



Department of  
**Finance and  
Personnel**  
www.dfpni.gov.uk

Building Regulations (Northern Ireland) 2012

# Guidance

Technical  
Booklet

**B**

Materials and workmanship

October 2012

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### Technical Booklets

This Technical Booklet, which takes effect on 31st October 2012, is one of a series that has been prepared by the Department of Finance and Personnel (the Department) for the purpose of providing practical guidance with respect to the technical requirements of the Building Regulations (Northern Ireland) 2012 (the Building Regulations).

The guidance given in a Technical Booklet includes performance standards and design provisions relating to compliance with specific aspects of the Building Regulations for the more common (normal) building situations.

At the back of each Technical Booklet is a list of all the Technical Booklets that have been prepared and published by the Department for this purpose.

If the guidance in a Technical Booklet is followed there will be a presumption of compliance with the requirements of those Building Regulations covered by that guidance. However, this presumption can be overturned, so simply following the guidance does not guarantee compliance. For example, if a particular circumstance is not one of the more common building situations the design provisions given in the Technical Booklet may not be appropriate.

**There are likely to be alternative ways of demonstrating compliance with the relevant requirements of the Building Regulations other than by following a design provision given in a Technical Booklet. There is therefore no obligation to adopt any particular provision set out in a Technical Booklet, should you decide to comply in some other way. However, you will have to demonstrate that your alternative solution meets the relevant requirements of the Building Regulations by those other means.**

### This Technical Booklet

The guidance contained in this Technical Booklet relates only to the requirements of regulations 23 and 24(2) in Part B. The work will also have to comply with all other requirements of the relevant Building Regulations.

The Building Regulations are made for specific purposes, primarily securing the health, safety, welfare and convenience of people and for the conservation of fuel and power. Standards and technical approvals are relevant guidance to the extent that they relate to these purposes. However, they may also address other aspects of performance such as serviceability, or aspects which although they relate to health and safety are not covered by the Building Regulations.

Where this Technical Booklet makes reference to a named standard, the relevant version of the standard is the one listed in the Appendix. However, if this version has been replaced or updated by the issuing standards body, the new version may be used as a source of guidance provided that it continues to address the relevant requirements of the Building Regulations.

## **Diagrams**

The diagram in this Technical Booklet supplements the text. It is not intended to illustrate compliance with any other requirements of the Building Regulations. It is not necessarily to scale.

## **Recognising the Construction Products Regulations 2011**

It is the intention of the Department to review this Technical Booklet to recognise the implementation of new arrangements regarding construction products and CE marking under Regulation (EU) No 305/2011 which will come fully into effect on 1 July 2013.

## Part B Regulations

Part B (comprising regulations 22 to 24) of the Building Regulations, which sets out the requirements for materials and workmanship, has been replicated below for the convenience of the user of this Technical Booklet and is taken directly from the Building Regulations (Northern Ireland) 2012.

Any person who intends to demonstrate compliance with the Building Regulations by following the guidance given in this Technical Booklet is advised to ensure that the regulations below, are current on the date when plans are deposited or notices given to the district council.

As Part A (comprising regulations 1 to 21) of the Building Regulations sets out the interpretation along with the procedural requirements relating to the application of the regulations, the Department advises that all Parts of the Building Regulations are read in conjunction with Part A of those regulations.

The Building Regulations (Northern Ireland) 2012 and any subsequent amendment may be viewed by following the links from the Department's website at "[www.buildingregulationsni.gov.uk](http://www.buildingregulationsni.gov.uk)."

### PART B

#### Materials and workmanship

##### Interpretation

22. In this Part—

“Harmful substances” includes fumes and vapours; and

“Relevant work” means—

- (a) the erection of a building;
- (b) the structural alteration or extension of a building;
- (c) the provision of any service or fitting; or
- (d) the backfilling of any excavation carried out in connection with (a), (b) or (c).

##### Fitness of materials and workmanship

23. In any relevant work—

(a) the materials used shall—

- (i) be of a suitable nature and quality in relation to the purposes for and the conditions in which they are used;
- (ii) be adequately mixed and prepared;
- (iii) be applied, used or fixed so as adequately to perform the functions for which they are designed; and
- (iv) not continue to emit any harmful substance longer than is reasonable in the circumstances; and

(b) the standards of materials and workmanship need be no more than are necessary to—

- (i) secure the health, safety, welfare and convenience of persons in or about the building; and
- (ii) further the conservation of fuel and power.

## **Urea formaldehyde foam**

**24.**—(1) Subject to paragraph (2), in-situ foamed urea formaldehyde shall not be used in the erection, structural alteration or extension of a building.

(2) In-situ foamed urea formaldehyde may be used for filling the cavity of a cavity wall having an inner leaf constructed of bricks or blocks, provided that it is—

- (a) suitable for such an application; and
- (b) satisfactorily installed.

### Fitness of materials and workmanship (regulation 23 in Part B)

#### Performance

- 0.1 It is the view of the Department that the requirements of regulation 23 in Part B will be met where –
- (a) materials are of a suitable nature and quality in relation to the purposes and conditions of their use; and
  - (b) the workmanship is such that –
    - (i) where relevant, materials are adequately mixed or prepared;
    - (ii) materials are applied, used or fixed so as to perform adequately the functions for which they are intended; and
  - (c) materials do not continue to emit any harmful substance longer than is reasonable in the circumstances.
- 0.2 To be of a suitable nature and quality, materials –
- (a) for use as the weather-resisting part of an external wall or roof should not rely on being painted, or coated, surfaced or rendered with any other material which when used, does not in itself constitute effective resistance against weather; or
  - (b) which depend on periodic maintenance, replacement or renewal for suitability should be readily accessible or positioned so that such maintenance, replacement or renewal is practicable.

#### Limitations

Regulation 23 in Part B applies across all of the substantive Parts of the Building Regulations.

Regulation 23(b) of Part B limits the standards of materials and workmanship to be no more than necessary to –

- (a) secure the health, safety, welfare and convenience of persons in or about the building; and
- (b) further the conservation of fuel and power.

#### Introduction to provisions in Section 2

- 0.3 The guidance in Section 2 is to provide aids which –
- (a) may be used for establishing the suitability of a material for use for a specific purpose; and
  - (b) may be used to establish the adequacy of workmanship.

The guidance also addresses the suitability of certain materials such as short lived materials and materials susceptible to changes in their properties. Specific provisions are given regarding materials likely to be adversely affected by moisture or by harmful substances in the sub-soil.

## Urea formaldehyde foam (regulation 24 in Part B)

### Performance

- 0.4 Regulation 24(1) in Part B prohibits the use of urea formaldehyde foam subject to the provisions of regulation 24(2) in Part B.

It is the view of the Department that the requirements of regulation 24(2) in Part B will be met if the risks to the health of persons in buildings are eliminated or reduced to an extent whereby any formaldehyde fumes given off by urea formaldehyde foam filling the cavity of a cavity wall does not give rise to an irritant concentration. This can be achieved by ensuring that the inner leaf of the cavity wall provides a suitable barrier to the passage of formaldehyde fumes.

### Introduction to provisions in Section 3

- 0.5 The guidance in this Section is to ensure reasonable precautions are taken to eliminate or reduce to an acceptable level, the permeation of toxic fumes into a building when urea formaldehyde foam has been inserted into the cavity of a cavity wall.

## Section 1 General

- 1.1 In this Technical Booklet the following definitions and glossary of terms apply –

### Definitions

**Harmful substances** – has the meaning assigned to it by regulation 22 in Part B of the Building Regulations.

**Materials** – has the meaning assigned to it by regulation 2 in Part A of the Building Regulations.

### Glossary of terms

**British Standards (BSs)** – British Standards are issued by the British Standards Institution. To achieve British Standard status the draft document is submitted for public consultation and all comment received, considered and consensus reached.

**CE marking** – The CE marking is more fully described in Annex III ‘Attestation of conformity with technical specifications’ of the Construction Products Directive. The marking may be on the product, a label, the packaging or accompanying commercial documentation. It will be accompanied by a reference to the technical specification to which it conforms, and, where appropriate, by indications to identify the characteristics of the product.

**Comité Européen de Normalisation (CEN)** – The European standards body recognised by the Commission to prepare harmonised standards to support the Construction Products Directive. The members comprise the standards bodies of participating members of the EU and of EFTA (European Free Trade Association).

**Construction Products Directive (CPD)** – The Council Directive reference 89/106/EEC dated 21 December 1988 and published in the Official Journal of the European Communities No. L40/12 dated 11.2.89. The CE Marking Directive (93/68/EEC) amends the CPD.

**Construction Products Regulations** – The Construction Products Regulations 1991 (SI 1991/1620) came into force on 27 December 1991 and implement the Construction Products Directive. The CE Marking Directive came into force on 1 January 1995, and was implemented in the UK by the Construction Products (Amendment) Regulations 1994 (SI 1994/3051).

**European Commission** – The executive organisation of the EU, based in Brussels. It ensures implementation and observance of Community rules, has the sole power to propose legislation based on the Treaties and executes the decisions taken by the Council of Ministers.

**European Economic Area (EEA)** – The European Economic Area consists of those states which signed the Agreement at Oporto on 2 May 1992 together with the Protocol adjusting that Agreement signed at Brussels on 17 March 1993. The contracting parties to the EEA Agreement are the EU and its 27 members namely Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom plus Iceland, Liechtenstein and Norway.

**European Organisation for Technical Approvals (EOTA)** – is the umbrella organisation for bodies issuing European Technical Approvals for individual products. It operates over the same area as CEN. EOTA complements the work of CEN in that the guidelines it produces are for products for which standards do not exist as yet, possibly due to the innovative nature of the product.

**EN** – European standards are implemented as identical national standards in each of the Member States, and in the United Kingdom as BS ENs. The British Standard will include additional guidance about its relationship with other standards in the family and possibly about the use of the standard. An EN does not have a separate existence as a formally published document.

**European Technical Approval** – A favourable technical assessment of the fitness for use of a construction product for an intended use, issued for the purposes of the Construction Products Directive by a body authorised by a Member State to issue European Technical Approvals (European Technical Approval Issuing Body) for those purposes and notified by that Member State to the European Commission.

**European Technical Approval issuing body** – A body notified under Article 10 of the Construction Products Directive. The details of these institutions are published in the 'C' series of the Official Journal of the European Communities.

**European Union (EU)** – The 27 countries of the European Union, namely Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom.

**Harmonised standard** – A standard established, as mentioned in the Construction Products Directive, by the European Standards Organisation on the basis of a mandate given by the Commission of the European Economic Community and published by the Commission in the Official Journal of the European Communities.

**International Organisation for Standardisation (ISO)** – The worldwide standards organisation, some of whose standards may be adapted for use with the Construction Products Directive. Standards are identified by 'ISO' and a number. These may be transposed into the UK as BS ISO, or adopted as European standards and implemented as BS EN ISO. ISO standards are separately published standards (unlike European standards).

**Technical specification** – A standard (a BS EN or any other harmonised standard) or a European Technical Approval Guide. It is the document against which compliance can be shown in the case of a standard and against which an assessment is made to deliver the European Technical Approval.

## Section 2 Fitness of materials and workmanship

- 2.1 Technical Booklets contain references to materials (as defined to include products) covered by European harmonised product standards, British Standards, by certificates issued by European Technical Approvals issuing bodies and by other technical specifications but the references are not exclusive and other materials may be suitable in the particular circumstances.

Products designed and manufactured in accordance with the requirements of a European Council Directive relating to a specific purpose do not have to comply with any standard or code of practice (British, international or other) referred to in a Technical Booklet relating to any purpose covered by that Directive.

### Ways of establishing the fitness of materials

- 2.2 There are a number of ways in which the suitability of a material for use for a specific purpose may be assessed. The following are aids which may be used for establishing this (see paragraphs 2.3 to 2.10).

#### CE marking

- 2.3 The material has CE marking (see Diagram 2.1). The CE marking gives a presumption of conformity with the stated minimum legal requirements when placed on the market as set out in the Construction Products Regulations<sup>(1)</sup>. These requirements include compliance with a harmonised European Standard as formally announced in the Official Journal of the European Communities (or with part of a European Standard) or with a European Technical Approval, coupled with the appropriate attestation procedure.

**Diagram 2.1 CE marking**

see para 2.3



(1) The Construction Products Regulations 1991 (SI 1991 No 1620), as amended by the Construction Products (Amendment) Regulations 1994 (SI 1994 No 3051).

If used appropriately and in satisfactory conditions, a product bearing CE marking shall be presumed by the district council to satisfy the relevant requirements unless there are reasonable grounds for suspecting otherwise. In this context relevant requirements are defined in relation to the essential requirements of the Construction Products Directive (89/106/EEC)<sup>(2)</sup> [as amended by the CE Marking Directive (93/68/EC)<sup>(3)</sup>, the Low Voltage Directive (2006/95/EC)<sup>(4)</sup> and the EMC Directive (2004/108/EC)<sup>(5)</sup>], and are –

- (a) mechanical resistance and stability;
- (b) safety in case of fire;
- (c) hygiene, health and the environment;
- (d) safety in use;
- (e) protection against noise; and
- (f) energy economy and heat retention.

Depending on the intended use of the product and the particular regulatory requirements, all or some of the essential requirements may be relevant.

A CE marked material can only be rejected if either its performance does not, in fact, conform to the particular technical specification against which the CE marking has been claimed or, in the case of a declared value or a class of performance, the resultant value does not meet the relevant requirements of the Building Regulations. If a district council has reasonable grounds for suspecting that a CE marked material does not conform to the specification against which CE marking has been claimed, it would have to prove this. In such circumstances it should notify the relevant Environmental Health Officer. This will enable the UK Government, where necessary, to notify the Commission.

It should be noted that not all materials will necessarily be CE marked under the Construction Products Directive, and it will not, in any case, be possible for all products to be CE marked until all relevant technical specifications have become available. However, there are some products where CE marking is compulsory under other Directives (e.g. gas boilers, which should fully comply with all relevant Directives and should be installed in accordance with the appliance manufacturer's instructions).

(2) As implemented by the Construction Products Regulations 1991 (SI 1991 No 1620).

(3) As implemented by the Construction Products (Amendment) Regulations 1994 (SI 1994 No 3051).

(4) As implemented by the Electrical Equipment (Safety) Regulations 1994 (SI 1994 No 3260).

(5) As implemented by the Electromagnetic Compatibility Regulations 2006 (SI 2006 No 3418).

## **British Standards**

- 2.4 The material conforms to the relevant provisions of an appropriate British Standard.

Nearly all construction product British Standards will continue to be revised to become the British 'transposition' of the new European Standards (ENs) as and when prepared. Traditionally, where an EN has been transposed and has replaced a British Standard on more or less the same material (but possibly a radically changed technical content), it has taken the previous number. The BSI numbering policy now is to adopt the CEN numbering, prefaced with BS. Again, each title may contain different characteristics and requirements from the superseded British Standard.

British Standards are normally withdrawn when their equivalent European Standards are published but, under certain circumstances, arrangements may be made for a deferred withdrawal of the British Standard.

Because it is impossible to change everything simultaneously, there will be a period during which the old British Standards will have to co-exist with the new. Some will be 'withdrawn' but remain available for work which has already commenced; some will be retained as 'obsolescent' where, for example, they are called up in Technical Booklets not yet revised; some will co-exist for some years, fully maintained alongside the new transposed European originated standards (as it was with some of the structural codes).

Detailed enquiry will have to be made as to applicability in each context. Where the old standard retains applicability, it may reasonably be presumed that relevant products comply with Part B. Where there is a new standard, it may again be necessary to check applicability during the transitional period, following which compliance may reasonably also be presumed.

The European originated standards will have specifically identified clauses, those which relate to the 'harmonised' requirements containing the (largely health and safety) requirements relevant to the Building Regulations, and 'non-harmonised' requirements containing additional matters relating to trading requirements of concern to the construction industry, but not to Part B. The reference in this Technical Booklet only applies to the 'harmonised' requirements.

## **Technical approvals**

- 2.5 The material is covered by a national or European certificate issued by a European Technical Approval issuing body, and the conditions of use are in accordance with the terms of the certificate. Where necessary it is up to the person intending to carry out the work to provide translations and to demonstrate equivalence.

## **Other national and international technical specifications**

- 2.6 The material complies with –
- (a) a national technical specification of a Member State of the European Union or Turkey<sup>(6)</sup>, or of another State signatory to the Agreement on the European Economic Area (EEA); or
  - (b) an international technical specification,

that provides an equivalent level of safety and protection. Where necessary, it is up to the person intending to carry out the work to provide translations and to demonstrate equivalence. It should be noted that the technical specifications of other Member States will, for the same reason as noted in paragraph 2.4, be in a process of change paralleling that of British Standards.

## **Independent certification schemes**

- 2.7 The product has certified compliance under an independent certification scheme. There are many UK product certification schemes. Such schemes certify compliance with the requirements of a recognised document which is appropriate to the purpose for which the material is to be used. Materials which are not so certified may still conform to a relevant standard.

Many certification bodies that approve products under such schemes are accredited by the United Kingdom Accreditation Service (UKAS). Such bodies can issue certificates only for the categories of product covered under the terms of their accreditation.

If a product has been tested and certified as complying with a British Standard by an approved body in another Member State of the European Community, in accordance with the special procedure under Article 16 of the Construction Products Directive, then, if it is used appropriately and in satisfactory conditions, it should normally be accepted by a district council as complying with that standard. If it is not so accepted then the onus of proof in such a case is on the district council, who must notify the Environmental Health Officer. This will enable the UK Government, where necessary, to notify the Commission.

A district council may accept certification of products, components, materials, or structures under such schemes as evidence of compliance with the relevant standard. Similarly, a district council may accept the certification of installation or maintenance of products, components, materials and structures under schemes as evidence of compliance with the relevant standard. Nonetheless a district council will wish to establish in advance of the work, that any such scheme is adequate for the purpose of the Building Regulations.

(6) Decision No. 1/95 of the EC-Turkey Association Council of 22 December 1995.

## **Tests and calculations**

- 2.8 It can be shown by tests, by calculation or by other means that the material will be capable of performing the function for which it is intended. The Accreditation Scheme for Testing Laboratories run by UKAS together with similar schemes run by equivalent certification bodies, including accreditation schemes operated by other Member States of the EU, and recognised by that State's government, provide a means of ensuring that such tests can be relied on.

## **Past experience**

- 2.9 The material can be shown by experience, such as in a building in use, to be capable of performing the function for which it is intended.

## **Sampling**

- 2.10 A district council has the power to take samples of materials used or to be used in building work. Regulation 16 in Part A of the Building Regulations allows a district council to take such samples either used or to be used as it considers necessary to establish if that material complies with the provisions of the Building Regulations.

## **Suitability of certain materials**

### **Short-lived materials**

- 2.11 Some materials, in the absence of special care, may be considered unsuitable because of their rapid deterioration in relation to the expected life of the building. It is not possible to set down any specific criteria from which the length of life of a material can be considered against the requirements of the Building Regulations.

A short-lived material which is readily accessible for inspection, maintenance and replacement may meet the requirements of the regulations provided that the consequences of failure are not likely to be serious to the health or safety of persons in and around the building.

Where a short-lived material is not readily accessible for inspection and maintenance or replacement and the consequences of failure are likely to be serious for health or safety, it is most unlikely that the material will be suitable.

## **Materials susceptible to changes in their properties**

- 2.12 Some materials may undergo changes to their properties when they are exposed to certain environmental conditions which may affect their performance over time.

Some examples are certain stainless steels, structural silicone sealants and intumescent paints for enhancing the fire resistance of building elements.

Such materials can be used in works where these changes do not adversely affect their performance. They will meet the requirements of the Building Regulations provided that their final residual properties, including their structural properties, can be estimated at the time of their incorporation in the work. It should also be shown that these residual properties will be adequate for the building to perform the function for which it is intended for the expected life of the building.

## **Resistance to moisture**

- 2.13 Any material which is likely to be adversely affected by condensation, by moisture from the ground or by rain or snow will be suitable if –
- (a) the construction will resist the passage of moisture to the material; or
  - (b) the material is treated or otherwise protected from moisture.

## **Resistance to substances in the subsoil**

- 2.14 Any material in contact with the ground or in the foundations will be suitable if it is capable of resisting attacks by deleterious material in the subsoil such as sulphates.

## **Ways of establishing the adequacy of workmanship**

- 2.15 The following aids may be used for establishing the adequacy of workmanship (see paragraphs 2.16 to 2.20).

### **Standards**

- 2.16 (a) The method of carrying out the work is included in the recommendations of a British Standard Code of Practice. (Note: the BS 8000 series gathers together guidance from other BSI Codes and Standards); or
- (b) The method conforms to an equivalent technical specification which may include a national technical specification of a Member State of the European Union or Turkey, or of another State signatory to the Agreement on the European Economic Area (EEA) that provides an equivalent level of safety and protection.

## **Technical approvals**

- 2.17 The workmanship is specified for a material covered by a national or European certificate issued by a European Technical Approval issuing body, and the conditions of use are in accordance with the terms of the certificate.

Alternatively the workmanship may be covered by an equivalent technical approval (including a technical approval of any other member of the European Organisation for Technical Approvals), which provides an equivalent level of performance, and the conditions of use are in accordance with the terms of the technical approval. It is up to the person who intends to carry out the work to show that the method of workmanship will provide the equivalent level of protection and performance.

## **Management systems**

- 2.18 The workmanship is covered by a scheme which complies with the relevant recommendations of BS EN ISO 9000, and related standards. There are a number of such UKAS accredited schemes. These schemes relate to products and processes for which there may also be a suitable British or other technical standard.

There are also independent schemes for accreditation and registration of installers of materials and services that provide a means of ensuring that work has been carried out by knowledgeable contractors to appropriate standards.

## **Past experience**

- 2.19 It can be shown by experience, such as in a building in use, that the method of workmanship is capable of performing the function for which it is intended.

## **Tests**

- 2.20 A district council has the power to require tests in accordance with regulation 15 in Part A of the Building Regulations, to be carried out in relation to drains and private sewers as necessary, to establish compliance with Part N of the Building Regulations.

In relation to the tests referred to above, a district council, as part of the process of taking reasonable steps to establish that the relevant requirements of the Building Regulations have been complied with, may, when considered necessary, decide to carry out or arrange to have carried out such tests itself.

## Section 3 Urea formaldehyde foam

### General provisions

- 3.1 Other than the circumstances outlined in 3.2 urea formaldehyde (UF) foam should not be used in the erection, structural alteration or extension of a building.
- 3.2 Foam insulating materials which give off formaldehyde fumes either when used or later in normal use, may be used to insulate the cavity in a cavity wall where there is a continuous barrier which will minimise as far as practicable the passage of fumes into the building. BS 8208-1 gives guidance on factors to be considered when assessing the suitability of existing masonry external cavity walls for filling with thermal insulants.
- 3.3 A cavity wall which has been determined to be suitable for foam filling may be insulated with UF foam where –
- (a) the inner leaf of the wall is built of masonry (bricks or blocks);
  - (b) the person carrying out the work holds (or operates under) a current Certificate of Registration of Assessed Capability for the work to be undertaken;
  - (c) the in-situ foamed urea formaldehyde is manufactured in accordance with the relevant recommendations of BS 5617; and
  - (d) the installation is in accordance with BS 5618.

## Appendix Publications referred to

BS EN ISO 9000: 2005	Quality management systems. Fundamentals and vocabulary.
BS EN ISO 9001: 2008	Quality management systems. Requirements.
BS 5617: 1985	Specifications for urea formaldehyde (UF) foam systems suitable for thermal insulation of cavity walls with masonry or concrete inner and outer leaves.
BS 5618: 1985	Code of practice for thermal insulation of cavity walls (with masonry or concrete inner and outer leaves) by filling with urea formaldehyde (UF) foam systems. AMD 6262 1990, AMD 7114 1992.
BS 8000-1: 1989	Workmanship on building sites. Code of practice for excavation and filling.
BS 8000-2-1: 1990	Workmanship on building sites. Code of practice for concrete work. Mixing and transporting concrete. AMD 9324 1997.
BS 8000-2-2: 1990	Workmanship on building sites. Code of practice for concrete work. Sitework with in situ and precast concrete.
BS 8000-3: 2001	Workmanship on building sites. Code of practice for masonry.
BS 8000-4: 1989	Workmanship on building sites. Code of practice for waterproofing.
BS 8000-5: 1990	Workmanship on building sites. Code of practice for carpentry, joinery and general fixings.
BS 8000-6: 1990	Workmanship on building sites. Code of practice for slating and tiling of roofs and claddings.
BS 8000-7: 1990	Workmanship on building sites. Code of practice for glazing.
BS 8000-8: 1994	Workmanship on building sites. Code of practice for plasterboard partitions and dry linings.
BS 8000-9: 2003	Workmanship on building sites. Cementitious levelling screeds and wearing screeds. Code of practice.
BS 8000-11: 2011	Workmanship on building sites. Internal and external wall and floor tiling. Ceramic and agglomerated stone tiles, natural stone and terrazzo tiles and slabs, and mosaics. Code of practice.
BS 8000-12: 1989	Workmanship on building sites. Code of practice for decorative wallcoverings and painting.

BS 8000-13: 1989	Workmanship on building sites. Code of practice for above ground drainage and sanitary appliances.
BS 8000-14: 1989	Workmanship on building sites. Code of practice for below ground drainage.
BS 8000-15: 1990	Workmanship on building sites. Code of practice for hot and cold water services (domestic scale).
BS 8000-16: 1997+A1:2010	Workmanship on building sites. Code of practice for sealing joints in buildings using sealants.
BS 8208-1: 1985	Guide to assessment of suitability of external cavity walls for filling with thermal insulants. Existing traditional cavity construction. AMD 4996 1985.

## Technical Booklets

The following list comprises the series of Technical Booklets prepared by the Department for the purpose of providing practical guidance with respect to the technical requirements of the Building Regulations (Northern Ireland) 2012.

Technical Booklet B	Materials and workmanship
Technical Booklet C	Preparation of site and resistance to contaminants and moisture
Technical Booklet D	Structure
Technical Booklet E	Fire safety
Technical Booklet F1	Conservation of fuel and power in dwellings
Technical Booklet F2	Conservation of fuel and power in buildings other than dwellings
Technical Booklet G	Resistance to the passage of sound
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 N	Drainage
Technical Booklet P	Sanitary appliances, unvented hot water storage systems and reducing the risk of scalding
Technical Booklet R	Access to and use of buildings
Technical Booklet V	Glazing

Any person who intends to demonstrate compliance with the Building Regulations by following the guidance given in a Technical Booklet is advised to ensure that the guidance is current on the date when plans are deposited or notice given to the district council.