



Department of
**Finance and
Personnel**
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Building Regulations (Northern Ireland) 2011

Phase 2 Consultation

Consultation Proposals

(closing date for the receipt of responses is 4:00 pm on 14 October 2011)

June 2011

Introduction

Following consultation, the Building Regulations primary legislation “The Building Regulations (Northern Ireland) Order 1979” was amended in March 2009 by “The Building Regulations (Amendment) Act (Northern Ireland) 2009” to provide the power to make building regulations supported by guidance.

The Department of Finance and Personnel is exercising the power to introduce guidance based regulations and is consulting in two phases on proposals to do so. Phase 1 consultation is complete and Phase 2 is the current consultation.

In addition, proposals to amend the Prescribed Fees Regulations will also be consulted upon in Autumn 2011.

It is proposed to make the new guidance based regulations at the end of 2011, coming into operation in Spring 2012 and to bring into operation new Prescribed Fees Regulations with the new Building Regulations.

Contents

	<i>Page</i>
1. Background	4
2. Introduction to Phase 2 consultation proposals	6
3. Consultation package – content and response	6
4. Proposals for new Building Regulations – Part A	9
5. Proposals for new Building Regulations – Parts B, D, F, H, J, K, L, P & R	15
6. Proposals For New Technical Booklets	21
7. Proposed further amendments following Phase 1 consultation	29

1. BACKGROUND

- 1.1 The Department of Finance and Personnel has responsibility for maintaining the Building Regulations for Northern Ireland.
- 1.2 Building Regulations apply to most building work and are made generally to ensure the health, safety, welfare and convenience of people in and around buildings, to further the conservation of fuel and power, protect and enhance the environment and to promote sustainable development. The current building regulations are The Building Regulations (Northern Ireland) 2000 (as amended) (the Building Regulations), and were made using powers provided in the Building Regulations (NI) Order 1979 (as amended).
- 1.3 Building Regulations express technical requirements mainly in functional wording (i.e. they identify a reasonable standard that should be attained). In the present deemed-to-satisfy system the regulations refer to provisions (which may be in the form of Technical Booklets, British and European Standards, or other publications), which, if followed, satisfy the regulatory requirements (i.e. accepted by Building Control). It is recognised that the provisions contained in Technical Booklets are generic and cover the most common situations/ scenarios and forms of domestic type construction. Situations may arise where it is not only appropriate but also necessary to demonstrate compliance with the Building Regulations with a form of construction outside those contained in the Technical Booklets.
- 1.4 The Department considered that there was benefit in moving towards a system of guidance publications for a number of reasons including facilitating closer technical harmonisation with the building regulations in GB and ROI, which are guidance based. A guidance based system has been shown to free designers from the restrictive deemed-to-satisfy provisions, it encourages creativity and provides more flexibility in design and in the use of new and emerging materials and technologies.
- 1.5 In March 2009 the Building Regulations (Amendment) Act (Northern Ireland) 2009 (the 2009 Act) received Royal Assent. This Act, when the relevant paragraph is commenced, will revoke the power to provide methods and standards that would be deemed-to-satisfy particular requirements of the building regulations and will replace this power with the power to provide guidance.
- 1.6 Work is on-going on the development of a new set of Building Regulations to consolidate the 2000 Regulations and all subsequent amendments. The new Regulations will also include a number of new requirements including those brought about by provisions included in the 2009 Act. A new suite of guidance based Technical Booklets will be published to support the new Regulations.
- 1.7 District councils are permitted to charge fees where they undertake prescribed building regulations functions. These functions and charges are set out in the Building (Prescribed Fees) Regulations (Northern Ireland) 1997. A review of the prescribed fees is also ongoing.

1.8 The Department has adopted a 3-phased approach to consulting on replacing the current Building (including Fees) Regulations, as follows –

Phase 1 Revised format of the Technical Booklets;
The introduction of new guidance-based Technical Booklets for –
Part E: Fire safety;
Part H: Stairs, ramps, guarding and protection from impact;
Part N: Drainage; and
Part V: Glazing;
with little or no regulatory change.
Regulatory/technical uplifts and new guidance-based Technical Booklets for –
Part C: Preparation of site and resistance to moisture; and
Part G: Sound insulation of dwellings.

Phase 2 Revision of Part A: Interpretation and general;
The introduction of new guidance-based Technical Booklets with little or no regulatory change for –
Part B: Materials and workmanship;
Part D: Structure;
Part J: Solid waste in buildings; and
Part R: Access to and use of buildings;
Regulatory/technical uplifts and new guidance-based Technical Booklets for –
Part F Conservation of fuel and power;
Part K Ventilation;
Part L: Combustion appliances and fuel storage systems; and
Part P: Sanitary appliances and unvented hot water storage systems.
Further proposed amendments to Part H and Technical Booklets E & N.

Phase 3 Replacement of the Building (Prescribed Fees) Regulations (NI) 1997.

This consultation relates to Phase 2 as outlined above.

1.9 The Phase 1 public consultation was conducted from 9th July to 29th October 2010. Responses to the Phase 1 consultation were largely supportive but comments and suggestions on improvements were also received. A number of these suggestions have been incorporated into the proposals included in this Phase 2 consultation, for example to improve the format/content of Technical Booklets. The outcomes of both consultations will be considered together before the new regulations and guidance based Technical Booklets are finalised.

2. INTRODUCTION TO PHASE 2 CONSULTATION PROPOSALS

- 2.1 The purpose of this consultation is to obtain comments and views of interested parties on proposals for changes to Parts of the Northern Ireland Building Regulations. Titles to Parts may be amended to reflect revised content.
- 2.2 The proposals for Part A are included in a draft of the proposed new Building Regulations included in the consultation papers. This draft gives consultees an overview of all of the proposed deletions, alterations and additions to the current regulations, including those already proposed in the Phase 1 consultation.
- 2.3 As a consequence of a change of powers included in the 2009 Act (see para. 1.5) deemed-to-satisfy regulations and the Schedules and Tables setting out the publications previously referenced as containing provisions that would be deemed-to-satisfy particular requirements would no longer form part of the new regulations. However, the methods and standards that currently are deemed-to-satisfy particular requirements will, if still appropriate, be referenced as suitable guidance in the new guidance Technical Booklets. Where an alternative approach can be given, for example, by referring to other standards or other publications, these alternatives will also be included in the new Technical Booklets.
- 2.4 The proposed changes will also determine if terms used in the regulations need to remain, where they will be located, whether the current definitions remain appropriate or if they need to be redefined.

3. CONSULTATION PACKAGE – CONTENT AND RESPONSE

- 3.1 In addition to these proposals, the documents making up this consultation are –
- Dear Consultee letter
 - Response Form for Consultees
 - Regulatory Impact Assessment (Phase 2 Draft for Consultation)
 - Draft Building Regulations (Northern Ireland) 2011
 - Technical Booklet B (Materials and workmanship)
 - Technical Booklet D (Structure)
 - Technical Booklets F1 and F2 (Conservation of fuel and power)
 - Technical Booklet H (Stairs, ramps, guarding and protection from impact)
 - Technical Booklet J (Solid waste in buildings)
 - Technical Booklet K (Ventilation)
 - Technical Booklet L (Combustion appliances and fuel storage systems)
 - Technical Booklet P (Sanitary appliances, unvented hot water storage systems and reducing the risk of scalding) and
 - Technical Booklet R (Access to and use of buildings)

All of the documents are available online at www.buildingregulationsni.gov.uk

- 3.2 All proposed changes to the current regulations (see Sections 4 and 5 “Proposals for new Building Regulations”) are identified in **red text** with deleted text being shown as “**strikethrough**”. The requirements of the technical Parts of the regulations are repeated in the relevant Technical Booklet but are shown as the proposed regulations that would apply after the amendment is made.
- 3.3 Where changes in Technical Booklets D, H, L, P and R are proposed and guidance is provided, new and revised text is highlighted in **red**. All of the content of Technical Booklets B, F1, F2, J and K is considered to be “new”.

Responding to this consultation

- 3.4 We look forward to receiving your comments and views concerning any of the proposals contained in this consultation. In order to assist our analysis of responses please use the Response Form included on the website and submit your reply electronically to karen.mckernon@dfpni.gov.uk

Alternatively your response may be posted or faxed to –

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Fax: (028) 90823282

The Department will consider all the responses to this consultation received on or before the closing date, which is 4.00 pm on Friday 14 October 2011.

Submissions made after this date cannot be considered.

Code of practice on consultations

- 3.5 In light of the requirements of the Code of Practice on Access to Government and the Freedom of Information Act, responses may be made available to the public on request. We may also wish to make responses to this consultation available to the Northern Ireland Assembly and for public inspection either at the Building Standards Branch office or on the website.
- 3.6 You have the option of indicating that you wish your response to remain confidential and the Department will generally respect that request. Should it be decided that the public interest must override that request, the Department will contact you before disclosure and, if appropriate, provide you with an opportunity for your response to be withdrawn.

PROPOSALS FOR NEW BUILDING REGULATIONS

4.	Part A: Interpretation and general	9
5.2	Part B: Materials and workmanship*	16
5.3	Part D: Structure*	16
5.4	Part F: Conservation of fuel and power	16
5.5	Part H: Stairs, ramps, guarding and protection from impact	18
5.6	Part J: Solid waste in buildings*	19
5.7	Part K: Ventilation	19
5.8	Part L: Combustion appliances and fuel storage systems	19
5.9	Part P: Sanitary appliances, unvented hot water storage systems and reducing the risk of scalding	20
5.10	Part R: Access to and use of buildings*	20

* No substantive change

PROPOSALS FOR NEW BUILDING REGULATIONS

4. Part A (Interpretation and general)

- 4.1 Part A of the Building Regulations has two main purposes –
- to establish processes and procedures relating to the application of the regulations –
 - how the regulatory requirements should be applied in relation to the erection of buildings, to works of alteration, extension, change of use, installation of services and fittings;
 - procedures to be followed when making applications and giving notifications to a district council;
 - responsibilities of the district council (Building Control);
 - rights and timescales for appealing against a decision of a district council; and
 - to define the main terms used in the regulations.
- 4.2 The Department proposes to amend some of the current Part A regulations, to add a number of new regulations to Part A and to amend, delete or add a number of definitions.

New Requirements (2009 Act)

- 4.3 The 2009 Act created new provisions in relation to type approvals for dwellings, tests to prove conformity with building regulations and the time period for serving of contravention notices. The Department now intends to introduce requirements into Part A in relation to these provisions as follows:
- 4.3.1 Type approvals (A11 and Schedule 3 Part C) It is proposed to allow anyone who intends to erect the same house type in a number of district council areas to apply for a “type approval” certificate for that house type which would be valid in those council areas. The application would be made to a “processing council” (i.e. the district council which, if it deems it appropriate to do so, will issue the certificate) which will be required to consult with other district councils affected by the request and anyone else considered appropriate, and to publish notice of all certificates issued or any variation to a certificate. The type approval will not apply to site specific matters (such as foundations), will be time limited and in any event will cease to have effect from the date when subsequent amendments to the Building Regulations come into operation except where plans for a particular development have already been deposited with the relevant district council.
- 4.3.2 Testing of drains and private sewers (A15) In addition to the current requirement permitting the district council to test any drain or private sewer to establish compliance with Part N (Drainage), it is proposed to permit the district council to require any person who carried out, or on whose behalf

carried out, work to the drains or private sewers to undertake such tests and where applicable to advise the district council of the results of the tests.

- 4.3.3 Contravention period A18 Currently a district council may serve a contravention notice up to 18 months from the date the work that caused the contravention was completed. This has on occasion proved problematic, particularly on larger buildings where an early contravention may not come to light until more than 18 months into the construction process.

The Department proposes changing the period during which the district council may issue a contravention notice by setting a long-stop period of 12 months commencing from the date when valid notification of completion of construction has been given to the district council. A district council may continue to serve a contravention notice at any time during the construction process.

Amended requirements

- 4.4 A2 – Interpretation As a consequence, mainly of the proposed deletion of deemed-to-satisfy (d-t-s) regulations and Tables and Schedules giving d-t-s provisions, but also of proposed amendments to technical requirements, changes would be necessary to a number of defined terms in Part A.

The following changes are proposed –

- 4.4.1 The following definitions (without amendment) would be relocated from Part A to –

- Part B/Technical Booklet B –
 - Construction Products Directive;
 - European technical approval;
 - harmonised standard.
- Part F/Technical Booklet F –
 - BER;
 - DER;
 - renovation;
 - SAP;
 - SBEM;
 - TER;
 - thermal element;
 - Total Useful Floor Area.

- 4.4.2 The following terms would be relocated (without amendment) to Part A from Part E –

- dwellinghouse;

- flat; and
- maisonette.

4.4.3 The following (amended) term would be relocated to Part A from Part B –

- materials: expanded to include products, components and fittings, to give further recognition to the Construction Products Directive.

4.4.4 Definition of the following existing terms in Part A would be amended –

- fixed building service: to clarify that “process heating” is excluded from the term;
- institution: to bring up to date terminology in the definition;
- porch: to include enclosed spaces only; and
- statutory undertakings: to encompass persons or non-governmental bodies authorised by statute to deliver certain public undertakings. The title of the definition would be amended to “Statutory undertakers”.

4.4.5 New definitions would be included in Part A for –

- extension: to assist applicants and district councils determine requirements that should apply to converting a roofspace, or a space attached to a dwelling, to a room;
- functional regulation: would be defined as a requirement that sets a standard but is not prescriptive in the standard to be attained; needed because in A16 (Exercise of power of dispensation or relaxation) it would be clarified that a relaxation cannot be given to a functional requirement;
- place of assembly or recreation: would include the classes of buildings in the previous definition of ‘public building’ but widened in scope to include nurseries, children’s playgroups / after school clubs, sports halls and medical & health centres; this would be one of the specified uses included in A8 (Application to material change of use);
- room for residential purposes: as there would be requirements for such rooms in Part G (Resistance to the passage of sound) and this would be one of the specified uses included in A8 (Application to material change of use);

4.4.6 Terms that would no longer be included in the regulations and therefore no longer need to be defined –

- energy efficiency requirements (embedded into EPB¹ regulations);
- Energy Performance Certificate (embedded into EPB¹ regulations);
- public building (incorporated into Place of assembly or recreation);
- statutory provision (deleted from statutory undertakers);

¹ The EPB regulations are *The Energy Performance of Buildings (Certificates and Inspections) Regulations (Northern Ireland) 2008 (as amended)*.

- under former control (not referred to).
- 4.5 The former Regulation A3 Deemed-to-satisfy provisions would be removed.
- 4.6 A3 (formerly A4) - Transitional provisions: information on regulations which apply to plans deposited or work carried out before the new regulations come into effect would be relocated to a new schedule (Schedule 1).
- 4.7 A4 (formerly A5) - Exemptions: A4(1) would refer to statutory undertakers and A4(4) would refer users to Schedule 2 (formerly Schedule 1) (Classes of exempted buildings). Schedule 2 would be amended as follows:

New exemptions would be introduced at Schedule 2 –

- (2) Buildings used for the purposes of national security: for buildings used for the purposes of national security. This exemption would not extend to associated buildings used as dwellings, office or canteen accommodation;
 - (8) Extensions: the maximum floor area of an exempted porch to a dwelling would be reduced from 30m² to 3m². This reflects a similar exemption in planning legislation. Also, in order to be considered exempt, porches and conservatories would also have to satisfy certain conditions in relation to thermal separation from the building, radon protection and the safety of glazing;
 - (9)(d) Other buildings: to restrict the exemption in relation to a moveable dwelling to one that is moveable as a single unit i.e. not requiring any degree of assembly when delivered to site nor one requiring disassembly or separation to facilitate being moved on site or removal from site.
- 4.8 A5 (formerly A6) - Application to erection of buildings: References to updated numbering of regulations.
- 4.9 Former A6A (Application to existing buildings), A8A (Application to thermal elements) and A8B (Application to a change of a building's energy status): These would be relocated to Part F (Conservation of fuel and power).
- 4.10 A8 (formerly A9) – Application to a material change of use: The cases listed in A8(1) as applicable in material change of use scenarios would be amended. For consultation purposes, the building types (and the regulations which would apply to each type) are listed separately. The creation or removal of a room for residential purposes and a building that would contain a greater or lesser number of dwellings than it currently contains would be included as would a “place of assembly or recreation” instead of a “public building”.

Any revision to the format of A8(1) will confirm that the change of use is from the building's last known use (or use immediately before the change) and does not relate back to any similar previous use e.g. where it is proposed to convert a building from an office to a dwelling a material change of use will

apply even though the building may have been used as a dwelling before its conversion to an office.

The Table to A8 noting applicability of the Parts of the regulations to the change of use cases specified in A8(1) would be re-designed to make it more user-friendly and expanded to include all the cases identified above.

- 4.11 Regulation A9 (formerly A10) – Giving of notices and deposit of plans: Currently, a building notice may be served to notify Building Control of proposed work to an existing dwelling, including alterations and extensions, or for the erection of a new dwelling.

Changes to the regulations have meant that a building notice is impractical for the erection of a new dwelling due to the information required at the outset to demonstrate compliance. For example, Building Control is not able to check until the house is near completion whether or not the requirements of Part F (Conservation of fuel and power) will be satisfied. At this late stage, the developer may face substantial additional costs or find it difficult to comply with the regulations.

Without plans, it is also difficult for home owners to determine in advance of work being undertaken the cost of an extension or roof space conversion.

The Department proposes restricting the use of building notices to alterations to a dwelling and to where building work would not increase the dwelling floor area by more than 3m². In addition, it would be emphasised that a separate building notice must be used for each existing dwelling on which building work will be carried out.

The list of matters for which notification to a district council would not be required would be expanded to include –

- the replacement of external doors;
- the addition of output devices or control devices to a fixed building service, or the adding of parts to same;
- the provision of a self-contained fixed building service, provided certain conditions are met in relation to ease of testing or location; and
- the provision of fixed internal lighting which serves no more than 100m² of the floor area of the building.

- 4.12 A12 (formerly A11) - Notice of commencement and completion of certain stages of work: As there are no statutory notifications to the district council required between floor level/ground works and completion/occupation, it is considered that additional notifications (pre-covering up of (a) above ground structural elements and (b) sound insulation measures) would benefit both the developer to demonstrate compliance and the district council to confirm compliance. These additional notifications would be included in A12 (1).

Paragraphs A12(5)(d) to (g) would be removed as it is felt that they are not notices of commencement or completion, and therefore do not fall under the heading of this regulation.

- 4.13 A14 (formerly A13) – Completion Certificates: It is proposed to amend this regulation to make the issue of a completion certificate mandatory. A completion certificate will only be issued where the district council is satisfied that the relevant requirements of the building regulations have been satisfied.
- 4.14 A16 – Exercise of power of dispensation or relaxation: The regulation would be amended to widen the scope of a district council's power to relax or dispense with any requirement of building regulations. This would not apply to –
- any application made by a district council itself;
 - any of the provisions of Part A (with the exception of Regulation A12);
 - the requirements of Regulation F3 (Target carbon dioxide Emissions Rate); or
 - any functional requirement (dispensations only).
- 4.15 A19 Application for dispensation or relaxation: References in this regulation to the Department would be reordered to reflect the proposed changes to A16.
- 4.16 A19 (formerly A18) – Appeals and prescribed periods: Three new prescribed periods would be introduced to this regulation –
- the period in which an applicant may appeal against a district council's decision in relation to materials etc. prescribed as unsuitable for permanent use;
 - the period after which an applicant may appeal if a district council does not approve a request for a type approval certificate; and
 - the period after which an applicant may assume approval for a particular type of building matter is refused.

The period in each case would be 56 days.

- 4.17 A20 (formerly A19) – Revocations: This would be amended to reflect the further statutory rules revoked by the new regulations.

PROPOSALS FOR NEW BUILDING REGULATIONS

5. Parts B, D, F, H, J, K, L, P and R

5.1 General

- 5.1.1 Proposed regulatory requirements to Parts C, E, H, N and V were the subject of Phase 1 consultation and are not under consideration in this consultation. However, as a consequence of responses to the Phase 1 consultation and engagement with external partners, further amendments are proposed to Part H.
- 5.1.2 In this Section, proposals for the regulatory requirements (including amendments) to Parts B, D, F, H, J, K, L, P and R are outlined.
- 5.1.3 A change of powers included in the 2009 Act (see para. 1.5) which, amongst other things and when the relevant paragraph is commenced, will revoke the requirement to provide methods and standards that would be deemed-to-satisfy particular requirements of the building regulations and will replace this requirement with the power to provide guidance.
- 5.1.4 Deemed-to-satisfy regulations and the Schedules and Tables setting out the publications previously referenced as containing provisions that would be deemed-to-satisfy particular requirements would no longer form part of the new regulations. The draft new regulations identify these proposed deletions but they are not included as part of other proposed amendments outlined below as, although they are a fundamental part of the amendment, they are considered to have been the subject of full consultation during the making of the 2009 Act.
- 5.1.5 A number of terms included in the Building Regulations (including in the Schedules and Tables) are defined. With the proposed removal of a number of Schedules and Tables some of these terms would no longer be referenced in the new regulations, but may be referenced in Technical Booklets. Where this is the case, the term would be defined in the relevant Technical Booklet. For other terms which are referenced in a number of Parts of the regulations it would be appropriate to relocate the definition to Part A (see para.4.4).
- 5.1.6 For completeness all proposed requirements are included in the draft new regulations. All proposed changes (deletions and additions) to the building regulations are identified.

5.2 Part B (Materials and workmanship)

5.2.1 Part B sets requirements to ensure that building work is carried out in a workmanlike manner with adequate and proper materials. The following amendments are proposed –

- the scope of the Building Regulations was extended by the 2009 Act to include the protection and enhancement of the environment and the promotion of sustainable development. It is proposed to amend Regulation B2(b) (Fitness of materials and workmanship) to recognise this extended scope;
- it is proposed to delete Regulation B3 (Suitability of certain materials) as this requirement is embodied in Regulation C4 (Resistance to ground moisture and weather) and the suitability of certain materials is controlled by Regulation B2(a)(i) (Fitness of materials and workmanship);
- industry practice is not to use urea formaldehyde foam but to use alternative low risk products. As there is no evidence to show that there would be real risks associated with removing the control of the use of this product, it is proposed to delete the requirement relating to urea formaldehyde foam; and
- it is proposed to remove Regulation B5 (Preservative treatment of timber) as the requirement is adequately controlled by Regulation B2.

5.3 Part D (Structure)

5.3.1 Part D of the Building Regulations sets out requirements –

- to ensure the structural safety of buildings; and
- where there is an event causing damage to a building, any collapse will not be disproportionate to the cause.

There are no amendments proposed to the Part D (Structure) requirements.

5.4 Proposals for Part F (Conservation of fuel and power)

5.4.1 Government has given an undertaking to improve building standards to require new buildings, over a period of time, to be low or zero carbon and where certain works are undertaken to existing buildings to require consequential improvement to the thermal fabric of the existing building.

5.4.2 This amendment would bring Part F (Conservation of fuel and power) broadly back into line with recent amendments made to building regulations standards elsewhere in the UK. Further amendments will be proposed in 2013/14 and 2016, from when it is proposed across the UK that all new dwellings will be low or zero carbon.

5.4.3 The Part F requirements are mainly functional, requiring reasonable or adequate provision to be made. Provisions that would be considered adequate are set out in two new Technical Booklets F1 and F2.

5.4.4 This consultation –

- proposes amendments to Part F that would on average reduce carbon dioxide (CO₂) emissions from new buildings (without being prescriptive on the methods for achieving these standards) by an average of 25% from current standards which came into operation in 2006. This would be achieved by a combination of improved fabric thermal efficiency; more efficient boilers, services and heating controls; reduction in the level of uncontrolled air leakage; and consideration of the use of renewable technologies;
- would clarify that the Part will also apply to any building in which energy is used to condition its indoor climate and when (in relation to proposed work) certain buildings or parts of buildings would no longer be exempt from the requirements of this Part; and
- as the standard of thermal efficiency of buildings required to meet building regulations requirements has improved with each amendment to Part F, the amount of energy required to heat these building has consequently reduced. It is proposed that the current exemption to Part F requirements, where the level of heating output does not exceed 50 W/m² for industrial and storage buildings and 25 W/m² for all other non-domestic buildings (Regulation F(1)(2)), would no longer apply.

5.4.5 In addition to requiring more onerous minimum levels of thermal performance, the proposed amendments would make a number of changes such as –

- relocating a number of existing requirements (Consequential improvements, Change of energy status, Renovation of thermal elements and Notice of emissions rate) and definitions (Thermal element and Total useful floor area) from Part A to Part F with, in some instances, minor amendments that would apply the requirement to a specific regulation rather than to all the requirements of Part F;
- making minor amendments to definitions of Pipes, ducts and vessels and Thermal element and including a definition of a Space cooling system;
- referencing recent editions of the SAP and SBEM (the National Calculation Methodologies);
- clarifying the application of a number of regulations by rewording Regulation F(1)(2); and
- clarifying whose responsibility it is to provide information to the building owner or district council in respect of air pressure test, commissioning, notice of emissions and information about the building and its services.

5.5 Further proposals for Part H (Stairs, ramps, guarding and protection from impact)

- 5.5.1 Part H sets requirements to ensure that stairs, ramps and guarding are provided such that people can safely approach and enter a building and have access to storeys within the building.
- 5.5.2 Regulation H2 (Provision of stairs in dwellings) requires a stair to be provided in every dwelling of more than one storey to give safe access between storeys. H2 also gives an exemption to this requirement where a storey is used only as general storage accommodation and as access to such accommodation is not a matter for Building Regulations, a portable or fold-up ladder may be provided.
- 5.5.3 In a number of cases, roof space conversions to provide such general storage accommodation are being used as habitable rooms (such as bedrooms). As well as not being compliant with the requirements of the Building Regulations, such practices are unsafe in that in the event of an emergency, such as a fire, reasonable means of egress from such space may not be available (due to the possible use of a portable or fold-up ladder access).
- 5.5.4 The Department is proposing to remove the exemption in Regulation H2. The effect will be that where accommodation is provided on any storey in a dwelling, a stair will have to be provided to give access to that storey.
- 5.5.5 As a result of the Phase 1 consultation, comments were received that the technical standards for stairs and ramps are contained within both Technical Booklet H and Technical Booklet R. Users considered there to be duplication between these publications, leading to possible misinterpretation. In response to this, the Department is proposing that the requirements to provide for the safety (including the safety of less able users) of all methods of access to, egress from and access within a building should be required by Part H. Amendments to Regulations H1, H3 and H4 are therefore proposed recognising this holistic methodology for the safety in use of stairs and ramps to or in a building.
- 5.5.6 The Phase 1 consultation also drew the Department's attention to a drafting error in Regulation H6 (Protection against impact from and trapping by doors). It is proposed that a correction to H6(1) be made to replace the word "and" with "or". The requirement would be for a door or gate across a main route of travel **or** (one which) can be pushed open from either side i.e.

H6 Protection against impact from and trapping by doors

(1) In any building a door or gate which –

- (a) is across a main route of travel; ~~and~~ or
- (b) can be pushed open from either side,

shall have a means to ensure that people approaching it have a clear view of the space on the opposite side.

5.6 Part J (Solid waste in buildings)

- 5.6.1 Part J sets requirements to ensure that accessible space/facilities are provided to ensure that the solid waste from a building can be adequately segregated and stored and its removal facilitated.
- 5.6.2 The Part J regulations have been redrafted into a more functional format and the provisions that would be considered reasonable have been transferred into a new Technical Booklet J. In making these changes the requirements will not be any more onerous.

5.7 Proposals for Part K (Ventilation)

- 5.7.1 The requirements of Part K are concerned with providing adequate means of ventilation for people in buildings by removing 'stale' indoor air and replacing it with 'fresh' air from outside the building.
- 5.7.2 The proposed amendment is required to ensure the continued delivery of the amount of fresh air needed in the indoor environment for the health of occupants. The amendment is complementary to increasing levels of fabric thermal performance and air-tightness required to meet the proposed amended requirements of Part F (Conservation of fuel and power).
- 5.7.3 Where a fixed mechanical system is provided the Part K regulations would require the ventilation system and its associated controls to be commissioned to ensure its efficient operation. In addition, the building owner would be given sufficient information about the fixed mechanical ventilation system so that it can be operated and maintained in an efficient manner.
- 5.7.4 The district council would also have to be provided with a copy of air flow test results for the fixed mechanical ventilation system and its associated controls.

5.8 Proposals for Part L (Combustion appliances and fuel storage systems)

- 5.8.1 Part L of the Building Regulations sets requirements for air supply; discharge of products of combustion; protection of buildings; and the protection of liquid fuel storage systems. As the requirements are mainly functional requiring adequate/reasonable provision to be made, such provisions applicable to the most common types of building are set out in Technical Booklet L.
- 5.8.2 In relation to regulatory requirements, to reduce the likelihood of deaths or injuries caused by the presence of carbon monoxide produced by a faulty combustion appliance or such an appliance not burning efficiently, the Department proposes to include a new regulation to require the provision of carbon monoxide alarms in dwellings where a combustion appliance is newly installed or replaced.

5.9 Proposals for Part P (Sanitary appliances, unvented hot water storage systems and reducing the risk of scalding)

- 5.9.1 Part P sets requirements in relation to the provision of sanitary appliances and sanitary accommodation in a building. It also sets requirements where it is proposed to install an unvented hot water storage system.
- 5.9.2 Scalding is a risk that exists every day in buildings, particularly in homes where very young and elderly people are most at risk. The severity of injury depends on a number of factors including the temperature of the water, the period and type of contact (spray or immersion) and the age of the person in contact with the hot water.
- 5.9.3 To reduce the likelihood of scalding in the home and therefore reducing the number of severe injuries or death caused by scalding in a dwelling, it is proposed to include additional requirements to reduce the temperature of water in the domestic hot water distribution system and also to require measures to be put in place to limit the temperature of hot water delivered to a bath to a maximum of 48°C. The title of the Part would be amended to reflect the new requirement.

5.10 Proposals for Part R (Access to and use of buildings)

- 5.10.1 Part R of the Building Regulations sets out requirements for access to and use of a building. These requirements are for the benefit of people who are customers or visitors to the building or those who work in it.
- 5.10.2 There are no amendments proposed to the Part R requirements.

PROPOSALS FOR NEW TECHNICAL BOOKLETS

6.2	TB B: Materials and workmanship	23
6.3	TB D: Structure*	23
6.4	TBs F1 & F2: Conservation of fuel and power	24
6.5	TB J: Solid waste in buildings	25
6.6	TB K: Ventilation	25
6.7	TB L: Combustion appliances and fuel storage systems	26
6.8	TB P: Sanitary appliances, unvented hot water storage systems and reducing the risk of scalding	27
6.9	TB R: Access to and use of buildings*	27

* No change to technical standards

6. PROPOSALS FOR NEW TECHNICAL BOOKLETS

6.1 General

- 6.1.1 In this Section, proposals are outlined for practical guidance that would be provided with respect to the technical requirements of Parts B, D, F, J, K, L, P and R of the proposed new Building Regulations.
- 6.1.2 Proposed practical guidance for Parts E, H, N and V were included in the Phase 1 consultation. However, as a consequence of responses to the Phase 1 consultation and engagement with external partners, further changes to Technical Booklet H are proposed and are included as a “new” Technical Booklet.
- 6.1.3 A change of powers included in the 2009 Act (see para. 1.5) which, amongst other things and when the relevant paragraph is commenced, will revoke the requirement to provide methods and standards that would be deemed-to-satisfy particular requirements of the building regulations, and will replace this requirement with the power to provide guidance.
- 6.1.4 Deemed-to-satisfy regulations and the Schedules and Tables setting out the publications previously referenced as containing provisions that would be deemed-to-satisfy particular requirements would no longer form part of the new regulations. As a consequence, some of the terms currently defined in the Building Regulations (including in the Schedules and Tables) would no longer be referenced in the new regulations, but may be referenced in Technical Booklets. Where this is the case, the term would be defined in the relevant Technical Booklet. For other terms which are referenced in a number of Parts of the regulation it would be appropriate to relocate the definition in Part A (see section.4.4).
- 6.1.5 A suite of draft new Technical Booklets which will give practical guidance for most of the more common building situations has been prepared by the Department. If this guidance is followed there would be a presumption of compliance with the requirements of the Building Regulations covered by the guidance.
- 6.1.6 However, the presumption of compliance can be overturned, so simply following the guidance does not guarantee compliance. For example, if one particular case is unusual in some way, then normal guidance may not be applicable. It is also important to note that there may be alternative ways of achieving compliance that may be more appropriate. There would therefore be no obligation to follow the guidance if another way of meeting the requirement was preferred or more appropriate.
- 6.1.7 The methods and standards that currently are deemed-to-satisfy particular requirements will, if still appropriate, be referenced in the relevant new Technical Booklet. Where it is appropriate, for example, as a solution to possibly satisfying a requirement or to indicate an alternative approach to the guidance given, references to standards or to other publications will also be made in the new guidance documents.

6.2 Proposals for new Technical Booklet B (Materials and workmanship)

- 6.2.1 The Department proposes to publish, for the first time, a Technical Booklet B to give guidance on how Part B may be satisfied.
- 6.2.2 The proposed guidance is given to ensure that materials used are –
- appropriate for the circumstances in which they are used;
 - adequately mixed or prepared; and
 - applied, used or fixed so as adequately to perform the functions for which they are designed.
- 6.2.3 The guidance will also reiterate the intention of the Construction Products Directive, in that specification of construction products should not create a barrier to trade in respect of the use of construction products from other European Member States.
- 6.2.4 The guidance lists a broad spectrum of published standards and specifications recognised by the States within the European Economic Area which provide an acceptable standard of suitability and fitness.
- 6.2.5 Workmanship is included so that references to methods of establishing workmanship may be included in the guidance e.g. where performance depends on the work being carried out with an essential standard of workmanship. It is not the intention of the Department that a district council checks workmanship in general, however, where appropriate workmanship is essential to meeting the requirements of the building regulations, the district council will have criteria against which workmanship may be assessed.

6.3 Proposals for new Technical Booklet D (Structure)

- 6.3.1 Part D of the Building Regulations sets out requirements –
- to ensure the structural safety of buildings; and
 - where there is an event causing damage to a building, any collapse will not be disproportionate to the cause.
- 6.3.2 The Department is proposing that the technical content of the Technical Booklet supporting Part D will move to guidance on a broadly level basis without any technical uplift from those methods and standards set in the current deemed-to-satisfy publication. It will, where appropriate, recognise any updated standards referred to in the current edition.
- 6.3.3 It is also proposed to re-organise the guidance setting the performance, codes and standards that will satisfy the requirements of the Part D regulations, in the opening sections. A single section will be dedicated to guidance appropriate to single family houses, annexes and small buildings.

6.4 Proposed amendments to Technical Booklets F1 (Conservation of fuel and power in dwellings) and F2 (Conservation of fuel and power in buildings other than dwellings)

- 6.4.1 The new Technical Booklets and updated calculation methodologies set energy efficiency standards for new dwellings and buildings other than dwellings that will achieve a 25% reduction in CO₂ emissions from buildings relative to the level of emissions that result from the Part F standards introduced in 2006.
- 6.4.2 The new Technical Booklets also set tighter standards for energy efficiency in work to existing buildings.
- 6.4.3 Where a cavity wall separates two buildings it has been found that stack effect ventilation can occur in the cavity. This is referred to as Party Wall Heat Loss. The ventilation air flow substantially increases heat loss from the buildings on both sides of the separating wall. This party wall heat loss has been addressed for all new buildings containing a separating wall.
- 6.4.4 Some of the limits for building fabric and services have been strengthened.
- 6.4.5 New guidance has been introduced to limit heat loss from swimming pool basins.
- 6.4.6 Appendix B in each Technical Booklet contains guidance for presenting evidence that demonstrates compliance with Part F, highlighting key features that are critical in achieving the emissions target for new buildings.
- 6.4.7 The guidance on the renovation of a thermal element has been expanded.
- 6.4.8 New guidance has been provided for non-exempt buildings with low energy demand.
- 6.4.9 Revised guidance has been provided –
- on avoiding thermal bridging at construction joints;
 - for modular and portable buildings;
 - on shell and core developments;
 - for sunrooms and other highly glazed extensions that exceed 25% glazing; and
 - for demonstrating that reasonable provision has been made to limit the effects of solar gain in buildings other than dwellings.

6.5 Proposed new Technical Booklet J (Solid waste in buildings)

- 6.5.1 The Department proposes to publish, for the first time, a Technical Booklet J to give guidance on how Part J may be satisfied by setting requirements to ensure that accessible space/facilities is/are provided so that the solid waste from a building can be adequately segregated and stored and its removal facilitated.
- 6.5.2 The Part J regulations have been redrafted into a more functional format and the provisions that would be considered reasonable have been transferred into a new Technical Booklet J. This move to guidance is on a broadly level basis without any technical uplift from the methods and standards given in the current regulations. It does however recognise the updated versions of the standards referred to in the deemed-to-satisfy provisions for the current Part J.

6.6 Proposals for new Technical Booklet K (Ventilation)

- 6.6.1 The main changes proposed are –
- the adoption of a mainly performance based approach;
 - inspection and commissioning of all ventilation systems (both natural and mechanical);
 - for mechanical ventilation systems installed in new dwellings, measurement of air flow rates on-site as part of the commissioning process. This applies to intermittently used extract fans and cooker hoods, as well as to ventilation systems in continuous operation;
 - sufficient information about the ventilation system and its maintenance requirements should be given to the owner / occupier, so that the ventilation system can be operated and maintained to provide an adequate flow of air. This also applies to natural and mechanical systems in new dwellings;
 - evidence that commissioning and testing have been carried out for new dwellings has to be given to building control;
 - provision of guidance for airtight homes; this should result in greater ventilation provisions for dwellings with a design air permeability of $5 \text{ m}^3/(\text{h} \cdot \text{m}^2)$ at 50 Pa or less;
 - the description in terms of 'equivalent area' (instead of free area) of background ventilation areas, because it is a more accurate measure of air flow performance;
 - the provision of guidance for the ventilation of basements in dwellings;

- setting the same infiltration allowance for leakier homes as for single-storey and multi-storey dwellings, resulting in increased ventilation provisions for single-storey dwellings up to four storeys above the ground;
- the improvement of guidance on the ventilation of rooms through other rooms and spaces, to aid clarity; and
- the improvement of guidance on the ventilation of car parks.

6.7 Proposals for new Technical Booklet L (Combustion appliances and fuel storage systems)

6.7.1 Part L of the Building Regulations sets requirements for air supply, discharge of products of combustion, protection of buildings and the protection of liquid fuel storage systems.

6.7.2 The Department proposes to include a new regulation to require the provision of carbon monoxide alarms/detectors in dwellings where a combustion appliance is newly installed or replaced.

6.7.3 It is proposed to amend the technical standards for this Part as follows –

- buildings are driven to be increasingly airtight by Part F. The current provisions on air supply in Technical Booklet L are based on assumptions about adventitious ventilation from leaks in the building fabric. In modern, more air-tight homes additional ventilation may be necessary to ensure that combustion appliances can continue to function safely. Therefore, amended provisions are proposed to require additional ventilation in more air-tight homes where combustion appliances that draw oxygen for combustion from the room in which they are situated, are installed;
- solid biofuel was implicitly included in Technical Booklet L 2006 as a solid fuel. However, for clarity, it is proposed that specific mention of solid biofuel is included in the new guidance booklet;
- some modern solid biofuel appliances produce less ash and soot than other solid fuel appliances and the probability of the flue becoming blocked is less than with other less sophisticated appliances. It is proposed to allow the current minimum flue dimension of 125mm to be reduced to 100mm if permitted by the appliance manufacturer and supported by calculation;
- some modern biofuel appliances are designed such that they do not require a hearth or additional wall protection to prevent accidental ignition of adjacent materials. However, the existing Technical Booklet L treats all solid fuel in the same way. It is proposed that Technical Booklet L is amended such that, whilst still treating solid biofuel broadly as a solid fuel, it provides greater flexibility in the guidance where measures necessary for conventional solid fuel appliances are unnecessary for the more sophisticated biofuel appliances;

- a modern fanned draft boiler is suitable for operation with a significant length of horizontal flue which may run through a ceiling void. However, whilst a fanned draft boiler can operate safely in these circumstances (as designed and tested for), it can be difficult or impossible to inspect the flue for integrity, leakage or corrosion and to carry out safety checks (as required by other legislation) unless suitable provision is made for access into the void. It is proposed that the new guidance booklet gives provisions for inspection of concealed flues based on gas industry practice (Gas Safe Technical Bulletin 008); and
- combustion appliances that have been poorly installed or maintained have been responsible for a number of carbon monoxide deaths and injuries. The fitting of carbon monoxide alarms would potentially save lives and prevent injuries. It is proposed to include technical provisions in the new guidance Technical Booklet L to ensure that where a combustion appliance is installed or replaced in a dwelling a carbon monoxide alarm is also provided.

6.8 Proposals for new Technical Booklet P (Sanitary appliances, unvented hot water storage systems and reducing the risk of scalding)

- 6.8.1 England & Wales introduced new requirements and related guidance to the equivalent of Part P (E&W Part G) in 2010. It is considered that it is not viable locally to undertake a complete technical uplift of Part P within the timescale of this current review of the Building Regulations. A full review of Part P will be undertaken at a future stage.
- 6.8.2 The current proposals are limited to bringing Part P guidance into line with standards currently applicable in E&W in relation to scalding and distribution of hot water.
- 6.8.3 A new requirement is proposed that limits the temperature of water in a domestic hot water distribution system and also to require measures to limit the temperature of hot water delivered to a bath to a maximum of 48°C to reduce the risk of scalding.

6.9 Proposals for new Technical Booklet R (Access to and use of buildings)

- 6.9.1 Part R of the Building Regulations sets out requirements for access to and use of a building. These requirements are for the benefit of people who are customers or visitors to the building or those who work in it.
- 6.9.2 The Department is proposing that the technical contents of the new guidance booklet supporting Part R will move to guidance on a broadly level basis without any technical uplift from those methods and standards set in the current deemed-to-satisfy publication.

- 6.9.3 However, as a result of the Phase 1 consultation, comments were received on the fact that the technical standards for stairs and ramps are contained within both the present editions of Technical Booklet H and Technical Booklet R; users considered there to be duplication between these publications, leading to possible misinterpretation.
- 6.9.4 In response to this, the Department is proposing that the provisions for access, e.g. a stair, ramp etc., will continue to be given in Technical Booklet R. However, the technical provisions in relation to safety etc. will no longer be contained in this Technical Booklet, but instead will be included in Technical Booklet H.

PROPOSED FURTHER AMENDMENTS FOLLOWING PHASE 1 CONSULTATION

7.2	Part E: Fire Safety	30
7.3	Part H: Stairs, ramps, guarding and protection from impact	30
7.4	Part N: Drainage	31

PROPOSED FURTHER AMENDMENTS FOLLOWING PHASE 1 CONSULTATION

7.1 General

7.1.1 Although Parts E, H and N formed part of the Phase 1 consultation, further minor amendments are proposed to Part H and to the guidance in Technical Booklets E, H and N.

7.2 Proposed amendments to Technical Booklet E (Fire safety)

7.2.1 Part E of the Building Regulations sets out requirements for fire safety in buildings.

7.2.2 Provisions for the means of escape from a new-build 3-storey house given in Technical Booklet E are for the upper storey to have either two escape routes or be served by a protected stairway. However, when converting an existing 2-storey house to a 3-storey house by means of a roofspace conversion, the current Technical Booklet gives an alternative solution to the means of escape from that described above. This alternative design option imposes limits on the size and use of the roofspace conversion.

7.2.3 The Department proposes to remove this alternative design option so that, with respect to the provisions for means of escape, all roofspace conversions in 2 storey houses will be treated in the same way as a new 3 storey house. The effect will be the removal of paragraphs 1.17 – 1.22 in Technical Booklet E.

7.3 Proposed further amendments to Technical Booklet H (Stairs, ramps, guarding and protection from impact)

7.3.1 Part H of the Building Regulations sets out requirements for stairs, ramps, guarding and protection from impact.

7.3.2 Dialogue with external partners has indicated that in many instances the current exemption in Regulation H2, to not require a stair to any storey in a dwelling if that storey is used only as general storage, is being abused. In particular, it would appear that rooms are being created in roof spaces in dwellings and are termed “general storage” but are capable of being used, and in some instances are being used, as a habitable room e.g. a bedroom without further access and fire safety work being undertaken giving rise to life safety concerns.

7.3.3 As a result of the Phase 1 consultation, (see para. 6.9.3) users considered there to be duplication in relation to stairs and ramps in Technical Booklets H and R, leading to possible misinterpretation. In response, the Department is proposing –

- as a result of the proposal to remove the exemption in Regulation H2 (see section 5.5), to include additional guidance on stairs for limited access in dwellings;

- that guidance on the requirements relating to safety etc. (including providing for the safety of less able users) of stairs and ramps to and within a building, be given in Technical Booklet H and
- that the provisions for access e.g. provision of a stair, ramp etc., continue to be given in Technical Booklet R.

7.4 Proposed additional paragraphs to Technical Booklet N (Drainage)

Drainage of condensate from condensing boilers

7.4.1 It is proposed to add the following additional guidance to Technical Booklet N to ensure the safe disposal of condensate from condensing boilers –

- Condensate from condensing boilers should be taken to a suitable drain. This condensate drain may be connected to sanitary pipework. The connection should be made with pipework having a minimum diameter of 22mm and should incorporate a 75mm condensate trap. Where the condensate trap is provided externally to the boiler, an air gap should be provided between the boiler and the trap with the condensate drain discharging into a suitable tundish upstream of the trap;
- The connection should preferably be made to an internal drainage stack;
- Where the connection is made to a branch pipe it should be connected downstream of any sink waste connection;
- All sanitary pipework into which condensate is to discharge, should be made of materials resistant to a pH value of 6.5 or lower and the installation should be in accordance with BS 6798; and
- Where it is not practicable to make the above provisions, alternative provision for the drainage of condensate from a condensing boiler is given in Appendix C of the “Guide to the Condensing Boiler Installation Assessment Procedure for Dwellings”.