



Mr. Gerald McInerney
Sustainable Buildings Division
Department for Communities and Local Government
5th Floor
Eland House
Bressenden Place
London
SW1E 5DU

15th September 2009

Dear Gerald,

Consultation on Parts F and L of the Building Regulations

We are writing to you with the Home Builders Federation response to the Government's consultation on Parts F and L of the building regulations.

The Home Builders Federation (HBF) is the principal trade association representing private sector house builders in England and Wales. Our members are companies who between them build about 80% of the new homes in England and Wales.

Our response comprises two, inter-related parts:

- The overview and issues contained in this letter, and;
- The answers to the consultation questions within the document.

We would stress that these should be read together in order that the bigger picture issues that emerge can be clearly understood and related to the key points of detail which give rise to them.

Issues relating to the zero carbon homes objective

An issue of particular importance is how the proposals in the current consultation relate to and may affect the path to the proposed zero carbon homes standard to apply from 2016.

It is correct in our view to follow the principle that the correct way to reduce carbon emissions from future new homes is by first improving the thermal efficiency of the building fabric as far as practicable technically and commercially before considering other measures. This fabric first principle was one of the cornerstone proposals in the consultation on the definition of zero carbon homes earlier this year and there has been broad general agreement among all the main parties about this. The priority to be given to fabric efficiency in reducing carbon emissions from new homes was duly recognised in the Minister for Housing's statement on the definition of zero carbon on 16th July.

In this context there are some key considerations that should be borne in mind for the current consultation:

- The 2010 regulations will themselves take us close to the limit of what is likely to be practically achievable in terms of fabric efficiency improvements
- As a result, very serious attention must be given to the significant variations in the practical potential for improvements on Part L 2006 performance requirements for different types of dwelling and development
- While a detached house may have potential for around a 30% improvement on Part L 2006 requirements through fabric efficiency alone, the equivalent potential for some flats and apartments may be no more than about 10%.
- We believe that the regulations must recognise this by allowing for an "aggregate" rather than "flat" approach to achieving the 25% improvement sought. This will necessarily also be a major factor in determining the details of the proposed 2013 and 2016 changes to Part L.
- Given the variation in potential for different dwelling and development types, the 2010 regulations will probably already in some cases need to provide for the suitable use of on-site renewable energy.
- The technical guidance and SAP methodology must be fit for purpose for all the above considerations.
- The implications of possible ventilation solutions – natural or mechanical – in homes built to very high levels of air tightness must also be factored into the calculation of and technical guidance for the Part L 2010 regulations given that these will either affect the scope for achievable fabric efficiency improvements or have implications for homes' energy loads in use.

Costs and development viability

Another important issue concerns costs.

As with the consultation on the definition of zero carbon, the current consultation appears to be based on an under-estimate of the costs entailed.

The view of our members who have undertaken work in this area is that the cost estimates produced for the Parts F and L consultation appear to be on the low side. We believe it is vital therefore that decisions on the new regulations take into account the more robust and accurate – as actually built – cost figures which will shortly be provided by the Zero Carbon Hub who are undertaking work on this subject based on an understanding of the relevant projects so far implemented by companies.

Given the concerns raised by the HBF about the overall or cumulative impact of policy and regulation on costs, development viability and land values – and the work being undertaken by the Government on this major issue – the cost estimates used for the purposes of decisions on the current proposals must be fully robust. While in his statement of 16 July the Housing Minister indicated that the zero carbon objective should take priority in terms of possible claims on land values, it is essential nevertheless that the cost impact of the 2010 regulation changes is properly assessed against both the economic climate that currently prevails and against other policy and regulatory impacts.

This cost and viability assessment must in turn help inform the decisions reached on what is a practical metric and standard to be adopted to determine the extent of future regulatory requirements for fabric efficiency.

Actual versus design performance

The consultation also addresses the need to ensure that new homes will perform in line with the designed as built specification.

We welcome the suggestions made in this area, but we have significant concerns about what is reasonable to expect house builders themselves to be able to achieve in regard to ensuring a particular level of performance. Ultimately it will be the purchaser of the home who determines actual performance. If purchasers do not buy in to the concept of low energy living or use the features of the home in a way that optimises performance it will appear that the new home is not performing as it was designed to do in terms of energy use.

There is therefore a need for much more work to be done to educate purchasers on how they can ensure optimum performance through their behaviour and use of the features and equipment installed to help manage energy use and adequate ventilation.

Other issues

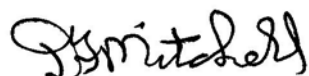
It is critical to achieving the desired performance improvements in the most practical and cost-effective way possible that the current arrangements for Accredited Construction Details (ACDs) are improved.

The current ACDs have not proved effective, but this approach has in principle much potential and could provide both flexibility and assurance for companies in achieving the required standards.

We would like to see a proper method of accrediting and evaluating ACDs and for the system to allow a company to accredit its own details effectively.

We would be happy to discuss any of these issues further with the Department if this would be helpful and facilitate effective solutions.

Yours sincerely,

A handwritten signature in black ink that reads 'D Mitchell'. The signature is written in a cursive, slightly slanted style.

Dave Mitchell
Technical Director

Annex C

Response form

The purpose of this form is to help consultees marshal their thoughts and to assist collation and analysis of the many responses that are expected. The large number of questions is a reflection of the scale of this consultation exercise and the issues that need to be addressed.

To help consultees the form is divided into sections that match the structure of the consultation document. Consultees may respond to each question in strategic terms or in depth, as they choose.

In answer to each question consultees can choose to tick boxes and/or to provide suggestions and observations in more detail. In particular, if you disagree with any proposal, please add comments and provide practical alternatives. It is not essential to form a view against every question – respond only where you wish.

The list of questions is not exhaustive, and there is no intention to discourage consultees from expressing views “outside the box”. The last question is completely open to enable consultees to make suggestions or observations that do not fit into the preceding format.

We would prefer replies by email. To this end, an electronic version of the consultation questionnaire can be downloaded from:

www.communities.gov.uk/publications/planningandbuilding/part1f2010consultation

Alternatively, please return hard copies of the completed questionnaire along with any material that you feel would support your response.

Proposals for amending Part L and Part F of the Building Regulations:
consultation

Respondent Details:	
Name: D.F.Mitchell	Please return Please return by: 17 September 2009 Responses should preferably be submitted by email to: PartLF2010.Consultation@communities.gsi.gov.uk Alternatively, hard copy responses should be sent to: Gerald McInerney Sustainable Buildings Division Department for Communities and Local Government 5th Floor Eland House Bressenden Place London SW1E 5DU
Organisation: Home Builders Federation	
Address: Byron House, 7-9 St. Jame's Street, London, SW1A !EE	
Telephone: 020 7960 1600	
Fax: 020 7960 1601	
e-mail: dave.mitchell@hbf.co.uk	
<p>Are you responding as an individual? <input type="checkbox"/></p> <p>Or are you representing the views of an organisation? <input checked="" type="checkbox"/></p> <p>If you are responding on behalf of an organisation, please say who the organisation represents and, if applicable, how the views of members have been assembled.</p>	
<p>HBF is the principal trade organisation representing the interests of house builders in England and Wales. Our members include companies of all sizes, ranging from multi-national household names through regionally based businesses and small local companies. They are responsible for more than 80% of the new homes built every year. HBF have held regional meetings throughout England and Wales with members to discuss this consultation and members comments are reflected within this response.</p>	
<p>Is your response confidential? If so please explain why. (See disclaimer on page 18.)</p>	
Yes	<input type="checkbox"/> <input checked="" type="checkbox"/>
No	
Comments	
<p>Provision is made throughout this questionnaire for you to make additional comments. If, however, you wish to provide more detailed comments on any aspect of the consultation then please feel free to append additional materials and supplementary documents, clearly marked and cross referenced</p>	

to the relevant questions, as necessary.

Organisation type (tick one box only)			
House or property developer	<input type="checkbox"/>	Local authority – Planning	<input type="checkbox"/>
Commercial developer	<input type="checkbox"/>	Local authority – Other (please specify)	<input type="checkbox"/>
Housing association (registered social landlord)	<input type="checkbox"/>	Approved Inspector	<input type="checkbox"/>
Property management:		Professional body or institution	<input type="checkbox"/>
Residential	<input type="checkbox"/>		
Commercial	<input type="checkbox"/>		
Public sector	<input type="checkbox"/>		
Builder – Main contractor (commercial/volume house builder)	<input type="checkbox"/>	Trade body or association	<input checked="" type="checkbox"/>
Builder – Small builder (repairs/ maintenance, etc)	<input type="checkbox"/>	Householder:	
		Homeowner	<input type="checkbox"/>
		Tenant	<input type="checkbox"/>
Builder – Specialist sub-contractor	<input type="checkbox"/>	Energy sector:	
		Generation	<input type="checkbox"/>
		Transmission	<input type="checkbox"/>
		Distribution	<input type="checkbox"/>
		Supplier	<input type="checkbox"/>
		Energy service company	<input type="checkbox"/>
Manufacturer	<input type="checkbox"/>	Other non-governmental organisation	<input type="checkbox"/>
Architect	<input type="checkbox"/>	Specific interest or lobby group	<input type="checkbox"/>
Civil/structural engineer	<input type="checkbox"/>	Research/academic organisation	<input type="checkbox"/>
Consultancy	<input type="checkbox"/>	Journalist/media	<input type="checkbox"/>
Individual in practice, trade or profession	<input type="checkbox"/>	Development funder	<input type="checkbox"/>

Local authority – Building control	<input type="checkbox"/>	Other (please specify):	<input type="checkbox"/>
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Geographical Location			
England	<input type="checkbox"/>	Wales	<input type="checkbox"/>
England and Wales	<input checked="" type="checkbox"/>	Other (please specify) [Redacted]	<input type="checkbox"/>

Volume 1

Proposals for amending Part L and Part F of the Building Regulations

Chapter 1 Introduction

- 1 Two approaches have been presented for determining the target emission rate (TER) in 2010 for new dwellings: the “Aggregate 25%” and “Flat 25%”. The Government preferred option is “Flat 25%”.

Which approach do you prefer?

Aggregate 25%	<input checked="" type="checkbox"/>
Flat 25%	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Please give the reason for your answer Flat rate penalises properties with mid-level heat loss (e.g. apartments, mid-terraces etc.) and contradicts statements later in this consultation regarding weighting. The aggregate option is preferred as long as it reflects construction consistency and deals with the disproportionate effect of mid-terraces, mid-floor apartments etc.	

- 2 Two approaches have been presented for determining the target emission rate (TER) in 2010 for new non-domestic buildings: the “Aggregate 25%” and “Flat 25%”. The Government preferred option is “Aggregate 25%”.

Which approach do you prefer?

Aggregate 25%	<input checked="" type="checkbox"/>
Flat 25%	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Please give the reason for your answer Reasons as above. Also gives consistency.	

- 3 Do you agree that a 25% reduction target for new non-domestic buildings is an appropriate and practical target for 2010?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>If your answer is No, at what level should the non-domestic target be set?</p> <p>Needs to be consistent with domestic. This is particularly important in mixed use developments.</p>	

- 4 Do you agree with the proposal for changes to come into force in October 2010?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>If your answer is No, please suggest when the changes should be implemented and why</p> <p>Yes - assuming the usual transitional arrangements will still be in place. Also that the regulations and all associated information including a fully tested SAP software is available 6 months before the implementation date. This is crucial to the industry.</p>	

- 5 If you have any other comments on the Introduction, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

Volume 1

Proposals for amending Part L and Part F of the Building Regulations

Chapter 2

Proposals for improving compliance and building performance

- 6 Please indicate on the scale below your view as to the likely effectiveness of the proposals in improving compliance and performance for Part L in 2010.

Very effective	Effective	Ineffective	Very ineffective
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) Which proposals do you consider would be most effective and why?

Comment If the Impact Assessment is robust, this question and its subsections are redundant. This applies also to questions 7, 8 and 9. The effectiveness of this is largely dependent upon how thorough the evaluation of the SAP process and its accompanying software has been factored into the RIA. The SAP software can make or break Part L and should be readily available to non-accredited users (i.e. designers) and should have a sufficient degree of flexibility to reflect changes in technology.

- b) Which proposals do you consider would be least effective and why?

Comment

- c) Please provide below any general comments you have on these proposals

Comment

7 Please indicate on the scale below your view as to the likely effectiveness of the proposals in improving compliance and performance for Part F in 2010.

Very effective	Effective	Ineffective	Very ineffective
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) Which proposals do you consider would be most effective and why?

Comment

b) Which proposals do you consider would be least effective and why?

Comment

c) Please provide below any general comments you have on these proposals

Comment

8 Will the existing building control system be able to enforce the proposed changes?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No , please make suggestions and observations on what could be done to improve enforcement and/or relieve the regulatory burden.	

9 Please provide below any general comments you have on the outline approach to improving compliance and performance of Parts L and F in the longer term.

Comment

- 10 Please indicate your view about the need for, remit of and operational scope of a steering group – consisting of interests in government, building control, and industry together with the education, training and research communities – designed to develop and coordinate a strategy aimed at closing the performance gap by 2016.

(a) The need for such a group

Agree	Do not agree	No view
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) Please provide any comments you may have on the need for such a group

Comment It is essential that there is builder input into such a group - input from developers, both domestic and non-domestic will provide real-world knowledge.

(c) If you agree that such a group would be valuable, please comment on the group's remit and scope

Comment As above.

- 11 If you have any other comments on the *Proposals for improving compliance and building performance*, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

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Chapter 3

Proposals for Accredited Construction Details (ACDs)

12 Do you support the proposal to accredit proprietary details?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment The current ACDs have not been sufficiently tested. There is an urgent need to make ACDs more robust and they should be properly tested. A proper method of accrediting and evaluating these details also needs to be in place. Additionally, there needs to be a method whereby a company can get their own details accredited. It should be possible to submit developed details for approval without any penalty incurred. Is there scope in this for say a company set of details to be approved or as well as a house type approval? It would not be difficult for industry to develop such a scheme in the same way as they developed the Part E scheme. Positive signals would be required from Government that such a scheme would be acceptable.	

13 Do you agree that the scheme(s) should encompass both domestic and non-domestic construction?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment As far as possible this scheme should encompass both domestic and non domestic	

14 Do you agree that psi-values should always be calculated by individuals with appropriate expertise and experience?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment We need to clearly define what is considered to be "appropriate expertise and experience". We need to then ensure that there are enough people with that expertise and experience so that there are no delays in the approval process. Any scheme incorporating this needs to be in place 6 months prior to the implementation of Part L. Needs to be a robust checking procedure.	

- 15 Do you agree that a margin (say 10%) should be added to calculated psi-values until a minimum number of implementations of the detail have been inspected on site and shown to be satisfactory?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment See above comments - does not support the idea of a robust assessment procedure.	

- 16 Do you agree that regular inspection and feedback will improve the robustness of the details and add credibility to the claimed performance of the details?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Need to establish who will carry out these inspections and what exactly they will entail.	

- 17 Do you agree that potential scheme operators should meet the criteria listed in paragraph 3-15 of *Proposals for Accredited Construction Details*?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

Don't know	<input type="checkbox"/>
<p>If your answer is Yes, please comment on how the criteria should be defined.</p> <p>If your answer is No, please list suitable criteria.</p> <p>Yes, although this is subject to previous comments.</p> <p>Experienced house builders need to be part of any such scheme.</p> <p>Any such scheme needs to be more flexible and more robust than the current scheme.</p>	

- 18 If you have any other comments on the *Proposals for Accredited Construction Details*, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment
	As previously stated, the ACDs need to be more flexible than the current system.

(The comment box will expand to accommodate any comments you wish to make)

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Chapter 4

Training and dissemination strategy

19 Do you agree with the strategic objectives described?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Training is required for commissioning. The design element will need to incorporate services. All stakeholders need to be involved, this includes consumers.	

20 Do you agree with the list of target groups?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No , please comment on how the list should be modified or developed. Need to add Energy providers to the list	

21 Do you agree with the range of content described?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No , please comment on how the range of contents should be modified or developed.	

As previously stated, buy-in is required from all stakeholders including the consumer.

Needs to also cover the buying, selling and legal processes.

22 Do you agree with the approach described for working with industry?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Yes, although self build does not appear to have been included.	

23 Please provide any general comments you have on the long term development of the knowledge and skills base.

Comment We would ask if development will be enough to inform the means of achieving the objectives for 2013 and 2016? Will it be quick enough for these deadlines?

24 If you have any other comments on the *Training and dissemination strategy*, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment
4.18	How does 10 years tie in with 2016

(The comment box will expand to accommodate any comments you wish to make)

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Chapter 5 Future Thinking Paper

Part L

- 25 Do you agree that the separate target for electric resistance heating should be progressively removed?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Should be removed altogether or at least progressively removed in line with carbon reduction of the grid.	

- 26 Do you agree that the calculation tools should report energy demand (kWh/year) for both regulated and currently unregulated demands from 2010?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Unregulated demand is a whole new area which needs careful appraisal, moving forward. We need to monitor this so that we are confident that the unregulated demands are as correct as they can possibly be and we should not be afraid to change the criteria if we find that the wrong assumptions have been made. Unregulated demand is a very uncomfortable area and we don't see how this can be accurately captured. There is little prospect of consistency in consumer unregulated demand - this would require a great deal of work to achieve. Kwh/m2 might be a better way of measuring this and would allow comparison with European figures.	

27 Do you support the idea of setting energy demand limits in amendments to Part L beyond 2010?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>If your answer is Yes, which metrics do you think are most appropriate and why? Yes for regulated energy and perhaps Kwh/m2 is the best form of measurement.</p>	

28 Do you support the concept of incorporating an automatic assessment of renewable potential as part of the Part L compliance tools?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>If your answer is Yes, please give suggestions as to how this assessment could be carried out.</p> <p>We are not sure how this could/would work.</p> <p>House builders will work out the best possible solution at the design/planning stage taking into consideration all the required metrics, i.e. customer preferences, location of development and what is available to them etc:</p>	

29 In respect of the operating and maintenance information to be provided to the user, do you think it would be a good idea if the level of content and form of presentation of the material were made a legal requirement?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>Comment</p> <p>There is already sufficient regulation in place through CDM etc.</p>	

30 Do you agree that vertical transport, security and feature lighting should be included in the TER/BER calculation for non-dwellings beyond 2010?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

Don't know	<input type="checkbox"/>
Comment This will be critical under Lifetime Homes. Security lighting in domestic buildings also needs to be included.	

31 Do you agree that the energy impact of air curtains should be included beyond 2010?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment If your answer is Yes , on what basis should standards be set, and how should the energy impact of other large openings be assessed? Research is required in this area to get the equivalent of a u value for this technology.	

32 If the exemption for conservatories less than 30m² is removed from Part L in 2010, how do you think energy performance standards for conservatories should be improved beyond 2010?

Comment The definition of a conservatory provided in the consultation document does not match that accepted by the industry. The industry defines a conservatory as a glass structure separated from the main house by doors, thermally broken from the main house and with no provision for heating. If the 'conservatory' contains heating it is technically a glass extension.	
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33 Do you feel that the modelling of highly glazed spaces in SAP and SBEM is adequate?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment There is a need for an energy modelling process and it is unclear whether this covered in the new SAP.	

34 If you have any other comments on the *Future thinking paper* in relation to Part L, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment

Part F

- 35 Dwellings are traditionally naturally ventilated. Within this consultation version of ADF, we have included guidance for increased natural ventilator area for more airtight dwellings. Do you have any evidence to suggest that appropriately sized natural ventilation does **not work** adequately in airtight homes?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>If your answer is Yes, please provide evidence : It is doubtful if the UK industry will be able to provide much evidence on this. Need to look to Europe.</p>	

- 36 Do you agree that we should develop guidance for demand-controlled ventilation systems in new dwellings beyond 2010?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>Comment More research is required into both natural and mechanical systems in air-tight homes. It is important that medical evidence is obtained in the first instance to judge whether or not this is a problem.</p>	

- 37 Do you foresee the need for technical amendments to guidance for new buildings other than dwellings in subsequent revisions of ADF?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>If your answer is Yes, please provide details. Although this is dependent on further research providing evidence that this is necessary.</p>	

38 Do you foresee the need for significant technical amendments to guidance for existing buildings in subsequent revisions of ADF?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
If your answer is Yes , please provide evidence	

39 If you have any other comments on the *Future thinking paper* in relation to Part F, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

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Annex B

Consultation stage Impact Assessment

Part L

- 40 Are the levels of emissions reductions set out for different new domestic and non-domestic building types reasonable?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No, please explain why Heat pumps, thermal piling etc. are completely absent from the modelling. Also does not address the problems associated with mix-use buildings with communal areas etc.	

- 41 Are the cost and benefit data and methods of analysis given in the Impact Assessment for **new** domestic and non-domestic buildings reasonable to evaluate the impact to amendments to Part L?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Please suggest how the estimates and methods of analysis could be improved See answer to Q40 above. Plus RIA is far too complicated.	

- 42 Are the cost and benefit data and methods of analysis given in the Impact Assessment for **existing** domestic and non-domestic buildings reasonable to evaluate the impact to amendments to Part L?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Please suggest how the estimates and methods of analysis could be improved Needs to be more robust and simpler to understand.	

Part F

- 43 For Part F, are the proposals for higher ventilation rates, testing and commissioning of ventilation systems in new dwellings set out in the Impact Assessment adequate to offset any worsening in indoor air quality that could arise from increases in air tightness? Are the costs identified reasonable?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
<p>If your answer is No, please suggest what other changes might be required and their likely cost. There is currently not enough evidence and further research is indicated. It is also subject to proper design and being fitted robustly.</p>	

General

- 44 Are there categories of risk, uncertainty or unintended consequences that have not been identified in the Impact Assessment?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>If your answer is Yes, please identify them. Thoughts on how to quantify the costs and benefits of any further categories would also be helpful. What happens if filters become blocked or the mechanical ventilation is inadvertently turned off?</p>	

- 45 Are you content with the specific impact tests carried out in the Impact Assessment?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
<p>If your answer is No, please explain why. Unable to find any reference to specific impact tests in the consultation document.</p>	

- 46 Do you agree with the proposed percentage improvement in compliance arising from the amendments to Parts L and F, based on the evidence in the Impact Assessment as well as in Chapter 2: *Proposals for improving compliance and building performance*?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
If your answer is No , please explain why	

- 47 If you have any other comments on the *Impact assessment*, please add them here, making clear which issue each comment relates to by identifying the relevant page number.

Page number	Comment

(The comment box will expand to accommodate any comments you wish to make)

Volume 2

Proposed technical guidance for Part L

Chapter 1

Approved Document L1A – Conservation of fuel and power in new dwellings

Chapter 2

Approved Document L1B – Conservation of fuel and power in existing dwellings

Chapter 3

Approved Document L2A – Conservation of fuel and power in new buildings other than dwellings

Chapter 4

Approved Document L2B – Conservation of fuel and power in existing buildings other than dwellings

ADL1A, ADL1B, ADL2A, ADL2B

- 48 Do you agree with the proposal to remove the current exemptions for certain classes of building/building work from the energy efficiency regulations, and to use guidance to demonstrate what is reasonable in each particular case?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment This can be off-set. However, need to specify whether this will apply to listed buildings and what affect this may have.	

- 49 Do you consider that the exemption for conservatories less than 30 m² should be removed from Part L in 2010? (*The main details are in ADL1B.*)

Yes	<input type="checkbox"/>
-----	--------------------------

No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment See answer to Q32 re: definition of a conservatory. However, if the definition applied is that given in the consultation document, all sizes of 'conservatory' should come under the Building Regulations	

50 If the exemption for conservatories less than 30 m² is removed from Part L in 2010, do you consider that work on conservatories should be notifiable?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Heat gain from the side of the building affected would need to be accounted for etc.	

51 Do you agree with the proposed definition of a conservatory if introduced in 2010?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment See answer to Q32 re: definition of a conservatory.	

52 Do you agree with the proposed technical standards for conservatories if introduced in 2010?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment As in the answer to Q49 - if the industry definition of a conservatory is taken then the answer is no. If the definition given in the consultation document is used then yes.	

53 Do you agree that we should introduce guidance on the insulation of swimming pool basins within buildings?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comment Why only apply to internal pools - why not include hot tubs and external pools?

ADL1A, AD2A

- 54 Do you agree with the proposal to require a design stage CO₂ emission rate calculation to be provided to the building control body (BCB) with the deposit of plans, in addition to a final as-built calculation?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment It is already good industry practice to have this information upfront.	

- 55 Do you agree that the commissioning plan should be made available with the deposit of plans?

Yes	<input checked="" type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Yes if non-domestic, no if domestic.	

- 56 Do you agree with the proposed approach to assigning psi-values in the DER/BER calculation?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment A default value could be used.	

- 57 Many adjustable trickle ventilators, and other air inlet devices, are designed to provide a small amount of background ventilation even when fully closed. Do you agree with the proposal that, in order to obtain a good measure of building envelope performance, the air permeability of buildings should be measured with air inlet devices sealed (method B in BS EN 13892:2006) rather than just closed as at present?

Yes	<input checked="" type="checkbox"/>
-----	-------------------------------------

No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Yes, however this may not give a true reading. Furthermore, if a vent is allowing air in/out whilst closed, is this not poorly designed? What would be the implications where there was an acoustic attenuation specified in the design? More consideration of these issues is required.	

ADL1B, ADL2B

58 Do you support the revised definition of renovation?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

59 I Do you agree with the guidance covering work on historic and traditional buildings and places of worship?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

60 Do you agree with the improvements to standards that are proposed for work in existing buildings?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

ADL2A, ADL2B

61 Do you agree with the new guidance relating to buildings with low energy demand?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

ADL1A

62 Do you agree with the revised definition of dwelling type?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment This definition needs to be consistently applied to all legislation.	

63 Do you support the proposals for assessing the air permeability of dwellings that are not subject to a pressure test?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment No - unless the revised figure could be used in SAP.	

64 Do you agree with the assumptions on secondary heating and internal lighting as proposed for the actual dwelling?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

65 Do you agree with the proposals for dealing with heat losses caused by a party wall bypass?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment It would be better to leave this proposal on hold until 2013. Clearly telling all stakeholders that this is what is intended. This then gives industry a chance to look at the way party walls are constructed	

**and change their detailing if required.
 At the same time it provides more time to build a better/larger evidence base which is sufficient to warrant such a proposal.
 It also provides time to fully understand the wider scale implications of such a proposal and consider the unintended consequences it causes.**

66 If you have any other comments on *Approved Document L1A*, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number. Note that the issues relating to the target setting mechanism are raised under Volume 2, Chapter 5 dealing with changes to the *National Calculation Methodology (NCM)*.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

ADL1B

67 Do you agree that, for most cases, the basis of the standards for replacement windows should be the window energy rating?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	There is a need to define a proper energy rating (including frame etc.). There is currently a methodology but it needs to be an industry standard and applied consistently.

68 If you have any other comments on *Approved Document L1B*, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

ADL2A

- 69 Do you agree that Part L should set standards for buildings which use energy to condition spaces that contain processes, such as computer rooms and cold stores?.

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

- 70 Do you agree with the new guidance covering modular and portable buildings?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

- 71 Do you agree with the proposed approach to shell and core developments?.

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

- 72 Do you agree with the proposed change to the basis of Criterion 3 – limiting the effects of solar gain in summer?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

- 73 If you have any other comments on *Approved Document L2A*, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number. Note

that the issues relating to the target setting mechanism are raised under Volume 2, Chapter 5 of this consultation on *Proposed changes to the National Calculation Methodology (NCM)*.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

ADL2B

74 If you have any other comments on *Approved Document L2B*, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

Volume 2

Proposed technical guidance for Part L

Chapter 5

Proposed changes to the National Calculation Methodology

- 75 Do you agree that the specification of the notional dwelling represents a reasonably achievable standard?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment We have concerns surrounding part wall assumptions, 100% energy efficient lighting and thermal bridging etc., and how these issues are dealt with. There seems to be a case for more research surrounding this area before finalising what indeed is a notional dwelling.	

- 76 Do you agree with a fuel-based target that for most fuels delivers an approximately equal energy efficiency standard?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Inconsistent with previous policy - gas/ electricity	

- 77 Do you agree that electric resistance heating should have a more demanding energy efficiency standard than other fuels?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment This already comes under SAP. Recognition is needed that heat fuel factors will change with the decarbonisation of the grid. The type of fuel, e.g. biomass, may have a different value.	

78 Do you agree that the specifications of the notional non-dwellings represent reasonably achievable standards?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment	

79 Do you agree with the three generic space types used to generate the notional building for non-dwellings?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment	

80 Do you agree that the selection of the space type should be driven by the activity database rather than being a user choice?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

81 Do you agree that the list of available activity areas should be constrained by the Planning Use Class?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

82 If you have any other comments on the *Proposed changes to the National Calculation Methodology*, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph number.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

Volume 2

Proposed technical guidance for Part L

Chapters 6 and 7

Domestic and non-domestic building services compliance guides

- 83 The building services guides contain guidance on recommended minimum standards for appliance efficiency, system control, and installation and commissioning procedures. The guides also contain a significant amount of general “good practice” guidance on building services specifications and installation.

(a) Is the guidance clear and at an appropriate level?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment The guidance is clear but what is an "appropriate level"? Furthermore pg226 shows two hot water circuits? Is this correct/necessary?	

(b) Would it be useful to indicate within the guides those parts that are essential for compliance purposes, e.g. by highlighting text or adding separate check lists?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	

- 84 Are the minimum performance standards a useful starting point in the context of designing a building to achieve the TER?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Please explain Although this should not be relied on.	

85 Do you agree that the minimum efficiency of gas and oil-fired new and replacement boilers should be raised to 90%?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Providing sufficient numbers are available?	

86 There is an agreed labelling system in place for rating the performance of heating system pumps and circulators. Do you agree that it is appropriate to require a minimum rating of "Band C"?

Minimum cell efficiency	<input checked="" type="checkbox"/>
Other index of performance	<input type="checkbox"/>
If your answer is No , do you have an alternative suggestion? This also needs to be usable and checked under SAP.	

87 The performance of PV systems is currently indicated by their minimum cell efficiency. Is there another index of performance, such as Performance Ratio or System Yield, that would be more appropriate?

Minimum cell efficiency	<input checked="" type="checkbox"/>
Other index of performance	<input type="checkbox"/>
If your answer is Other index of performance , please provide details below: No other index of performance is widely known.	

88 The guides deal mainly with the most commonly employed building services. Is it clear that the guides do not preclude the use of other suitable services or innovative technologies?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment The guides are reasonably clear but there is concern about the measurability of these technologies.	

89 Are there any significant omissions from the content of the guides?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

Don't know	<input type="checkbox"/>
If your answer is Yes , please provide details: No mention of minimum standards of new and emergent technologies (CHP, biomass, air source heat pumps etc.)	

90 If you have any other comments on the *Domestic Building Services Compliance Guide* and *Non-Domestic Building Services Compliance Guide*, please add them here, making clear which issue each comment relates to by identifying the guide and relevant section.

Guide	Section	Comment

(The comment box will expand to accommodate any comments you wish to make)

Volume 3

Proposed technical guidance for Part F

Chapter 1

Approved Document F – Means of ventilation

- 91 In *Section 2: The Requirement F1 – Means of ventilation*, below the requirement we have set out six proposed changes to the Regulations. Do you agree that all the changes are desirable?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No, please explain why Agree in principle but they need to be more clearly and thoroughly explained.	

- 92 *Section 5: Dwellings* introduces a higher ventilation rate for dwellings designed to have an air permeability equal to or tighter than $5 \text{ m}^3/(\text{h.m}^2)$ at 50 Pa. Do you agree that this is a reasonable change-over value?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
If your answer is No, what changes should be made? Based on present understanding this is possible, but why $5\text{m}^3/(\text{h.m}^2)$? More research is needed, particularly research that proves we actually need to do this (i.e. medical evidence etc.) In addition, what are the consequences of over or under achieving the stated aim?	

- 93 The Approved Document calls for all ventilation systems to be installed correctly and commissioned, and *Section 5: Dwellings* refers to a new installation and commissioning compliance guide for new dwellings.

Do you think current standards of installation and commissioning need to be improved in new dwellings?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

Don't know	<input type="checkbox"/>
Comment Installation compliance guide is appropriate but the commissioning is excessive, should only be user guidance.	

- 94 Approved Document F 2006 spreads guidance for each domestic ventilation system type between Tables. In this edition, *Section 5: Dwellings* presents the full advice for each system in its own separate Table. Do you find this approach clearer?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No , how do you think we should present the information?	

- 95 There has been little modification of *Section 6: Buildings other than dwellings* due to our understanding that air infiltration is not a significant part of the design strategy within any guidance referenced in this Section. Do you have any information to suggest modifications to the ventilation guidance for more airtight buildings of this type are necessary?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is Yes , please provide further information	

- 96 With reference to *Section 7: Work on existing buildings*, should trickle ventilators (or an equivalent means of ventilation) be fitted when windows are replaced? See also the analysis in the Impact Assessment.

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Please give reasons for your answer This will work towards a consistent approach however in instances where noise levels are affected, mechanical ventilation may be more appropriate. There are also issues if applied to listed buildings etc. and more detail is required into replacement/ renewal, size of vent etc.	

97 In *Appendix A: Performance based ventilation*, the basis of the moisture criterion has been changed to reflect recent research. Do you agree with these changes?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No , please give details Although issues with the robustness of humidistats.	

98 In *Appendix B: Purge ventilation*, guidance has been added to say that if the window opens less than 15° it is not suitable for providing purge ventilation. Do you agree?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
If your answer is No , please give details What is the basis of the 15 degrees and how does this relate to Part F?	

99 Appendix E is new. It gives noise criteria and an assessment procedure for continuous mechanical ventilation systems for use in dwellings. It provides a means of meeting the proposed new regulation for noise levels from these ventilation devices.

(a) Do you think the maximum sound power levels and the test for tonal components are reasonable?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No , please give details Although the stated level is too onerous, 35 decibels would be reasonable.	

(b) Are the test procedures appropriate and is sufficient information provided to carry out the tests in a consistent way?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
If your answer is No , please give details	

100 In general, are you aware of any particular experience from other countries that should be considered as part of this review? This could relate to noise, ventilation performance, or other matters.

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
If your answer is Yes , please provide details	

101 Do you have experience of ventilation systems designed according to the guidance in Approved Document F 2006 not providing adequate ventilation, and resulting in indoor air quality problems?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is Yes , please provide details of problems and likely causes, such as incorrect implementation of guidance	

102 Do you have any suggestions for improving the clarity of Approved Document F?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is Yes , please provide details:	

103 If you have any further comments on Approved Document F, please add them here, making clear which issue each comment relates to by identifying the relevant paragraph of the AD.

Paragraph number	Comment

(The comment box will expand to accommodate any comments you wish to make)

Volume 3

Proposed technical guidance for Part F

Chapter 2

Domestic ventilation – Installation and Commissioning Compliance Guide

104 Is the installation and commissioning guidance both clear and appropriate for each system type?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No, please provide recommendations for improvement Yes but the guidance is too confusing and complex for consumers.	

105 Do you foresee any difficulties in implementing this guidance in practice to achieve a good quality of installation and commissioning?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is Yes, please identify problems and potential solutions Significant costs are involved and a high quality installation will not results from this administrative-heavy approach.	

106 (a) Do you agree that the completion checklist and commissioning sheet section should be completed and signed by a suitably “qualified” person?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

(b) If your answer is Yes, what training/education programme exists that would suitably qualify a person to complete this sheet, and what prior experience should that person possess?

Comment A definition of a "suitable qualified" person is needed.

(c) Which industry association(s) should be invited to accredit their members?

Comment

107 If you have any other comments on the *Domestic Ventilation: Installation and Commissioning Guide*, please add them here, making clear which issue each comment relates to by identifying the relevant section.

Section	Comment

(The comment box will expand to accommodate any comments you wish to make)

SAP and SBEM software for consultation at:

www.2010ncm.bre.co.uk

SAP 2009 software tool

For the purposes of the Part L consultation, the Government has issued a special version of a SAP 2009 software tool to help consultees identify the impact of the proposed changes to Part L and SAP on dwelling design. The tool's core calculation engine is the SAP 2009 methodology; it also has a simple user interface and generates a compliance "output report" (see below).

When the new Part L regulations come into force, the Government could continue to make the software for the core calculation engine available as an alternative to the traditional manual spreadsheet. The core calculation software could be provided in one of two formats – locked or unlocked:

- (a) A locked core calculation engine could be incorporated by software suppliers into their own products, with a user-friendly interface and added functionality. Developers could then use such products to demonstrate compliance with building regulations.
- (b) Software with an unlocked core could be used by industry as a design tool to develop products with improved energy efficiency and/or to reduce carbon dioxide emissions associated with new build dwellings. It would not be possible to use software with an unlocked core calculation engine for demonstrating compliance.

108 Would a locked core calculation engine be useful?

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Please give reasons for your answer	

109 Would an unlocked core calculation engine be useful?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Please give reasons for your answer Useful to check future values of new technologies etc.	

Compliance “output report”

It is proposed to amend the regulations so that builders will be required to submit to the building control body (BCB) CO2 emission rate calculations demonstrating compliance with building regulations at the initial design stage as well as on completion (the current requirement). At the design stage, the builder would carry out a preliminary calculation based on plans and specifications and provide the results of these calculations and the associated data inputs to the BCB.

It is suggested that compliance with building regulations would be improved and enforcement made easier if Part L compliance software (i.e SAP 2009, SBEM and other non-domestic CO2 emission rate calculation tools) produced a compliance “output report”. The output report would indicate whether the design met the Part L Criteria 1 to 3 in ADL1A and ADL2A, and would list the design features likely to be most critical in meeting the criteria along with relevant details of the construction. When inspecting buildings during construction, BCBs would be able to focus on those key features.

The SAP and SBEM tools provided for the purposes of the Part L consultation both produce a compliance output report.

110 Do you agree that Part L compliance software should produce an output report?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Please give reasons for your answer Would show improvement in compliance level, useful for CfSH.	

111 Do you have any suggestions for improving the output report produced by the SAP and SBEM consultation software?

Comment <ul style="list-style-type: none">• Reference to the Code• Zero Carbon• % improvement – over base etc.• Provide a print-out certificate per plot.

112 If you have any other comments on the Part L consultation SAP and SBEM software tools, please add them here.

Comment <ul style="list-style-type: none">• Ensure it works and is debugged
--

- **Need to have the facility to compare results with the existing software**

General suggestions and observations

113 Please enter below any additional suggestions or observations that you would like to make on the proposals for amending Part L and Part F of the Building Regulations.

Comment
