

# The Future Homes Standard

## Consultation questions and responses

### Building Control – Colchester Borough Council

#### Chapter 2 The Future Homes Standard

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. <b>Yes</b>
b. No – 75-80% is too high a reduction in CO <sub>2</sub>
c. No – 75-80% is too low a reduction in CO <sub>2</sub>
If no, please explain your reasoning and provide evidence to support this.

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?

Agree with heat pumps and networks. Other technologies powered by electricity should be used with caution because the real reduction in emissions would impact until around 2035. Small high-performance dwellings may not be suitable for direct electric heating.
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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. <b>Yes</b>
b. No – the fabric standard is too demanding
c. No – the fabric standard is not demanding enough
If no, please explain your reasoning.

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.

Don't feel that there should be different standards. Future homes is a realistic positive step towards zero carbon but the revised part L will ensure greater control over compliance with any new requirements introduced and will avoid any confusion.

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.

### 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% CO<sub>2</sub> reduction

c. **Option 2 – 31% CO<sub>2</sub> reduction (the government's preferred option)**

d. Other

Please explain your reasoning.

However, it should be noted that upgrading standards of fabric efficiency is likely to be achievable in every location and will give immediate benefit for lower initial cost. Future technology can be built in as development improves which may give longer term benefits than those of option 2?

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 – CO<sub>2</sub> 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.

Primary energy is more important to the end user/occupant, plus the carbon reduction will result through lower usage and efficiencies/ changes to the infrastructure. However 'Energy use' is a far more appropriate metric as use of available low carbon energy does not encourage better performing buildings.

Q8 Do you agree with using CO<sub>2</sub> as the secondary performance metric?

a. **Yes**

b. No

Please explain your reasoning.

Agree with paragraph 3.17.

This is a necessary metric until such time as primary energy production can be demonstrated to achieve near zero carbon emissions.

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.

We have a responsibility to combat fuel poverty however 'Affordability' has yet to be defined and calculated.

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.

Mid to high B on SAP/EPC as a minimum.

This is likely to be the most easily understood and recognised metric by end users/occupiers however targets must be measurable and achievable; however Government has not indicated how this will be defined and calculated.

Q11 Do you agree with the minimum fabric standards proposed in table 3.1?

**Table 3.1 - Minimum standards for fabric performance**

Yes	No – should be more insulating	No – should be less insulating
External walls		0.26 W/m <sup>2</sup> .K
Party walls		0.20 W/m <sup>2</sup> .K
Floor		0.18 W/m <sup>2</sup> .K
Roof		0.16 W/m <sup>2</sup> .K
Windows, roof windows, glazed roof lights, curtain walling, and pedestrian doors		1.6 W/m <sup>2</sup> .K
Roof-lights		2.2 W/m <sup>2</sup> .K
Air permeability		8m <sup>3</sup> /m <sup>2</sup> .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.

Yes, feel it is achievable and realistic to use passive measures. However, values should be nearer those used for target setting given in SAP appendix R to avoid unworkable designs based on this table which may be considered misleading.

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.

As AD's are familiar and in an easy to use format.

It is recognised that there is a need to limit poor performing individual elements but consider that there should be options to offset areas of under performance by improvements elsewhere. It is considered that this is more easily achieved by setting minimum fabric standards in the approved document.

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.

It is considered that fabric efficiency remains crucial to the energy performance of a building and should be fully measurable.

Q14 Do you agree that the limiting U-value for roof-lights should be based on a roof-light in a horizontal position?

a. Yes

b. No

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

Q15 Do you agree that we should adopt the latest version of BR 443?

a. Yes

b. 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

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

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. <b>Yes</b>   |
| 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.                      |

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. <b>Through the target primary energy and target emission rate (i.e. through the notional building)</b>                             |
| c. Other  |
| Please explain your reasoning.<br>This would give more flexibility in design however a minimum standard maybe more easily recognised. |

Q20 Do you agree with the proposals to simplify the requirements in the Building Regulations for the consideration of high-efficiency alternative systems?

a. <b>Yes</b>
b. No
If no, please explain your reasoning.

Q21 Do you agree with the proposal to adopt the latest Standard Assessment Procedure, SAP 10?

a. Yes
b. <b>No</b>
If no, please explain your reasoning. SAP 10 currently contains alternative values to allow consideration of options 1 & 2 in this consultation. It is essential that values in SAP are aligned with the results of this consultation and not the reverse. Would be concerned about the results for existing properties.

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. <b>Yes</b>
b. No
If no, please explain your reasoning

Q23 Do you agree with the method in *Briefing Note – Derivation and use of Primary Energy factors* in SAP for calculating primary energy and CO<sub>2</sub> emissions factors?

a. <b>Yes</b>
b. No
If no, please explain your reasoning.

Q24 Do you agree with the removal of government Approved Construction Details from Approved Document L?

a. Yes
<b>b. No</b>
If no, please explain your reasoning. <b>It would be better to update details and keep them as an option.</b>

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>b. No, they give too much of an advantage to heat networks</b>
c. No, they do not give enough of advantage to heat networks
d. No, I disagree for another reason
Please explain your reasoning. <b>Need to maintain as much flexibility as possible. This is likely to unfairly penalise properties not able to access heat networks such as small-scale developments or one-off properties.</b>

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?

<b>a. Yes</b>
b. No
If no, please explain your reasoning <b>However, requirements such as commissioning notices will rely on knowledge of the statutory instrument which is not always referred to by all those using the guidance.</b>

Q27 Do you agree with the external references used in the draft Approved Document L, Appendix C and Appendix D?

<b>a. Yes</b>
b. No
If no, please explain your reasoning and suggest any alternative sources.



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. It is felt that a detailed comparison is not possible at this time.

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. It is felt that a detailed comparison is not possible at this time.

Q31 Do you agree with the proposals for restructuring the Approved Document guidance?

a. Yes
b. No
If no, please explain your reasoning.

Q32 Do you agree with our proposed approach to mandating self-regulating devices in new dwellings?

a. Yes
b. No
If no, please explain your reasoning.

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.

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. It is felt that CBC are not able to respond to this.

Q36 Do you agree that using individual volatile organic compounds, informed by Public Health England guidelines, is an appropriate alternative to using a total volatile organic compound limit?

a. Yes
b. No – the Public Health England guidelines are not sufficient
c. No – individual volatile organic compounds should not be used to determine ventilation rates
d. No – I disagree for another reason
If no, please explain your reasoning, and provide alternative evidence sources if appropriate. It is felt that CBC are not able to respond to this.

Q37 Do you agree with the proposed guidance on minimising the ingress of external pollutants in the draft Approved Document F?

a. Yes
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. It is felt that as this is not measurable it will not be enforceable.

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. It is not considered acceptable to remove the option as passive stack ventilation systems can still satisfy the requirements if part of a specialist design and installation.

Q40 Do you agree with the proposal to remove guidance for more airtight naturally ventilated homes?

a. Yes
<b>b. No</b>
If no, please explain your reasoning. It may encourage poor design and construction so as not to necessitate mechanical ventilation.

Q41 Do you agree with the proposal to remove guidance for less airtight homes with mechanical extract ventilation?

a. Yes
<b>b. No</b>
If no, please explain your reasoning. It is not evident what improvement this proposal will give.

Q42 Do you agree with the proposed guidance for background ventilators in naturally ventilated dwellings in the draft Approved Document F?

<b>a. Yes</b>
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.

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?

<b>a. Yes</b>
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 5000mm<sup>2</sup> 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.

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.

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. If this is desirable, then this should be a mandated requirement as opposed to being recommended.

## 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.

Q49 Do you agree that the limit should be set at 3m<sup>3</sup>/m<sup>2</sup>.h?

a. Yes
b. No – it is too low
c. No – it is too high
If no, please explain your reasoning and provide evidence.

Q50 Is having a standard level of uncertainty of 0.5 m<sup>3</sup>/m<sup>2</sup>.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 m <sup>3</sup> /m <sup>2</sup> .h is not an appropriate figure.
d. No – I disagree for another reason
If no, please explain your reasoning. 0.5m <sup>3</sup> /m <sup>2</sup> .h is too high

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.

Q54 Do you think that the proposed design airtightness range of between 1.5 m<sup>3</sup>/m<sup>2</sup>.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

It should not be necessary to carry out a blower test if the minimum figure of 1.5 satisfies design emission rates for the purposes of Building Regulation compliance.

Q55 Do you agree that we should adopt an independent approved airtightness testing methodology?

a. Yes

b. No

Please explain your reasoning.

CBC do not agree that air-tightness testing can be considered under a competent person scheme for Building Regulation purposes. Certification is required to demonstrate compliance with a regulatory requirement which tests a combination of building components and is not a type of work listed in schedule 3 as required by Regulation 12(6) of the Building Regulations.

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.

It is felt that CBC are not able to comment.

## 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.

Until it is mandatory for developers of new dwellings to submit plans and obtain a notice of approval of plans before commencement of work this will not work as most references require information to be indicated on design drawings.

Q58 Do you have any comments on the Build Quality guidance in Annex C?

There are many published guides that are suitable and give more informed information such as those published by the Zero Carbon Hub. These should be not repeated in an Approved Document but referenced as good practice guides.

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

Provision of this report can only be on or after completion which makes it useless for a site inspection check list. Current EPC regulations require the person carrying out the work to confirm to the energy assessor any as built specification changes from the design SAP, as do Building Regulations. Current proposals are little different and therefore are unlikely to improve the 'gap'.



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

It is considered that these requirements are not appropriate for inclusion in Building Regulations. The use of photographic evidence to establish compliance has been frowned upon in the past.

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

Failure to obtain photographic evidence at an appropriate time would result in failure to satisfy Building Regulations leaving a difficult, expensive and potentially damaging route necessary to demonstrate compliance.

Q62 Do you agree with the proposal to provide homeowner with the signed standardised compliance report (BREL) and photographic evidence?

a. Yes

b. No

Please explain your reasoning.

Would agree that the purchaser of a dwelling should be provided with confirmation of what standard a dwelling has been constructed to, but photographic evidence is not necessary.

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.

It is important to understand which standards have been applied and that they will differ for different dwellings. This should be made very clear to prospective purchasers and is

potentially the strongest incentive for developers to meet current rather than previous provisions.

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

Such a requirement would be difficult to enforce. Whilst important another way to provide this information should be established.

## 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

Agree with the proposal but the definition of what constitutes a commencement must be clear.

12 months maximum for the first building on a site following deposit of plans or Initial Notice and not more than 6 months after that for any other building included on the deposited plan, Building Notice or Initial Notice.

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

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. Section 16 of the Building Act 1984 refers to plans not individual buildings shown on those plans, similarly section 32 refers to commencement of work shown on deposited plans not individual buildings. Previous thinking by the Government was that commencement was related to 'the plans' not part, therefore staged commencements could not be considered. Commencement of one building was commencement of work shown on deposited plans.

Q67 What is your view on the possible transitional arrangements regarding changes to be made in 2025?

See responses to Q65 & Q66 above.
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## Chapter 8 Feedback on the Impact Assessment

Q68 The Impact Assessment makes a number of assumptions on fabric/services/renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable?

a. Yes
b. No
Please explain your reasoning and provide evidence to support this. It is felt that CBC are not able to respond to this.

Q69 Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes?

a. Yes
b. No
If no, please explain your reasoning and provide evidence to support this. It is felt that CBC are not able to respond to this.

