

# THE BUILDING REGULATIONS

EXPLAINED AND ILLUSTRATED

M. J. Billington • S. P. Barnshaw • K. T. Bright • A. Crooks

WILEY Blackwell

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14TH EDITION

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# THE BUILDING REGULATIONS

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#### Preface to the fourteenth edition

The thirteenth edition of this book was published in 2007. Since then the Building Regulations have been consolidated and recast and published as the Building Regulations 2010. They came into force on 1 October 2010 and subsequently have been amended no fewer than 10 times. At the same time the Approved Inspector Regulations were also revised and consolidated, coming into force on 1 October 2010 and like the Principal Regulations, these have also been amended several times. To complicate matters further from, 31 December 2011 the responsibility for Building Regulations in Wales was transferred to the Welsh Government. From this date the Welsh Government has been able to amend the Building Regulations specifically for Wales.

At the same time as these changes to the Principal Regulations, many amendments have been made to the Approved Document guidance including the removal of Part N and Approved Document N (except in Wales!) and the inclusion of a new Part Q Security – Dwellings.

For this edition, we are delighted to welcome two new authors to the editorial team - Andy Crooks and Stephen Barnshaw, both of jhai Ltd. With the Regulations becoming ever more complicated it was thought necessary to enlist the expertise of practising professionals in the field of building control and we are grateful for all the hard work they have put in. Specifically, Andy has completely re-written Chapter 7 (Part B - Fire) and Stephen has revised and updated Chapter 10 (Sound Insulation – Part E), Chapter 11 (Ventilation – Part F), Chapter 12 (Sanitation, hot water safety and water efficiency – Part G), Chapter 14 (Combustion Appliances and Fuel Storage Systems – Part J) and Chapter 16 (Conservation of Fuel and Power – Part L).

In detail the following chapters have been completely re-written:

Chapter 5: Work under the supervision of a competent person – revised to take account of the expansion of the types of work now covered by competent person schemes, the consequent increase in their number and complexity and the revisions to the Government terms and conditions that control such schemes.

Chapter 6: Structural Stability – revised to reflect the increased reference to European codes and standards. In order to assist our readers by providing, where possible, as complete a guide to the regulations and Approved Documents as we can in one place, in the previous editions of this book we reproduced the original timber sizing tables from the 1992 edition of AD A. For copyright reasons we are unable to reproduce the Tables from the TRADA document that replaced those earlier AD A Tables and unfortunately, the tables from the 1992 edition no longer comply with Eurocode 5. For these reasons we have decided, reluctantly, not to reproduce the old Approved Document Tables.

Chapter 7: Fire. Fire safety legislation throughout England and Wales was consolidated between 2005 and 2013 with amendments to both the Building Regulations and a

great deal of other fire legislation. Reliance solely on Approved Document B (Volumes 1 and 2) can produce solutions that are unnecessarily complicated and/or expensive, therefore this chapter, whilst concentrating on the Approved Document B guidance, where applicable draws parallels with British Standard 9999 to illustrate the different approaches to design that exist. In December 2011, responsibility for building regulations was transferred to the Welsh Government. Therefore as discussed in some other chapters, the legislation, supporting guidance and enforcement standards in Wales will start to change in the next few years.

In respect of fire safety, this process has already started. The Domestic Fire Safety (Wales) Measure 2011, after being passed by the National Assembly for Wales, received Royal Assent on 7 April 2011. This Measure provides the Welsh Government with the ability to require that new homes are fitted with 'an effectively operating fire suppression system'.

Chapter 8: Materials, workmanship, site preparation and moisture exclusion – for materials and workmanship this chapter has been revised to reflect full implementation of European Regulation 305/2011/EU-CPR covering construction products, referred to as the Construction Products Regulations 2011.

Chapter 12: Sanitation, hot water safety and water efficiency. This chapter covering Part G and Approved Document G, came into force on 6 April 2010 and contained many significant changes from its predecessor to both the legal requirements and the technical guidance. These changes were reflected in a new format, in which AD G now consists of an introduction, six parts and three appendices. Part G now includes guidance on cold water supply and water efficiency in addition to the updated recommendations for hot water supply and systems and sanitary conveniences and washing facilities.

Chapter 14: Combustion appliances and fuel storage systems – revised to reflect the expansion of Part J in 2010 to seven parts with a new requirement covering the provision of carbon monoxide alarms in dwellings where solid fuel appliances are installed. To incorporate this requirement adjacent to the existing requirement for the discharge of products of combustion involved a reordering of the numbering in respect of the various parts.

Chapter 15: Protection from falling, collision and impact. This chapter now incorporates the changes to the Building Regulations in 2013 which extended the Approved Document to Part K (ADK) to incorporate some of the provisions for stairs and ramps previously included in the 2004 edition of Approved Document to Part M (ADM 2004). The new 2013 edition of AD K was also extended to include all of the requirements for manifestation that had previously been shared by AD M and the Approved Document to Part N (ADN). These changes to AD K and AD M in 2013 and a rationalisation of the overlapping guidance covered within them, allowed the withdrawal of AD N.

The changes to AD M in 2013 have subsequently been subsumed into the 2015 edition of Part M and the 2015 edition of Approved Document M. However, caution should be exercised since the changes made in 2013 to Parts K and M and the withdrawal of Part N and the introduction of Part M 2014 and its Approved Document (AD M 2015) apply only to England. They do not apply to Wales. Whilst Wales is in the process of reviewing these and other Regulations, the versions of Parts K, M and N that are relevant in Wales at the time of publication of this book are those that were in force in England and Wales prior to April 2013.

Chapter 16: Conservation of fuel and power. This chapter has been revised to describe the continuing trend towards higher standards of energy conservation thereby ensuring compatibility with the European Energy performance of Buildings Directive (EPBD) and the national government's stated objective to achieve a zero carbon standard for new dwellings by 2016 and in new non-domestic buildings by 2019.

Chapter 17: Access to and use of buildings. See the paragraph on chapter 15 above to see the main changes brought about in Part M and chapter 17. All the substantive changes made in AD M relate to the guidance for 'Buildings other than dwellings' (Regulations M1, M2 and M3). The guidance relating to 'dwellings' (Regulation M4) has been amended to reflect the baseline mandatory requirements only and does not address the optional enhanced requirements.

Chapter 18: Electrical safety – renumbered from the former chapter 19 to reflect the deletion of Part N and its inclusion in chapter 15. The latest 2013 revision of Approved Document P came into force on 6 April 2013. The main changes brought about by the 2013 amendment include changes in the legal requirements as follows:

- The range of electrical installation work that is notifiable (where there is a requirement to certify compliance with the Building Regulations) has been reduced.
- An installer who is not a registered competent person may use a registered third party
  to certify notifiable electrical installation work as an alternative to using a building
  control body.
- Approved Document P now refers to BS 7871:2008 incorporating Amendment No. 1:2011.

Chapter 19: Security – this chapter covers the new Part Q of Schedule 1 to the 2010 Regulations (as amended) and is concerned with the prevention of unauthorised access to new dwellings. It was introduced in the Building Regulations &c. (Amendment) Regulations 2015 (SI 2015 No. 767). The amendment regulations came into force generally on 18 April 2015; however, Part Q did not come into force until 1 October 2015. It follows the lead of the Scottish Executive where security provisions have been part of the Scottish Building Regulations and Standards for a number of years.

Appendix: Local Acts of Parliament- this appendix has been omitted from the 14th edition of this book as all of the former local act provisions have now been incorporated into the building regulations or have been repealed.

As always, the aim of this book is to provide a convenient and straightforward guide and reference to a complex and constantly evolving subject. It must be stressed that this book is a guide to the Regulations and approved and other documents, and is not a substitute for them. We hope that it may shed light on some of the more obscure and difficult to understand parts of the source documents. It should also be stressed that the guidance in the Approved Documents is not mandatory and differences of opinion can quite legitimately exist between controllers and developers or designers as to whether a particular detail in a building design does actually satisfy the mandatory functional requirements of the Building Regulations.

The intended readers of this book are all those concerned with building work – architects and other designers, building control surveyors, members of competent person schemes, building surveyors, clerks of works, services engineers and contractors etc. – as well as

their potential successors, the current generation of students on built environment and architectural courses. This book is designed to be of use to both students and teachers and it is gratifying that successive editions are widely adopted by various academic institutions and professional bodies.

We are grateful to Tim Burgin at jhai Ltd for his invaluable help with the diagrams for Chapter 7. As always, we are especially grateful to Paul Sayer, Publisher (Civil Engineering and Construction) at John Wiley & Sons Ltd and his editorial team, for their help, patience and interest during the production of this edition.

The law is stated on the basis of cases reported and other material available to us on 1 October 2016.

M.J. Billington S.P. Barnshaw K.T. Bright A. Crooks

#### Stop press

As often happens, as we were about to go to press a new Part R – *Physical infrastructure* for high-speed electronic communications networks came into force on 1 January 2017. It applies in England and to building work carried out on excepted energy building in Wales as defined in the Welsh Ministers (Transfer of Functions) (No.2) Order 2009.

It contains one regulation R1 entitled 'In-building physical infrastructure'

#### R1 states:

- (1) Building work must be carried out so as to ensure that the building is equipped with a high-speed-ready in-building physical infrastructure, up to a network termination point for high-speed electronic communications networks.
- (2) Where the work concerns a building containing more than one dwelling, the work must be carried out so as to ensure that the building is equipped in addition with a common access point for high-speed electronic communications networks.

The requirement applies to building work that consists of:

- (a) The erection of a building; or
- (b) Major renovation works to a building.

The practical effect of R1 is that a duct must be provided from the service provider's access point in the building to where the occupier's network termination point is sited. Where a standard copper telephone cable is installed and connected to the service provider's fibre network this will satisfy the requirement.

## **Acknowledgements**

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All other documents referred to in the text are fully cited and may be obtained from the usual technical bookshops.

# Legal and administrative

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