

The Chartered Institute of Building

submission to

The Department of Communities and Local Government

on the Government's consultation about the

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

17th September 2009

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

Introduction

The Chartered Institute of Building (CIOB) represents for the public benefit the most diverse set of professionals in the construction industry.

Our Mission:

To contribute to the creation of a modern, progressive, and responsible construction industry; able to meet the economic, environmental and social challenges faced in the 21st century.

Our 7 Guiding Principles:

- Creating extraordinary people through professional learning and continuous personal development.
- Promoting the built environment as central to the quality of life for everyone everywhere.
- Achieving a sustainable future, worldwide.
- Advocating exemplary ethical practice and behaviour, integrity and transparency.
- Pursuing excellence in management practice, and technological innovation rooted in evidence based science
- Being socially responsible and working responsibly
- Enabling our members to find an emotional resonance with the Institute; their success is our success.

We have over 40,000 members around the world and are considered to be the international voice of the building professional, representing an unequalled body of knowledge concerning the management of the total building process.

Chartered Member status is recognised internationally as the mark of a true, skilled professional in the construction industry and CIOB members have a common commitment to achieving and maintaining the highest possible standards within the built environment.

The Chartered Building Company and Consultancy Schemes (CBCs) are a vital part of the CIOB, providing the Institute's members with a further business perspective.

The CIOB is also a member of the Society for the Environment and is able to award the Chartered Environmentalist qualification. We currently have over 280 Chartered Environmentalist members and this number is growing daily.

Our submission has been developed for the public benefit and is also informed by feedback from our members. Feedback has been analysed and this submission represents the consensus viewpoint which has subsequently been reviewed by Ambassador members.

General Comments

The Chartered Institute of Building (CIOB) welcomes the opportunity to respond to the ‘Proposals for amending Part L and Part F of the Building Regulations’ consultation. We appreciate the continuity of content and approach that has been incorporated from the 2006 editions of Approved Documents L and F and believe this will be of great benefit to the industry when implementing the amendments. We favour clear, practical and easily understandable documents and recognise the improvement that has been made to a number of the definitions included in the draft documents.

We welcome increasing energy efficiency for buildings...

We support and welcome the move towards increasing the energy efficiency standards of all buildings, especially progressing towards zero carbon new dwellings in 2016 and zero carbon new non-domestic buildings by 2019. We welcome the joined up approach which incorporates Approved Documents L, F, Standard Assessment Procedure (SAP) and the views of industry.

The CIOB supports a united approach for education...

We welcome the united approach towards dissemination of information and education as outlined in the consultation document for all those involved in the built environment sector. We recognise the role that the CIOB can take in providing training and education and eagerly await the resources that will enable our branch network structure to deliver education to construction professionals and the public.

We would like to highlight the skills base needed especially for the instillation, commissioning and certification of increased quantities of ventilation appliances. We recognise that as part of a wider programme of education, engagement with building occupiers is vital to better understand the use of buildings and appliances. This understanding can be used to drive a change to methodology which makes best use of in-built technologies and drives the necessary behavioural change by occupiers and the industry alike.

We support an approach that aligns design and as-built structures...

We support an approach that aims to narrow the distinction between design and as-built structures by enabling more thorough on-site checks by those involved in the construction process and those enforcing the regulations. We support the provision of design emission rate calculation information at an earlier stage in the development process.

We would like to see SAP used as a design driver and not only for compliance checking and favour more widespread distribution of the software to help improve understanding of the assessment methodology and criteria.

We support changes including the introduction of fabric longstops, accredited construction details, increased air testing, and limiting solar gain to reduce reliance on cooling and air conditioning.

We would like to note that U values remain either slightly improved or unchanged, which we believe will give consistency for those working with the regulations, support a smooth transition to the new regulations and allow for performance improvements in the future.

The CIOB calls for a clear lead in period...

We believe a clear lead in period for the new regulations is needed, where all new information is freely and readily available, including practice guides that are referenced in the Approved Documents. We also ask for procedures to be in place which highlight and identify the processes expected for those projects that are part way through the development process.

We call for a stronger approach towards consequential improvements...

We are disappointed that the opportunity to develop consequential improvements for existing domestic buildings has not been taken further and consider this to be a missed opportunity for the UK to progress towards the emission reduction targets set by the Climate Change Act. Existing buildings represent an area where significant savings in energy usage can be made. We believe that improvements can be introduced effectively and cost efficiently for the domestic and non-domestic sectors and would ask government to further consider approaches for the practical introduction and funding mechanisms of such improvements especially in the domestic sector.

The CIOB calls for a wider focus...

We believe that there should be a wider focus towards energy use in buildings. We understand and appreciate the need for minimum standards for individual buildings

as outlined in the Approved Documents and would like to highlight the impact that requirements and methodology contained in the Approved Documents and SAP have upon national energy policy. Alignment between Approved Documents and national energy policy, particularly fuel use is important for shaping the way towards low and zero carbon buildings in the near future.

Specific Comments

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: Robert Macdonald	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: Chartered Institute of Building (CIOB)	
Address: Englemere, Kings Ride, Ascot, Berkshire, SL5 7TB	
Telephone: 01344 630881	
Fax: 01344 630770	
e-mail: rmacdonald@ciob.org.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>	
Please see introduction sheet	

<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 to the relevant questions, as necessary.</p>	

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 checked="" 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 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"/>

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 type="checkbox"/>
Flat 25%	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Please give the reason for your answer Both approaches appear to offer similar savings and with this in mind, the "Flat" approach is clearer for everyone involved and is likely to be more straightforward to implement. A "Flat" rate will serve as a clear push in efficiency for all new dwellings.	

- 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 We believe that there is more variation in building types in the non-domestic sector and therefore an "Aggregate" approach would be more workable.	

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

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No , at what level should the non-domestic target be set?	

- 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"/>
If your answer is No , please suggest when the changes should be implemented and why We agree with the proposal for changes to come into force in October 2010 and would like to see a six-month lead-in transition period with all relevant information available to enable education and training to take place. We also think it would be of benefit to clarify the date that the regulations come into force and how projects part way through the development process will be affected.	

- 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 An Accredited Construction Detail scheme should enable ease of design, construction and compliance checking, ensuring as-built performance meets designed performance.

- 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 Air-flow testing as part of the commissioning process and the provision of information to occupiers.

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"/>
<p>If your answer is No, please make suggestions and observations on what could be done to improve enforcement and/or relieve the regulatory burden.</p>	

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 Recent surveys undertaken by LABC indicate that there is evidence to show that Building Control Surveyors are effective at enforcing Part L and other Approved Documents.

- 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 We feel that the diversity and experience of CIOB positions us well to positively contribute to this steering group and would welcome inclusion.

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

Comment We feel that the group could be beneficial in identifying avenues for targeting dissemination of information and education, timeframes for implementation and the most beneficial measures for closing the performance gap by 2016.

- 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 We support this process and would like to keep accredited details simple. A limited number of details that are robust with different combinations of materials would benefit all involved. We also recommend that Local Authorities and Approved Inspectors contribute to the formation of these approved details.	

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	

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	

- 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 We believe that evidence should be collected and analysed before introduction of the detail scheme to show that the proposed details are satisfactory for implementation.	

- 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	

- 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. We envisage the scheme being defined and operating in a similar manner to the existing Robust Details Scheme for Approved Document Part E (Sound).</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

(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	

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.	

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.	

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 We recognise the need for collaboration with all who are involved.	

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

Comment Training and the skills base is crucial for the overall goal of raising the energy efficiency of new and existing buildings. We appreciate the proposals for a co-ordinated approach including the distribution of pre-prepared presentations to all those parties who can spread information and provide education and training. We eagerly await receipt of this training material and believe a lead-in time of at least six months is needed to implement training and education effectively.

We believe the CIOB is well placed with our regional branch network and popular educational events to educate and inform a wide variety of members and the public.

We would welcome additional funding for those parties involved in training and appreciate that Building Control Bodies are well placed to offer training and advice to everyone involved.

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

(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 We believe that part of a long-term energy strategy includes a low-carbon electricity grid. Therefore, we would like to prepare for the future now and feel that penalising the instillation of electric appliances could increase retrofitting and waste of materials in the future as a low-carbon electricity grid develops.	

- 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 We need to be clear about the definition of 'zero carbon' in terms of regulated and unregulated demands.	

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

Yes	<input checked="" type="checkbox"/>
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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? In principle we support this idea, however we appreciate the difficulties involved in implementation. We believe that to some extent industry will drive this forward and it may be more applicable to introduce this for specific sectors, including commercial.</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 checked="" type="checkbox"/>
No	<input 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>	

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 type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
<p>Comment More importantly, we advocate the need for a 'soft landing' where the design team are available and actively involved in the running-in of the building over the first six months of occupancy. This will involve the designer checking the "as built" installations operation and function and being on hand to ensure that the building owner or operator utilises the equipment correctly. We favour a single process that is applicable to all, including all design consultants over a defined time period.</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"/>
<p>Comment We agree with the principle of including total consumption in the TER/BER calculation. However we would draw a distinction between items that are mandatory in some instances (lifts) and those that are a 'nice to have'</p>	

(feature lighting). It may then be prudent to address vertical transport separately with performance minimum standards.

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"/>
If your answer is Yes, on what basis should standards be set, and how should the energy impact of other large openings be assessed? Air curtains should be assessed as heating appliances.	

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 A Competent Person Scheme could be introduced for the glazing element of conservatories. The thermal separation of the conservatory from the dwelling is one crucial aspect and we believe that a 30m square conservatory is not dissimilar to a single-storey rear extension meaning Building Control involvement would benefit the energy performance of the glazing and other materials used in the envelope of the conservatory. Building Control involvement would also help to address other common occurrences including conflicts with drainage or fire safety.

33 Do you feel that the modelling of highly glazed spaces in SAP and SBEM is adequate?

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

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"/>
If your answer is Yes, please provide evidence: No evidence.	

- 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"/>
Comment This is a specialist and growing area where guidance is required.	

- 37 Do you foresee the need for technical amendments to guidance for new buildings other than dwellings 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 details.	

- 38 Do you foresee the need for significant technical amendments to guidance for existing buildings 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 evidence We believe that if the simple activities are covered in ADF and this ties in with regulations and guidance already in existence, there should be no need for change. Links to updated guidance documents may require updating, however these are not considered significant change.</p>	

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)

Volume 1

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

- 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 type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Please suggest how the estimates and methods of analysis could be improved	

- 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	

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"/>
If your answer is No , please suggest what other changes might be required and their likely cost.	

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"/>
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. The implications that the Building Regulations have in terms of a whole development's energy use or a national energy strategy could be developed further so that the future directions for energy policies are considered now.	

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

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

- 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"/>
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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 appears to be a common-sense approach which aims for an improvement in standards whilst giving attention to areas such as heritage.	

- 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 checked="" type="checkbox"/>
-----	-------------------------------------

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

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	We consider conservatories not dissimilar to single-storey extensions with the critical difference being the separation by a thermal barrier. We appreciate that conservatories or single-storey extensions can impact upon drainage systems in the curtailage of the building, fire escape from upper windows and that often consideration needs to be given to foundation design for differential settlement and the envelope of the extension for thermal performance. For these reasons we favour the involvement of Building Control in the construction of conservatories. It may be possible to reduce the other impacts of conservatories by reducing the size of exemptions to an area less than 10 square metres.

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

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	We like the clarity of this definition.

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

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	We agree with the standards and would like to see additional clarification stating that removal of the thermal barrier elements is a contravention of the regulations.

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 We like the wording of this statement.	

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 We believe that although a calculation can be requested at present, mandatory provision has the potential to promote energy use as a design driver. Also, for this approach to be effective, we believe that regulations need to make clear that the information has to be provided to the Building Control Body before work starts on site and a stop requirement could be introduced if necessary.	

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

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Although this information should be made available for checking in good time prior to completion.	

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

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment We favour addition of this only if this aids understanding and adds clarity to the process for all those involved.	

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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 type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment We do not feel this is necessary and would not be beneficial for determining as-built performance. Further testing and elimination could determine if trickle ventilation or other aspects of construction were affecting envelope performance.	

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 We agree with the definition, especially the working text shown in 'plumb italics' and would welcome the inclusion of these details in the Approved Documents.	

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 An appropriate balance needs to be found between heritage and energy conservation on a case by case basis. Minimising harm to the character and long term performance of fabric and fittings for important buildings is essential. Increased resources may be necessary within Local Planning Authorities in the form of conservation officers. There appears to be uncertainty	

in the application of some 'greening' approaches when applied to historically important buildings.

We do have concerns that large numbers of existing buildings may be exempt from parts of the regulations because they are designated as within a conservation area.

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 Although we would like to see these applied more widely rather than only buildings with a useful floor area of over 1000 square metres.	

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 This is an improvement over previous guidance. We anticipate that enforcement of temporary buildings is and will continue to be difficult; however the section about low energy-demand only applies to a very small number of buildings.	

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	

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

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment We believe that this process will incentivise air-permeability testing.	

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

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment We question the inclusion of a secondary heating appliance in all cases.	

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

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment recognition of heat losses through party walls should be displayed and to this extent we agree with the proposals for dealing with heat losses. We recommend that approaches for minimising heat loss are compatible with transmission of sound AD Part E and Robust Details.	

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	

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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 type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment We favour a center-pain value approach for determining the standard energy rating for replacement windows.	

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
All	We are disappointed that the opportunity to develop consequential improvements for existing domestic buildings has not been taken further. Existing buildings represent an area where significant savings in energy usage can be made and we believe that improvements can be introduced effectively and cost efficiently.

(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 This appears sensible and we agree that daily use of energy should be taken into consideration. We would be interested to see careful drafting to differentiate activities which could include more industrial processes as well as computer rooms as mentioned in the consultation documents.	

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 This guidance appears to be much improved, although not yet a definite solution. We, through our Building Control and Standards Faculty are keen to be involved in further development of this area of guidance.	

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

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment This is a difficult area and this approach is better than previous methods. It appears that there is potential to further expand this approach and we believe the word "Realistic" should be included to make the proposals less subjective.	

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 Generally we agree.	

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
All	We are disappointed that the opportunity to develop consequential improvements for existing non-domestic buildings has not been taken further. Existing buildings represent an area where significant savings in energy usage can be made and we believe that improvements can be introduced effectively and cost efficiently.

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

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

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

- 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	We do not think it is appropriate to penalise a future 'electric economy' bearing in mind future decarbonisation of the national grid. We also assume that as previous versions of SAP address this, SAP 2009 will continue to do so and see no need for repetition.

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

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input 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	We do not feel able to comment until all amendments have been made and methods thoroughly examined.

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 type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
Comment	We do not have a preference at this time.

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

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment	Although not expert with SBEM, we believe that areas including server rooms should be taken into account and incorporated into SBEM.

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 checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment We appreciate the guidance provided and would like to make sure that information is freely available and accessible to all.	

(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	

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"/>
<p>Comment Any heating appliance should be at the top of available standards so that efficiency standards continue to develop and improve.</p>	

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 type="checkbox"/>
Other index of performance	<input type="checkbox"/>
<p>If your answer is No, do you have an alternative suggestion?</p> <p>WRONG BOX PROVIDED HERE</p> <p>Question 86 As in question 85, we believe that appliances should be at the top of available standards so that efficiency standards continue to develop and improve.</p>	

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 type="checkbox"/>
Other index of performance	<input type="checkbox"/>
<p>If your answer is Other index of performance, please provide details below: A consistent simple system should be adopted to enable equal comparison across the UK and other parts of Europe.</p>	

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"/>
<p>Comment Innovation should be encouraged and other technologies or approaches are referred to in the documents.</p>	

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

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
If your answer is Yes , please provide details: Are tidal or wind power incorporated? Is a future low-carbon electric grid considered?	

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	

- 92 *Section 5: Dwellings* introduces a higher ventilation rate for dwellings designed to have an air permeability equal to or tighter than $5 \text{ m}^3/(\text{h} \cdot \text{m}^2)$ 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? We do not have any evidence to show a lack of natural ventilation is causing problems.	

- 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 checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Comment Especially for more complex equipment and systems. There is also a need to relate to the whole system rather than individual appliances.	

- 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 We have no evidence to suggest this. Non-domestic buildings are usually designed to guidance other than that described in the Approved Documents, for example CIBSE Guide B: Heating, Ventilating, Air conditioning and Refrigeration (2005) or BSRIA Illustrated Guide to Ventilation BG 2/2009 (2009)	

- 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 Replacement windows may reduce ventilation rates for buildings designed for higher ventilation rates. The inclusion of trickle vents does not appear to have a significant cost implication and benefits the control of internal environments in a secure manner. Trickle vents may not be appropriate for listed buildings or those situated in a conservation area.	

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 type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>
If your answer is No, please give details It appears that this approach will be difficult to check and comply with, not least due to the drying out period of a newly constructed building which can take between 6 and 12 months.	

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 checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
If your answer is No, please give details We agree that guidance should be aligned where possible, however, the suitability of the opening would appear to depend upon other factors including the size of the window, wind direction and proximity to other buildings. It is also important to consider alignment of the guidance with that provided in Approved Document K for avoidance of collision with opening low level windows.	

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 Yes, and these should align with other known standards.	

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

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

Don't know	<input type="checkbox"/>
If your answer is No, please give details Yes, in-situ testing seems a sensible approach towards consistent performance.	

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 Scandinavian countries, especially Sweden appear to have high efficiency and air tightness standards currently in place. Other European countries including Germany and Austria should also be considered.	

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
All document	We would like to highlight that some existing buildings need to 'breathe'. Buildings in this category including those of historical importance should be considered on a case by case basis.

(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	

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 As mentioned in question 97, we are concerned that moisture criteria and relative humidity in an occupied building will not be measurable or enforceable, especially during the drying-out period of a newly constructed building. Also as mentioned in our response to question 29, a "soft landing" for owners and occupiers would be following installation and commissioning and could help educate and influence the behaviour of owners/occupiers with regard to the use of the building.	

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 We recommend that a suitably qualified person is 'professionally qualified and suitably competent'.

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

Comment Appropriate professional and industry organisations include CIBSE, IMechE, NICEIC and ECA.

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 checked="" type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Please give reasons for your answer Assuming software products are relatively inexpensive and updates are infrequent or could be incorporated into the products, the benefits of increased usability, functionality and provision of information could further developers' knowledge and understanding of methodology focused towards low- and zero-carbon housing. We also encourage consideration of source code escrow.	

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 We believe that the SAP software should be used as a design tool to help bridge the gap between design and as-built performance and to further the industry towards low and zero carbon dwellings.

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 This will provide information that will help designer, builder and compliance checker to ensure that those areas of highest criticality are designed out or carefully considered during the construction phase, reducing the potential for a gap between design and as-built performance.

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

Comment

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

Comment

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 Please see introduction section with general CIOB comments.