

Q1: Do you agree that it is sensible to prioritise the proposed amendments to Technical Booklets F1 and F2 guidance in advance of awaiting outcomes around the development of new UK NCMs, software, and proposed building regulations uplifts?

- **Yes**

We have already fallen well behind the energy performance of buildings standards for buildings currently being constructed in neighbouring jurisdictions. An incremental uplift now will at least give breathing space to consider future uplifts whilst at the same time providing tangible benefits in terms of buildings' energy performance and reduced carbon production.

Q2: Do you agree that additional manual checks of current software reports will be manageable in practice to demonstrate compliance in relation to the new requirements for:

a) the betterment of the TER;

b) an air-tightness performance no greater than $10 \text{ m}^3/(\text{h.m}^2)$ at 50Pa; and

c) new U-value limits for building fabric (see paragraph. 5.59 on this below)?

- **Yes to (a), (b) & (c)**

A small additional resource (surveyor time) will be required to carry out these proposed manual checks on the software adjustment – and the software will in time be revised to take changes into account so that the outputs do not require a manual adjustment.

Paragraph 2.35A of the proposed new TB F1 and Paragraph 2.47A and 2.47B of the proposed new TB F2 provide details for the betterment of the TER and that is covered by Regulation 43B. However, we have some concerns that Regulation 40 indicates 'a target carbon dioxide emission rate for that building shall be calculated using a national calculation methodology' (NCM). Unless the NCM definition is amended to include these new proposals it and Part F will be contradictory and possibly misleading.

An air-tightness maximum of $10 \text{ m}^3/(\text{h.m}^2)$ at 50Pa is readily achievable – most new buildings will be considerably more air-tight than this so the increase in minimum standard from 15 to

10 is welcomed. The 40% uplift in TER will in practice mean that a much better airtightness performance than 10 is likely to be the norm required to achieve compliance.

We agree with the need to improve fabric performance whilst at the same time providing an element of flexibility that allows trade-offs between elements whilst still meeting the overall energy performance targets

Q3: Do you agree that the new guidance should apply from three months of publication of the guidance and from as early in 2022 as practicable?

- **Yes**

Q4: Do you agree that Option 1 should be dismissed?

- **Yes**

Q5: Do you agree that the above proposals provide an appropriate interim step, which can be implemented quickly?

- **Yes**

High standards of air-tightness performance are already being achieved by competent builders. It is stated in the guidance that the improved standards required in overall performance are expected to lead to a greater use of renewable generation technologies. It may take some time for the application of these technologies to become mainstream, as there will be a learning curve for all but a few with the expertise in these (currently) specialist technologies.

Q6: Do you prefer Option 3 (40% betterment of the TER for houses, 25% for flats and 15% for new non-domestic buildings), or are the standards outlined in Option 2 (25% betterment of the TER for all dwellings and 15% for buildings other than dwellings) preferred?

- **Preference is for Option 3**

The preference is for Option 3, as it will bring NI up to a standard more on a par with our neighbours in England & ROI, but more importantly will be a step towards reducing our carbon emissions.

If answering 'None of the above', please take into account and advise if proposals described here should be delayed or halted, in order to progress in line with your suggestions.

Q7: Do you agree that the definition of 'flat' in regulation 2 provides a sufficiently clear discrimination of the building types to enable the different betterment rates to be applied to houses (40%) and flats (25%)?

- **Yes**

It is agreed the definition of flat in Regulation 2 recognises the difference between a flat and a house. Regulation 32 (2) provides the definition of a 'Dwellinghouse'.

Q8: Do you agree that the proposed DER requirement for a 25% betterment of the TER should be applied to flats?

- **Yes**

We agree 25% betterment rate to flats as a workable interim measure given the design constraints of flats as opposed to houses. The introduction and 'normalisation' of renewable technologies will allow a further betterment in future – for many flats the scope to achieve the more onerous percentage TER uplift applied to houses may be harder to achieve given their usually smaller thermal envelope.

If no, should they be more onerous or less onerous? Please explain your reasoning and provide supporting evidence for alternative suggestions, taking into account that further review is planned for 2022/23 and that other building regulation proposals are likely to impact some flats.

Q9:

Do you agree with the heat pump costing assumptions (see Annex A in the Regulatory Impact Assessment (RIA)), the 10% incident rate estimate for flats and the proposed level of uptake for heat pumps in houses, used in our modelling (see Annex C in RIA), appropriate?

- **Yes**

We have no evidence-based information to offer an informed opinion on the likely uptake of heat-pump technology or the costing assumptions of building owners adopting heat-pump technology. However, the figures in the RIA appear reasonable assumptions.

Q10: Do you agree that the Department should make any necessary adjustment to attend to replicating the treatment of heat pumps proposed under Part L revisions in England for non-domestic buildings?

- Yes

Q11: Do you have any data or modelling that would be useful in helping to assess the likely cost impacts on specific building types under the proposals?

- No

Q12: Do you support the overall proposals for buildings other than dwellings, including proposed BER requirement for a 15% betterment of the TER for new non-domestic NZEB buildings?

- Yes

Yes, we agree that as an interim measure and based on information provided, a 15% betterment appears to be a reasonable level to apply across all non-domestic building types, especially if there is to be a further review of Part F in 2022/23.

If no, should the proposals be more onerous or less onerous? Please explain your reasoning and provide supporting evidence for alternative suggestions, taking into account that further review is planned for 2022/23.

Q13: Do you agree that adopting the 2013 edition of the Non-Domestic Building Services Compliance Guide is worthwhile and would be at negligible cost to current practice?

- Yes

If no, please provide evidence to explain where this would be difficult or how cost assumptions should be revised.

Q14: Do you agree that the guidance revising the limiting U-values is worthwhile and workable for industry and enforcement?

- Yes

If no, please explain your reasoning.

Q15: Do you agree that the revisions to guidance on thermal bridging are a helpful clarification of current processes?

- Yes

Q16: Do you agree with the removal of the default values for air permeability of 15 m³/(h.m²) currently permitted?

- Yes

Most buildings are currently constructed with air permeability rates much lower than 15, and 15 is a poor standard for modern construction techniques, especially now that the requirement to test permeability to show compliance with the design SAP/SBEM output has been in place for so long.

If no, please explain your reasoning.

Q17: Do you agree that the overall proposed changes on fabric standards are helpful to support a 'fabric-first' approach?

- Yes

If no, please explain your reasoning and what should be done, taking into account that any significant review may delay implementation

Q18: Do you agree that the guidance on non-export connections is helpful?

- Yes

If no, please explain your reasoning.

Q19: Do you have any comment on our impact assessment and its key assumptions?

- Yes

Extremely comprehensive and informative. However, the assessment makes no reference to the impact on Local Authority Building Control services for the additional assessment time to confirm compliance whilst awaiting SAP software upgrades. This will put an addition resource burden on Building Control with no further resources available.

If no, please explain your reasoning and suggest alternatives calculations.

Final question: General suggestions and observations

Q20: Have you any suggestions or observations that do not fit into the preceding questions?

- **No**