

# Annex B

## Response form 2

### Section two:

### Part L (Conservation of fuel and power)

#### Form 2: New build standards and performance standards for works in existing buildings

This form is to be used to respond to the proposals in Chapters 3, 4 and 5, the associated changes to the Approved Documents, and changes to the Building Services Compliance Guides and National Calculation Methodology. These changes relate to the proposals on performance standards for new buildings and for building work in existing properties, and the proposals on compliance and performance. The closing date for the submission of these forms is **27 April 2012**.

If possible, please respond by email to:

[building.regulations@communities.gsi.gov.uk](mailto:building.regulations@communities.gsi.gov.uk)

Alternatively, responses can be sent by post to:

Building Regulations Consultation  
Building Regulations and Standards Division  
Department for Communities and Local Government  
Zone 5/G9  
Eland House  
Bressenden Place  
London SW1E 5DU

## About you:

### (i) Your details

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### (ii) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational response  Personal views

### (iii) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes  No

Name of group:

(iv) Please tick the *one* box which best describes you or your organisation:

<b>Builders/Developers:</b>		<b>Property management:</b>	
Builder – Main contractor	<input type="checkbox"/>	Housing association (registered social landlord)	<input type="checkbox"/>
Builder – Small builder (extensions/repairs/maintenance, etc)	<input type="checkbox"/>	Residential landlord, private sector	<input type="checkbox"/>
Installer/specialist sub-contractor	<input type="checkbox"/>	Commercial	<input type="checkbox"/>
Commercial developer	<input type="checkbox"/>	Public sector	<input type="checkbox"/>
House builder	<input type="checkbox"/>	<b>Building Control Bodies:</b>	
<b>Building Occupier:</b>		Local authority building control	<input type="checkbox"/>
Homeowner	<input type="checkbox"/>	Approved Inspector	<input type="checkbox"/>
Tenant (residential)	<input type="checkbox"/>	<b>Specific Interest:</b>	
Commercial Building	<input type="checkbox"/>	Competent Person scheme operator	<input type="checkbox"/>
<b>Designers/Engineers/Surveyors:</b>		National representative or trade body	<input checked="" type="checkbox"/>
Architect	<input type="checkbox"/>	Professional body or institution	<input type="checkbox"/>
Civil/Structural engineer	<input type="checkbox"/>	Research/academic organisation	<input type="checkbox"/>
Building services engineer	<input type="checkbox"/>	<b>Energy Sector</b>	
Surveyor	<input type="checkbox"/>	<b>Fire and Rescue Authority</b>	
<b>Manufacturer/Supply Chain</b>		<b>Other</b> (please specify)	<input type="checkbox"/>
		<input type="text"/>	

(v) **Please tick the *one* box which best describes the size of your or your organisation's business?**

Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders)

Small – typically 10 to 49 full-time or equivalent employees

Medium – typically 50 to 249 full-time or equivalent employees

Large – typically 250+ full-time or equivalent employees

None of the above (please specify)

(vi) **Are you or your organisation a member of a competent person scheme?**

Yes  No

Name of scheme:

(vii) **Would you be happy for us to contact you again in relation to this consultation?**

Yes  No

DCLG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Department is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

*Because this is the second half of the Part L consultation response form, the numbering of questions continues from the previous form.*

### New homes

27. Do you agree with the proposal for a 'hybrid' approach to standard setting for new homes in 2013? Please justify your choice and provide any views on the change from relative to absolute standards for new homes.

Yes  No  Don't know

Comments

An absolute standard is preferable. This reflects the influence of building form, orientation etc in reducing energy demand; the PHT therefore supports the idea of an absolute energy efficiency target and would prefer an absolute CO<sub>2</sub> target. However, a hybrid approach would allow the industry to understand the challenge of achieving FEES, while using the same calculation methodology, so may be acceptable as an interim step.

28. The proposals explain the Government's preference for the 'FEES plus efficient services' CO<sub>2</sub> target. No firm preference is expressed for the energy demand targets. What is your preferred option for the standards for new homes from October 2013:

No change

The 'FEES plus efficient services' CO<sub>2</sub> target with energy targets set at 39/46 kWh/m<sup>2</sup>/year ('full FEES')

The 'FEES plus efficient services' CO<sub>2</sub> target with energy targets set at 43/52 kWh/m<sup>2</sup>/year ('interim' FEE targets)

The 'Halfway point' CO<sub>2</sub> target with energy targets set at 39/46 kWh/m<sup>2</sup>/year ('full FEES')

The 'Halfway point' CO<sub>2</sub> target with energy targets set at 43/52 kWh/m<sup>2</sup>/year ('interim' FEE targets)

Something else (please explain below)

Don't know

#### Comments

It is crucial that this opportunity to improve practice regarding building fabric is taken. When the 2016 targets are introduced later, people will need to both improve fabric performance and adopt renewables; if we don't learn how to deliver fabric improvements now, it will make it much harder to achieve the 2016 target later.

In addition, the Passivhaus Trust recommends that DCLG grant Passivhaus compliant dwellings a 'deemed-to-satisfy' status for Part L1A 2013.

Passivhaus performance is unquestionably in advance of the energy efficiency standards under consideration for 2013, and it should also meet any of the proposed carbon targets, without renewable devices

29. Do you agree that the limits on design flexibility 'backstop' values for fabric elements and fixed building services in new homes should be retained as reasonable provision in the technical guidance?

Yes  No  Don't know

Comments

It seems unclear from the consultation whether the suggestion is that backstop values should be retained instead of adopting the FEES standard or as well. We support the adoption of FEES and would recommend the retention of backstop values as well.

30. The proposals explain the options for the fuel factor for new homes. No firm preference is expressed. Which option for 2013 standards do you prefer and why:

Retain the fuel factor at current levels

Reduce the fuel factor

Remove the fuel factor

Don't know

Comments

Removal of the fuel factor will allow the industry to prepare for 2016 standards in the most effective way. By introducing the need to improve the building fabric and reduce heat loss further, or consider alternative to higher carbon fuels.

31. 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? Please justify your views.

Yes  No  Don't know

Comments

32. 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? Please justify your view and provide alternative evidence if necessary.

Yes  No  Don't know

Comments

The costs for the full fabric approach appear to be very high. Further improvements to fabric and services approaching Passivhaus standard are expected to be a more cost-effective than indicated in this exercise.

### New non-domestic buildings

33. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why:

No change

11% aggregate improvement

20% aggregate improvement

Don't know

Comments

A 20% improvement should provide an opportunity to drive standards towards Passivhaus levels.

34. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes  No  Don't know

Comments





35. What information do you have on how the proposed changes in standards for new non-domestic buildings might have different impacts on different categories of building?

Comments

36. The Impact Assessment makes a number of assumptions on fabric/services/renewables costs, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes  No  Don't know

Comments

37. 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 non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes  No  Don't know

Comments

38. Do you agree in broad terms with the proposed process for considering the introduction of new technologies into SBEM via an 'Appendix Q'? Please provide suggestions for an alternative approach where relevant.

Yes  No  Don't know

Comments

**Performance standards for works to existing buildings**

39. Do you agree with the proposal to raise performance standards for domestic replacement windows from October 2013? Please explain your answer.

Yes  No  Don't know

Comments

40. Do you agree with the proposal to raise performance standards for domestic extensions from October 2013? Please explain your answer.

Yes  No  Don't know

Comments

41. Do you agree with the proposal to raise performance standards for non-domestic extensions from October 2013? Please explain your answer.

Yes  No  Don't know

Comments

42. Do you agree with the proposal to include the Lighting Energy Numeric Indicator (LENI) methodology as an alternative way of meeting the minimum energy performance requirements for lighting installations?

Yes  No  Don't know

Comments

43. Do you think that the impact assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes  No  Don't know

Comments

### Compliance and performance

44. Do you think that the introduction of quality assurance processes and regulatory incentives to encourage their development and use will help mitigate the risks of a difference between the as-designed and as-built performance of new homes? Please suggest an alternative if you do not agree.

Yes  No  Don't know

Comments

The Passivhaus Trust supports the introduction of a quality assurance process, as a robust QA process is already used on certified Passivhaus buildings and evidence shows that these achieve very close to their performance targets. However, the detail of such a QA process needs careful consideration, whether process based or end-point performance testing. We believe that existing proven QA systems, such as Passivhaus certification, should be acceptable as a compliant QA process.

45. If a new process is developed (in addition to individual developers' schemes) do you think that such a quality assurance process should be codified in the form of:

A BSI Publicly Available Specification

Another form (please specify)

Don't know

46. Do you agree with the indicative contents outlined for a quality assurance

process? Please explain your answer and what you think the standard should cover.

Yes  No  Don't know

Comments

The list appears to be comprehensive but could then become too onerous and/or a tick box exercise. More work is needed to determine the effective form of an appropriate QA process.

47. If a quality assurance process is developed by a combined industry/government group, who do you think should be represented on such a group?

Comments

Representatives of those who will need to implement the QA process, and those who will need to enforce it. Additionally, practitioners and assessors who have experience of such a process in the UK, such as Passivhaus developers and practitioners who have completed buildings and are in the process of monitoring the performance of their buildings and learning from experience to improve practice.

48. What do you think is the best way for developers to demonstrate that the 'PAS' quality assurance process has been adopted?

Comments

Either: 1. Evidence demonstrating that the team (covering design, construction, installation, commissioning and operation) has delivered real performance in line with predicted levels on previous projects. This should relate to comfort and health as well as energy performance.

Or 2. Evidence of design details and specification etc prepared by appropriately trained team. Evidence of contractor and installer training at every level. Commitment to inspections and testing at appropriate stages, and ongoing monitoring to inform the process further.

PLUS random post-completion testing of a sample of buildings.

49. What do you think is the best way for developers to demonstrate that an

alternative, equivalent quality assurance process has been adopted?

Comments

Either: 1. Established Quality Assurance process such as Passivhaus, which can provide evidence regarding the real performance improvements achieved.

Or 2. Evidence demonstrating that the team (covering design, construction, installation, commissioning and operation) has the skills and experience to deliver real performance in line with predicted levels, and has done so on previous projects. This should relate to comfort and health as well as energy performance.

Or 3. Evidence of design details and specification etc prepared by appropriately trained team. Evidence of contractor and installer training at every level. Commitment to inspections and testing at appropriate stages, and ongoing monitoring to inform the process further.

PLUS commitment to post-construction testing of a sample of dwellings.

50. Where no formal quality assurance process is followed, which of the following would you support as an alternative:

3% confidence factor applied to Dwelling Emission Rate

Another % confidence factor (please specify)

A different approach (please explain below)

Do not agree with the concept of the quality assurance process and confidence factors

Don't know

Comments

A higher % confidence factor which more closely represents to the discrepancy between predicted and actual performance.

51. The consultation discusses compliance and performance issues for new non-domestic buildings. We would welcome any suggestions for improving Part L compliance and as-built energy performance for non-domestic buildings and any comments on the discussion.

## Comments

We support suggestions for use of the BSRIA Soft Landings guidance. Additionally, we support the introduction of a quality assurance process for non-domestic buildings in a similar way to that proposed for dwellings.

52. The consultation sets out a training strategy and target groups for the dissemination of the new Part L requirements. Do you agree with the proposed approach? Please explain your answer, provide an alternative approach if relevant, and indicate if you/your organisation would be willing to play a part in dissemination activities.

Yes  No  Don't know

## Comments

We support the need for this training, which will require significant resources, as we effectively need a culture change in the industry to focus on quality and performance. Testing and monitoring real buildings will build an understanding of how buildings and people use energy and, and what they can do as practitioners to influence this.

53. If you have any comments on the proposed changes to Approved Document L1A Conservation of fuel and power in new dwellings that are not covered by the questions above please add them here. Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

The Passivhaus Trust recommends that DCLG grant Passivhaus-compliant dwellings a 'deemed-to-satisfy' status for Part L1A 2013.

Passivhaus performance is unquestionably in advance of the energy efficiency standards under consideration for 2013, and it should also meet any of the proposed carbon targets, without renewable devices

The recommendation that Passivhaus compliant dwellings be granted deemed to comply status was discussed in Working Group 1 of the Building Regulations Advisory Committee (BRAC), received no opposition, and was included in the group's recommendation to BRAC. The Trust is surprised that this recommendation has not been included in the consultation documents, and believes that there is widespread support for this suggestion within the industry.

It is not proposed that Passivhaus replaces an existing methodology, as it is a different approach to that currently used for Part L compliance. In fact, the Trust supports the Fabric Energy Efficiency Standards (FEES) as part of

the 2016 target. Passivhaus does not compete with FEES, but in fact does realistically achieve FEES (and more).

There are precedents for using alternative models for compliance in Part L2A. A designer can use SBEM or the twelve different DSMs, interfaces and MCORs listed in DCLG's 'Notice of Approval'. The Passivhaus Planning Package (PHPP) software is at least as complete and robust an energy model as the SAP. Additionally, the Trust recognises and accepts the separate requirements to produce SAP ratings and EPCs.

The Passivhaus community is designing and building to this standard in the UK already, and the movement is gathering momentum. Such pioneers should be encouraged and given some small reward for going beyond the call of duty.

The Passivhaus Trust therefore proposes that Passivhaus could provide an entirely optional alternative route for its proponents. 'Deemed-to-satisfy' 2013 status for Passivhaus is clearly appropriate.

Additionally, the Passivhaus Trust supports the introduction of quality assurance processes, and proposes that the Passivhaus certification process be accepted as an alternative equivalent quality assurance process for Part L1A 2013.

- Passivhaus is a clearly proven, robust, effective low-energy standard, with c.20,000 Passivhaus homes already up and running successfully on the continent.
- The Passivhaus process without doubt improves the outcome. As-built performance is much closer to design-stage prediction than is more normally the case.
- The whole concept of Passivhaus certification provides technical comfort and offers a significant knock-on benefit for building control bodies. Passivhaus compliance is very clearly defined, with a certification process already set up in the UK, there is a competitive market and the process is operating well.

54. If you have any comments on the proposed changes to Approved Document L2A Conservation of fuel and power in new buildings other than dwellings that are not covered by the questions above please add them here. Please make it clear which issue each comment relates to by identifying the relevant



paragraph number.

Comments

55. If you have any comments on the proposed changes to Approved Document L1B Conservation of fuel and power in existing dwellings that are not covered by the questions above please add them here. Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

56. If you have any comments on the proposed changes to Approved Document L2B Conservation of fuel and power in existing buildings other than dwellings that are not covered by the questions above please add them here. Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

57. If you have any comments on the proposed changes to the National Calculation Methodology that are not covered in the questions above please add them here. Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

58. If you have any comments on the proposed changes to the Domestic Building Services Compliance Guide that are not covered in the questions above please add them here. Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

59. If you have any comments on the proposed changes to the Non Domestic Building Services Compliance Guide that are not covered in the questions above please add them here. Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

60. If you have any other comments on the proposals or suggestions on possible changes to Part L of the Building Regulations, please make them here:

Comments