving this goal, and unfortunately neither does the proposed Part L.

To drive the market changes required, the Future Homes Standard should be based on operational performance (the energy it actually uses) rather than the current model of estimating reductions against a notional building model. While the model may have been useful some time in the past, it has long-since worked against designers who want to produce buildings that reduce the energy bills of consumers and provide the required action in the face of the climate emergency.

We would suggest that the government adopts the recommendations of the London Energy Transformation Initiative. That is:

- 1. In 2020 the energy consumption of new homes should be disclosed in a way that allows the understanding of energy consumption.*
- 2. In 2025 the future homes standard should be based on operational performance based on metered energy targets.*
- 3. New buildings should be built to reduce the load on the national grid, given that this will need to support the existing building stock and a number of sectors that will be moving towards electrification.*

Q2

We think heat pumps and heat networks should typically be used to deliver the low carbon heating requirement of the Future Homes Standard. What are your views on this and in what circumstances should other low carbon technologies, such as direct electric heating, be used?

Heat pumps are certainly a key part of low-carbon heat requirements, however they must be installed and operated in a way that results in low energy use in operation (and therefore low energy bills).

Heat-networks should only be seen as beneficial if they are truly low-carbon, and deliver greater efficiencies over other systems. In many cases the use of a heat-network can lead to less choice and flexibility within a group of residences, whilst increasing capital costs. Once again, the end-result of operational energy should be prioritised, and this must include any true efficiencies of the network, not letting inefficient design and installation be hidden by assumptions as is currently the case.

Direct electric heating should only be used where there are incredibly low heat loads, or there is some fundamental reason why heat pumps cannot be used. For example where the predictive energy modelling (not SAP) shows a space heating demand of 15kWh/m2/yr.

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Q3

Do you agree that the fabric package for Option 1 (Future Homes Fabric) set out in Chapter 3 and Table 4 of the impact assessment provides a reasonable basis for the fabric performance of the Future Homes Standard?

- a. Yes
- b. No – the fabric standard is too demanding
- c. No – the fabric standard is not demanding enough**

Please explain your reasoning.

The fabric listed under Option 1 does make some progress towards energy efficient homes, but it does not deliver the sort of performance that would be required for a net-zero built environment. Particularly, an air permeability of 5m³/h.m³ @ 50Pa is too high, and form factor is not considered.

The current proposals mean that new homes could be less efficient in 2020 than in 2013. To make any progress zero-carbon, nothing should be left for later. The industry requires a clear trajectory and is ready to deliver on this now. Minimum/limiting fabric standards or higher FEES standards must be implemented.

Q4

When, if at all, should the government commence the amendment to the Planning and Energy Act 2008 to restrict local planning authorities from setting higher energy efficiency standard for dwellings?

- a. In 2020 alongside the introduction of any option to uplift the energy efficiency standards of Part L
- b. In 2020 but only in the event of the introduction of a 31% uplift (option 2) to the energy efficiency standards of Part L
- c. In 2025 alongside the introduction of the Future Homes Standard

d. The government should not commence the amendment to the Planning and Energy Act

Please explain your reasoning.

Local authorities are best placed to understand the issues in their area, and so if they and their voters believe that higher standards should be required, what possible reason would the government have to limit their ambition. The government should be putting in place minimum standards that are compliant with achieving the government's own net-zero policies, but if local authorities (such as London) wish to go further this should be facilitated and encouraged.

Q5

Do you agree with the proposed timings presented in Figure 2.1 (displayed in Chapter 2) showing the Roadmap to the Future Homes Standard?

- a. Yes
- b. No – the timings are too ambitious
- c. No – the timings are not ambitious enough**

If no, please explain your reasoning.

The changes required through the future homes standard (a change to metered operational energy over estimated energy usage) require this to be set in motion as early as is possible.

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Chapter 3 Part L Standards for New Homes in 2020

Q6

What level of uplift to the energy efficiency standards in the Building Regulations should be introduced in 2020?

- a. No change
- b. Option 1 – 20% CO2 reduction
- c. Option 2 – 31% CO2 reduction (the government's preferred option)

d. Other

Please explain your reasoning.

The Future Homes Standard 2020 does not promote the sort of fabric efficiency that is required for long-term targets, and we should not be building anything that will need retrofitting in the short-term.

Fabric should also be considered first, with technology supporting the reduction of remaining emissions. The suggested Options do not push fabric efficiency far enough, and the proposals would allow buildings less well insulated than under today's standards to be made acceptable via the use of efficient technologies, despite the fact that these technologies should be the default for all homes.

Finally, fundamentally we oppose the use of CO2 reductions as a target, as an in-use energy target allows far greater transparency, and is the metric which the government should be most interested in to allow the balancing of a decarbonising grid.

Q7

Do you agree with using primary energy as the principal performance metric?

- a. Yes – primary energy should be the principal performance metric
- b. No – CO2 should remain the principal performance metric

c. No – another measure should be the principal performance metric

Please explain your reasoning and provide evidence to support this.

Energy Use Intensity metrics should be used (based on in-use performance) in order to link the design of the building with its end use (and the consumers energy bills).

It is also fundamental that fossil fuels should play no part in space or water heating, whether within the home or as part of a communal heat network.

Q8

Do you agree with using CO2 as the secondary performance metric?

- a. Yes

b. No

As the electricity grid decarbonises and homes use only electricity for their energy needs, the carbon emissions resulting from energy use are not a useful metric for individual homes. The most important factor for homes to consider is their draw on a limited grid capacity.

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Q9

Do you agree with the proposal to set a minimum target to ensure that homes are affordable to run?

a. Yes

b. No

Please explain your reasoning.

Affordability in use is fundamental to housing, which suggest that in-use operational performance should be fundamental to new regulations, encouraging design teams to design and build homes that have low running costs (rather than just appearing low-energy on paper during the compliance process).

Q10

Should the minimum target used to ensure that homes are affordable to run be a minimum Energy Efficiency Rating?

a. Yes

b. No

If yes, please suggest a minimum Energy Efficiency Rating that should be achieved and provide evidence to support this.

If not, please suggest an alternative metric, explain your reasoning and provide evidence to support this.

And EPC rating (which is what the “Energy Efficiency Rating” is assumed to be) is an incredibly poor indicator of energy usage. If energy usage (therefore the draw on a limited grid capacity and running costs) are key, then only an in-use performance target can drive the sort of improvements required to achieve these goals.

Furthermore, the industry is tired of having to pretend that EPCs are meaningful, and their use often makes conversations around actual use more difficult. Their use is confusing to both residents and those ensuring regulatory compliance.

Q11

Do you agree with the minimum fabric standards proposed in table 3.1?

a. Yes

b. No – should be more insulating

c. No – should be less insulating

Table 3.1 – Minimum standards for fabric performance

External walls 0.26 W/m².K

Party walls 0.20 W/m².K

Floor 0.18 W/m².K

Roof 0.16 W/m².K

Windows, roof windows, glazed roof lights,

curtain walling, and pedestrian doors 1.6 W/m².K

Roof-lights 2.2 W/m².K

Air permeability 8m³/m².K at 50Pa

If you do not agree with any one or more of the proposed standards, please explain your reasoning and provide evidence to support this.

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Any standards that are being proposed should not require further retrofit, and the proposed targets fall far short of what would be needed to meet the current Climate Emergency. We support the London Energy Transformation Initiative (LETI)'s proposals of:

External walls 0.15 W/m².K

Party walls 0.0 W/m².K

Floor 0.10 W/m².K

Roof 0.10 W/m².K

Windows, roof windows, glazed roof lights, curtain walling, and pedestrian doors 1.2- 0.8 W/m².K

Air permeability <<3m³/m².h at 50Pa (To protect consumers in new dwellings from inadvertently suffering dangerously poor indoor air quality, MVHR must be mandatory at these levels of airtightness).

Q12

Do you think that the minimum fabric standards should be set in the Building Regulations or in the Approved Document (as is the current case)?

a. In the Building Regulations

b. In the Approved Document

Please explain your reasoning.

The approved document is the natural place to put these requirements, though the requirement to meet them should sit within the Building Regulations.

Q13

In the context of the proposed move to a primary energy metric and improved minimum fabric standards, do you agree with the proposal to remove the fabric energy efficiency target?

a. Yes

b. No

If no, please explain your reasoning.

As previously stated, fabric efficiency must be the first priority for designers. The FEES must not be scrapped, and it should be improved to become fit-for-purpose. To do otherwise would risk the possibility that a home in the future could be less well performing than something built now, which is clearly not aligned with goals to meet climate change targets or reduce fuel poverty.

We will already have an almost insurmountable challenge to retrofit all the homes that need retrofitting prior to 2050, and to produce homes now that need retrofitting before 2050 would be negligent.

Q14

Do you agree that the limiting U-value for roof-lights should be based on a roof-light in a horizontal position?

c. Yes

d. No

If no, please explain your reasoning and provide evidence to support this.

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Q15

Do you agree that we should adopt the latest version of BR 443?

c. Yes

d. No

If no, please explain your reasoning and provide evidence to support this.

Q16

Do you agree with the proposal of removing the fuel factors to aid the transition from high-carbon fossil fuels?

a. Yes

b. No

If no, please explain your reasoning.

Q17

Do you agree with the proposed changes to minimum building services efficiencies and controls set out in table 3.2?

a. Yes

b. No – proposed standard goes too far

c. No – proposed standard does not go far enough

Q18

Do you agree with the proposal that heating systems in new dwellings should be designed to operate with a flow temperature of 55°C?

a. Yes

b. No – the temperature should be below 55°C

c. No – dwellings should not be designed to operate with a low flow temperature

d. No – I disagree for another reason

If no, please explain your reasoning and provide evidence.

Based on LETI guidance, we support recommendations that the temperature should be 45°C which is suitable for low temperature radiators and would allow for the change to heat pumps that is likely to happen for homes that do not have them installed from the beginning.

Q19

How should we encourage new dwellings to be designed to operate with a flow temperature of 55°C?

a. By setting a minimum standard

b. Through the target primary energy and target emission rate (i.e. through the notional building)

c. Other

Please explain your reasoning.

See Q18 answer.

Q20

Do you agree with the proposals to simplify the requirements in the Building Regulations for the consideration of high-efficiency alternative systems?

a. Yes

b. No

If no, please explain your reasoning.

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Q21

Do you agree with the proposal to adopt the latest Standard Assessment Procedure, SAP 10?

a. Yes

b. No

If no, please explain your reasoning.

Bennetts Associates has long called for an emphasis on real in-use energy as the main criteria for judging a building's energy performance. The current and proposed reliance on a SAP methodology that is disconnected from real performance goes against all of the best industry guidance. This has long been the case, but in the face of a climate emergency the changes required cannot wait until the next review of building regulations.

We fully support the detailed assessment of LETI which explains further the issues with the SAP methodology:

- The use of a notional building to determine a percentage reduction in carbon over a semi-fictional baseline building. New buildings should strive to be built to achieve net zero carbon emissions. We should stop talking in terms of percentage reductions over a baseline or notional as these introduce avoidable complexity and do not clearly indicate performance relative to net zero carbon.*
- The notional building does not encourage efficient building form or poor design. A building with a poor form factor can currently appear to have the same percentage CO₂ reductions as a building with a good form factor. This is because each home is compared to a version of itself (notional) which does not question or reward or penalise the form factor.*
- The use of a gas boiler as the system in the baseline/notional case - this over inflates the carbon reductions of a heat pump. If the aim is to move away from fossil fuels to a heat pump based system, then the baseline should also use a similar system to avoid the reductions appearing greater than in reality.*
- SAP does not take into account the efficiency nuances of systems such as mechanical ventilation with heat recovery (MVHR). The further an MVHR is placed from a building façade, the longer the ductwork becomes. This significantly reduces the efficiency of the MVHR. This is not taken into account in SAP.*
- SAP over rewards large areas of glazing on the south facades. While there is benefit to receiving free heat, this is counterproductive to reducing overheating in homes. The benefit of heat gain directly competes with the need to reduce glazing area to mitigate overheating.*

There should also be an option to use more advanced modelling methodologies such as Dynamic Thermal Simulation (DTS) in domestic buildings. This is particularly relevant for large mixed used schemes where the ability to take the rejected heat from commercial areas, such as offices, and use this in homes can be more accurately modelled. Also using SAP for large blocks of flats, where many hundreds of dwellings may need to be modelled, is unduly time consuming and often there is already a DTS model built for assessing areas such as building loads and overheating. It would therefore be beneficial to the industry to use these tools for the larger and more complicated buildings for which SAP is not suitable.

Q22

Do you agree with the proposal to update the source of fuel prices to BEIS Domestic energy price indices for SAP 10.2?

a. Yes

b. No

If no, please explain your reasoning.

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BEIS domestic energy price indices is updated quarterly so it will be useful to understand if SAP will also be updated on this same timeframe?

Q23

Do you agree with the method in Briefing Note – Derivation and use of Primary Energy factors in SAP for calculating primary energy and CO2 emissions factors?

a. Yes

b. No

If no, please explain your reasoning.

Clarification is required on how the grid electricity primary energy factor has been arrived at, as the methodology is not clear.

Q24

Do you agree with the removal of government Approved Construction Details from Approved Document L?

a. Yes

b. No

If no, please explain your reasoning.

Though for many large developments the key metrics will be sufficient for a capable design team to design homes to meet targets, many smaller projects rely on accredited construction details. On smaller projects it may not be cost effective to calculate bespoke details, we therefore suggest that a detailed library of details for thermal bridging is provided to assist in the transition to more bespoke calculations at a later date.

Q25

Do you agree with the proposal to introduce the technology factors for heat networks, as presented in the draft Approved Document?

a. Yes

b. No, they give too much of an advantage to heat networks

c. No, they do not give enough of advantage to heat networks

d. No, I disagree for another reason

Please explain your reasoning.

Heat Networks should only be preferred when they are genuinely the most efficient option, which is far from certain when compared to other technologies.

Q26

Do you agree with the removal of the supplementary guidance from Approved Document L, as outlined in paragraph 3.59 of the consultation document?

a. Yes

b. No

If no, please explain your reasoning.

The information proposed to be removed is useful guidance on meeting mandatory requirements. Little justification for its removal is given in the consultation documentation. Without guidance on

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these issues there is a risk that poor choices will be made in the design of new homes. Guidance that is current and relevant should remain and be updated where applicable

Q27

Do you agree with the external references used in the draft Approved Document L, Appendix C and Appendix D?

a. Yes

b. No

If no, please explain your reasoning and suggest any alternative sources.

Yes, however these would need updating to cover any new methodologies/standards used in the calculations.

Q28

Do you agree with incorporating the Compliance Guides into the Approved Documents?

a. Yes

b. No

If no, please explain your reasoning.

Q29

Do you agree that we have adequately covered matters which are currently in the Domestic Building Services Compliance Guide in the new draft Approved Document L for new dwellings?

a. Yes

b. No

If no, please explain which matters are not adequately covered.

Q30

Do you agree that we have adequately covered matters which are currently in the Domestic Ventilation Compliance Guide in the new draft Approved Document F for new dwellings?

a. Yes

b. No

If no, please explain which matters are not adequately covered.

Q31

Do you agree with the proposals for restructuring the Approved Document guidance?

a. Yes

b. No

If no, please explain your reasoning.

The current Approved Documents are split into four clearly defined documents based on building typology and age. It seems curious that the four documents should be pulled together into one, given that only one of the three is being consulted on currently. Restructuring the documents as proposed seems unnecessary and could lead to confusion over scope. This should be re-consulted on when all documents are available.

Q32

Do you agree with our proposed approach to mandating self-regulating devices in new dwellings?

a. Yes

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b. No

If no, please explain your reasoning.

Providing the specific type of self-regulating device is not mandated (such as thermostatic radiator valves (TRVs)) then we support the use of self-regulating devices in general, such as zone control to improve occupant comfort and energy efficiency.

Q33

Are there circumstances in which installing self-regulating devices in new dwellings would not be technically or economically feasible?

a. Yes

b. No

If yes, please explain your reasoning and provide evidence.

To elaborate on Q32 - For well insulated buildings with heat pumps there are certain self-regulating devices such as TRVs which may not be appropriate.

A report by the Energy Saving Trust in 2011 (Report No: 6507 - The effect of Thermostatic Radiator Valves on heat pump performance) suggested that TRV's can lead to short-cycling of heat pumps. This could be avoided by omitting the TRV from radiators in any rooms where the thermostat for a heating zone is located, so the heat pump turns off once the room is up to temperature.

Another potential issue with the use of TRV's would be if the flow temperature is set too high and there is over-reliance on closing TRV's for temperature control. This is counter to ideal operation of heat pumps but could be avoided with good commissioning practices to ensure a low flow temperature with fairly free flowing TRV's under normal operation.

Q34

Do you agree with proposed guidance on providing information about building automation and control systems for new dwellings?

a. Yes

b. No

If no, please explain your reasoning.

Chapter 4 Part F Changes

Q35

Do you agree that the guidance in Appendix B to draft Approved Document F provides an appropriate basis for setting minimum ventilation standards?

a. Yes

b. No

If no, please explain your reasoning.

We do not agree with the allowance for an infiltration rate of 0.15 for less airtight buildings, as this could easily result in a reduction of indoor quality and therefore reduced health and wellbeing of occupants.

Q37

Do you agree with the proposed guidance on minimising the ingress of external pollutants in the draft Approved Document F?

a. Yes

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b. No

If no, please explain your reasoning.

Q38

Do you agree with the proposed guidance on noise in the draft Approved Document F?

a. Yes

b. No – this should not form part of the statutory guidance for ventilation, or the guidance goes too far

c. No – the guidance does not sufficiently address the problem

d. No – I disagree for another reason

If no, please explain your reasoning.

Noise is one of the main reasons that occupants turn off their mechanical ventilation. The guidance is welcome, however, it should give prescriptive sound levels thresholds for individual rooms, or fans and requirements for attenuation.

Under 1.7 the guidance should be reworded to account for external noise generally. Priority should be given to considering external noise for background ventilation, noise could transfer into the home through mechanical ducts too.

There is no mention of 'cross-talk' noise transmission between rooms.

Q39

Do you agree with the proposal to remove guidance for passive stack ventilation systems from the Approved Document?

a. Yes

b. No

If no, please explain your reasoning.

Q40

Do you agree with the proposal to remove guidance for more airtight naturally ventilated homes?

a. Yes

b. No

If no, please explain your reasoning.

*It is unclear what the boundary is between more airtight and less airtight homes. We suggest homes should have a maximum air permeability of $<3\text{m}^3/\text{m}^2.\text{h}$ at 50Pa. Any guidance for naturally ventilated homes operating at a higher air permeability should be removed. With an air permeability of $<<3\text{m}^3/\text{m}^2.\text{h}$ at 50Pa mechanical ventilation with heat recovery should be required, hence **all guidance** on naturally ventilated homes should be removed.*

Q41

Do you agree with the proposal to remove guidance for less airtight homes with mechanical extract ventilation?

a. Yes

b. No

If no, please explain your reasoning.

Q42

Do you agree with the proposed guidance for background ventilators in naturally ventilated dwellings in the draft Approved Document F?

a. Yes

b. No – the ventilator areas are too large

c. No – the ventilator areas are too small

d. No - I disagree for another reason

If no, please explain your reasoning.

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All guidance for natural ventilation should be removed. An air permeability of $3\text{m}^3/\text{m}^2\cdot\text{h}$ @ 50Pa should be used for mechanical ventilation with heat recovery.

Q43

Do you agree with the proposed approach in the draft Approved Document for determining minimum whole building ventilation rates in the draft Approved Document F?

a. Yes

b. No – the ventilation rate is too high

c. No – the ventilation rate is too low

d. No – I disagree for another reason

If no, please explain your reasoning.

Q44

Do you agree that background ventilators should be installed for a continuous mechanical extract system, at 5000mm² per habitable room?

a. Yes

b. No – the minimum background ventilator area is too low

c. No – the minimum background ventilator area is too high

d. No – other

If no, please explain your reasoning.

The ventilator should be sized based on the ventilation rate required to the room. Guidance should be given in relation to the room type extract rates in table 1.2.

Not all rooms may require a background ventilator. For example, a kitchen dining room could take make up supply air from the bedrooms and this would ensure corridors and intermediate spaces were adequately ventilated.

Q45

Do you agree with the external references used in the draft Approved Document F, in Appendices B, D and E?

a. Yes

b. No

If no, please explain your reasoning and suggest any alternative sources.

Q46

Do you agree with the proposed commissioning sheet proforma given in Appendix C of the draft Approved Document F, volume 1?

a. Yes

b. No

If no, please explain your reasoning.

Additional information is required.

2.3b should include statement about balance between total supply and extract ventilation rates. Are the total mechanical supply and extract ventilation rates measured at the unit within 10% of one another for all fan speeds to ensure balance through the heat exchanger.

2.3b Only mentions insulation in unheated spaces. Insulation is also critical on the ventilation unit and between the ventilation unit and the thermal envelope for units in heated spaces with heat recovery. These ducts are cold and condensation could form on the ducts.

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2.3c No mention of noise in individual rooms is mentioned. Noise may be caused by poor ductwork or terminal installation and a comment should be included. "During normal operation is there undue noise from any of the room terminals, air supply from bedroom and living area supply terminals should be inaudible".

3.3 and 3.4 should include a total air flow rate measured at the intake and exhaust from the building and a column to record comments on noise.

Q47

Do you agree with the proposal to provide a completed checklist and commissioning sheet to the building owner?

a. Yes

b. No

If no, please explain your reasoning.

Chapter 5 Airtightness

Q48

Do you agree that there should be a limit to the credit given in SAP for energy savings from airtightness for naturally ventilated dwellings?

a. Yes

b. No

If no, please explain your reasoning.

We agree that if natural ventilation is to be included as an option, the credit for airtightness should be limited.

However, we believe that all homes should have a maximum air permeability of $<3\text{m}^3/\text{m}^2.\text{h}$ @ 50Pa. Any guidance for naturally ventilated homes operating at a higher air permeability should be removed. With an air permeability of $<3\text{m}^3/\text{m}^2.\text{h}$ @ 50Pa mechanical ventilation with heat recovery should be required.

Q49

Do you agree that the limit should be set at $3\text{m}^3/\text{m}^2.\text{h}$?

a. Yes

b. No – it is too low

c. No – it is too high

If no, please explain your reasoning and provide evidence.

As per Q 48. We agree that if natural ventilation is to be included as an option, the credit for airtightness should be limited, this could be limited to $<3\text{m}^3/\text{m}^2.\text{h}$.

However, we feel that airtightness in general should be limited to $<3\text{m}^3/\text{m}^2.\text{h}$, therefore natural ventilation is no longer applicable.

Q50

Is having a standard level of uncertainty of $0.5\text{m}^3/\text{m}^2.\text{h}$ appropriate for all dwellings undergoing an airtightness test?

a. Yes

b. No – a percentage uncertainty would be more appropriate

c. No – I agree with having a standard level of uncertainty, but $0.5\text{m}^3/\text{m}^2.\text{h}$ is not an appropriate figure.

d. No – I disagree for another reason

If no, please explain your reasoning.

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A percentage reduction would be more appropriate. This would require proportional precision requirements based on the target airtightness (i.e. very airtight dwellings would require higher accuracy).

When dealing with very low air permeability specification the use 0.5 m³/m².h would be too punitive – it would be more than double the test reading. Smaller and correctly sized accurate blower door fans should be used, for example duct testing equipment.

Q51

Currently only a proportion of new dwellings are required to be airtightness tested. Do you agree with the proposal that all new dwellings should be airtightness tested?

a. Yes

b. No

If no, please explain your reasoning and provide evidence to support this.

Q52

Currently, small developments are excluded from the requirement to undergo any airtightness tests. Do you agree with including small developments in this requirement?

a. Yes

b. No

If no, please explain your reasoning and provide evidence to support this.

Q53

Do you agree that the Pulse test should be introduced into statutory guidance as an alternative airtightness testing method alongside the blower door test?

a. Yes

b. No

If no, please explain your reasoning.

It should be an option, but the blower door test should be kept as the main technology. It allows diagnosis and improvement during construction works.

Q54

Do you think that the proposed design airtightness range of between 1.5 m³/m².h and the maximum allowable airtightness value in Approved Document L Volume 1 is appropriate for the introduction of the Pulse test?

a. Yes

b. No

If no, please explain your reasoning and provide evidence to support this

Any new technology should be able to test down to 0.1m³/m²/h @ 50Pa, new buildings are already achieving this level of airtightness.

Q55

Do you agree that we should adopt an independent approved airtightness testing methodology?

a. Yes

b. No

Please explain your reasoning.

There should be an independent approved airtightness testing methodology.

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This should incorporate both the new Pulse method and established Q50 methodology in one standard.

Further it should lean heavily on previous Air Tightness Measurement Association (ATTMA) technical standards, now Building Compliance Testers Association (BCTA).

Q56

Do you agree with the content of the CIBSE draft methodology which will be available via the link in the consultation document? Please make any comments here.

Yes.

Chapter 6 Compliance, Performance and Providing Information

Q57

Do you agree with the introduction of guidance for Build Quality in the Approved Document becoming part of the reasonable provision for compliance with the minimum standards of Part L?

a. Yes

b. No

Please explain your reasoning and provide evidence to support this.

Q58

Do you have any comments on the Build Quality guidance in Annex C?

No

Q59

Do you agree with the introduction of the standardised compliance report, the Building Regulations England Part L (BREL) report, as presented in Annex D?

a. Yes

b. No there is no need for a standardised compliance report

c. No – I agree there should be a standardised compliance report but do not agree with the draft in Annex D

If no, please explain your reasoning

Q60

Do you agree with the introduction of photographic evidence as a requirement for producing the as-built energy assessment for new dwellings?

a. Yes

b. No

If no, please explain your reasoning

Q61

Do you agree with the proposal to require the signed standardised compliance report (BREL) and the supporting photographic evidence to be provided to Building Control?

a. Yes

b. No

If no, please explain your reasoning

Q62

Do you agree with the proposal to provide homeowner with the signed standardised compliance report (BREL) and photographic evidence?

a. Yes

BENNETTS ASSOCIATES

b. No

Please explain your reasoning.

Q63

Do you agree with the proposal to specify the version of Part L that the home is built to on the EPC?

a. Yes

b. No

Please explain your reasoning.

Q64

Do you agree Approved Document L should provide a set format for a home user guide in order to inform homeowners how to efficiently operate their dwelling?

a. Yes

b. No

If yes, please provide your views on what should be included in the guide.

If no, please explain your reasoning

Chapter 7 Transitional Arrangements

Q65

Do you agree that the transitional arrangements for the energy efficiency changes in 2020 should not apply to individual buildings where work has not started within a reasonable period – resulting in those buildings having to be built to the new energy efficiency standard?

a. Yes – where building work has commenced on an individual building within a reasonable period, the transitional arrangements should apply to that building, but not to the buildings on which building work has not commenced

b. No – the transitional arrangements should continue to apply to all building work on a development, irrespective of whether or not building work has commenced on individual buildings

If yes, please suggest a suitable length of time for the reasonable period in which building work should have started

If no, please explain your reasoning and provide evidence to support this.

Two years would allow plenty of time to complete a phase on a large site. It should be noted that this clause is only useful where Building Regulations is updated regularly.

Q66

Do you foresee any issues that may arise from the proposed 2020 transitional arrangements outlined in this consultation?

a. Yes

b. No

Please explain your reasoning and provide evidence to support this.

Q67

What is your view on the possible transitional arrangements regarding changes to be made in 2025?

Consultation should begin as early as possible on proposed 2025 regulations to allow for a smoother transition. This would allow sites to be built to new standards sooner as per the transitional arrangements.