

Unit 17: Building Regulations and Control for Construction

NQF Level 3: BTEC National

Guided learning hours: 60

Unit abstract

The Building Regulations set the minimum standards required for the construction of most new buildings and many building alterations in England and Wales to ensure that buildings are safe and hygienic, energy efficient and do not waste water.

Continuous development and updating of building standards and regulations has taken place over many years. Many of these changes result from concerns related to other issues, such as public health, so the provisions for building standards are scattered amongst numerous Acts of Parliament and local authority bylaws.

The Building Regulations are enforced by building control officers or approved inspectors, and enforcement initially involves approval of the proposed design and construction of a building, followed by regular inspections as the work proceeds on site.

The unit aims to develop the learner's knowledge and understanding of the Building Regulations and their influence on building design, construction and use. It will enable learners to gain an understanding of specific requirements of the regulations and the means by which they are enforced.

Learners will acquire knowledge and understanding of the Building Regulations for various aspects of low-rise domestic and commercial building design, and be able to apply these to typical construction situations. They will also be able to assemble the necessary documentation needed for making a submission for Building Regulations approval.

Learning outcomes

On completion of this unit a learner should:

- 1 Understand the origins, purpose and application of the current Building Regulations
- 2 Be able to interpret the Building Regulations and apply them to various aspects of low-rise domestic and commercial building design and construction
- 3 Understand the procedures and documentation involved with submission for Building Regulation approval, and the advisory and enforcement roles of local authority building control officers and Approved Inspectors
- 4 Be able to prepare a submission for Building Regulation approval, including all necessary documentation.

Unit content

1 Understand the origins, purpose and application of the current Building Regulations

Historical factors: the historical development of building standards relating to hygiene and public health eg the Industrial Revolution; events and changes affecting the construction and use of buildings eg the Great Fire of London, Ronan Point; changes in policy on energy and other environmental issues; local building bye-laws; establishment of national standards

Source of the current Building Regulations: the Building Act 1984 and 1991; current Building Regulations; Approved Documents

Current developments: sustainable construction (brownfield sites, uses of contaminated land, energy conservation); reduction in impact of the built environment on the natural environment

Application of current Building Regulations: application to new buildings and alterations; detailed requirements contained in Approved Documents

2 Be able to interpret the Building Regulations and apply them to various aspects of low-rise domestic and commercial building design and construction

Scope of the Building Regulations: the Building Regulations (including amendments); Approved Documents; scope, extent and detailed requirements of each part

Legal obligations: legal obligations of developer and/or contractor to comply with the Building Regulations and Approved Documents

Application of Approved Documents: to various aspects of design and construction of dwellings including flats

3 Understand the procedures and documentation involved with submission for Building Regulation approval, and the advisory and enforcement roles of local authority building control officers and Approved Inspectors

Approval procedures and inspection in building control: eg submission of building notices, plans, specification; notice of commencement and completion of sections of work; stages of notification; the role of the building control officer or approved inspector

Documentation: use of standard documentation for submissions for Building Regulation approval and subsequent stages including enforcement

Local authority and private building control: eg building control officers employed by local authorities, Approved Inspectors employed by private organisations such as NHBC, certification of inspectors, enforcement procedures

- 4 Be able to prepare a submission for Building Regulation approval, including all necessary documentation

Submission requirements: examination and completion of various application forms; production of necessary documents to aid and support a Building Regulation application; generation of the drawings and information needed to support a successful application

Grading grid

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all of the learning outcomes for the unit. The criteria for a pass grade describe the level of achievement required to pass this unit.

Grading criteria	
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:
P1 identify the factors that have influenced the development of building control and explain their significance	M1 explain the implications of the Building Regulations for low-rise domestic and commercial construction
P2 identify and describe the legislation and documentation associated with building control	D1 analyse and critically evaluate a selected part of the Building Regulations, eg Approved Document M Disabled Access or Approved Document L Conservation of Fuel and Power
P3 explain the application of the Building Regulations to a variety of scenarios	M2 produce and justify feasible solutions to a variety of Building Regulation issues
P4 identify and explain the procedures involved when applying for Building Regulations approval	M3 explain the procedures for the enforcement of Building Regulations.
P5 produce a specimen Building Regulation application for a low-rise domestic or commercial property complete with associated documentation including drawings.	D2 evaluate solutions to a variety of Building Regulations issues and suggest and justify suitable alternatives
	D3 compare and contrast private Approved Inspectors with local authority building control officers and explain the implications for developers.

Essential guidance for tutors

Delivery

Tutors delivering this unit have opportunities to use a wide range of techniques. Lectures, discussions, seminar presentations, site visits, supervised practicals, research using the internet and/or library resources and the use of personal and/or industrial experience are all suitable. Delivery should stimulate, motivate, educate and enthuse learners. Visiting expert speakers could add to the relevance of the subject.

The historical development of building control and the purpose, content and scope of the current Building Regulations should be investigated at the beginning of the unit followed by a contextualised study of their application to the construction and alteration of dwellings.

The continuous updating and revision of the regulations to reflect changes, such as the increasing need to conserve energy, should be considered.

Procedures for Building Regulation approval and subsequent enforcement should be addressed including the organisations and professionals responsible for enforcement.

Learners' knowledge and understanding should be applied to a submission for Building Regulation approval based on a real or hypothetical case-study.

Wherever possible, links should be formed with industry, in particular house builders, as this will provide an opportunity for learners to contextualise their learning and to use this to inform their study of the various aspects of building control. Similarly, visits to local authority building control departments should be considered, to view applications made for Building Regulation approval. A further enhancement to the learning process could be made by seeking specialised input from current practitioners.

Overall delivery of the unit should be supported by the use of case-studies and visual media where appropriate including photographs, video, DVD, and drawings to demonstrate applications of Building Regulations.

Group activities are permissible, but tutors will need to ensure that individual learners are provided with equal experiential and assessment opportunities.

Health, safety and welfare issues are paramount and should be strictly reinforced through close supervision of all workshops and activity areas, and risk assessments must be undertaken prior to practical activities. Centres are advised to read the *Delivery approach* section on page 24, and *Annexe G: Provision and Use of Work Equipment Regulations 1998 (PUWER)*.

Assessment

Evidence for this unit may be gathered from a variety of sources, including well-planned investigative assignments, case studies or reports of practical assignments.

There are many suitable forms of assessment that could be employed. Some examples of possible assessment approaches are suggested below. However, these are not intended to be either prescriptive or restrictive, and are provided as an illustration of the alternative forms of assessment evidence that would be acceptable. General guidance on the design of suitable assignments is available on page 19 of this specification.

Some criteria could be assessed directly by the tutor during practical activities. If this approach is used, suitable evidence from guided activities would be observation records or witness statements. Guidance on the use of these is provided on the Edexcel website.

The structure of the unit suggests that the grading criteria may be fully addressed by using three assignments. The first of these would cover criteria P1, P2, M1 and D1, the second P3, M2 and D2 and the third would cover criteria P4, P5, M3 and D3.

To achieve a pass grade learners must meet the five pass criteria listed in the grading grid.

For P1, learners must be able to identify the factors that have influenced the development of building control and explain their significance. This demands an appreciation of the historic development of building control including an understanding of the various influences that have contributed to that development.

For P2, learners must identify and describe the legislation and documentation associated with building control. An overview of the background legislation followed by an in-depth investigation of the relevant documentation, including the Approved Documents, will be required.

For P3, learners must explain the application of the Building Regulations to a variety of scenarios. This will require learners to interpret and explain the application of the Building Regulations to a number of elements of low-rise domestic and commercial construction. In doing so, learners will identify the particular part or parts of the regulations that apply.

For P4, learners must be able to identify and explain the procedures involved when applying for Building Regulations approval. This should encompass the completion of relevant application forms, drawings and specifications. Reference should also be made to the fees payable when an application is made.

For P5, learners must produce a specimen Building Regulation application for a low-rise domestic or commercial property complete with associated documentation including drawings. This lends itself to the use of a case-study to provide a realistic context for the task and add value to the learning process. The appropriate forms must be completed and be accompanied by relevant drawings, specifications, etc.

To achieve a merit grade learners must meet all of the pass grade criteria and the three merit grade criteria.

For M1, learners must explain the implications of the Building Regulations for low-rise domestic and commercial construction. This will necessitate demonstration of an understanding of how the regulations affect the design and construction of domestic buildings, including alteration work.

For M2, learners have to produce and justify feasible solutions to a variety of Building Regulation issues. Evidence must correctly interpret the requirements of the Building Regulations for the cases given and propose appropriate solutions that comply with the regulations.

For M3, learners must be capable of explaining the procedures for the enforcement of Building Regulations. Evidence must include procedures for notifying the enforcement authority at certain stages of the building work and the role of the inspector in verifying compliance with the regulations.

To achieve a distinction grade learners must meet all of the pass and merit grade criteria **and** the three distinction grade criteria.

For D1, learners must analyse and critically evaluate a selected part of the Building Regulations, eg Approved Document M Disabled Access or Approved Document L Conservation of Fuel and Power. Learners' evidence must show a detailed insight and understanding of the selected part.

For D2, learners are required to evaluate solutions to a variety of Building Regulations issues and suggest and justify suitable alternatives. Evidence must show consideration of alternative solutions to the issues presented, with supporting argument to justify the choices made.

For D3, learners must compare and contrast private Approved Inspectors with local authority building control officers and explain the implications for developers. This will require a comparison of local authority building control with that provided by the private sector including the potential variation in the fees charged.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

The learning outcomes in this unit are closely linked with, for example, *Unit 5: Construction, Technology and Design in Construction and Civil Engineering, Unit 6: Building Technology in Construction and Unit 16: Mechanical and Electrical Services in Construction*, together with similar units at Higher National and degree level.

This unit may have links to the Edexcel Level 3 Technical and Professional NVQs for Construction and the Built Environment. Updated information on this, and a summary mapping of the unit to the CIC Occupational Standards, is available from Edexcel. See *Annexe D: National Occupational Standards/mapping with NVQs*.

The unit provides opportunities to gain Level 3 key skills in communication, information and communication technology and problem solving. Opportunities for satisfying requirements for Wider Curriculum Mapping are summarised in *Annexe F: Wider curriculum mapping*.

Essential resources

Access to Building Regulations documents is essential to the delivery of this unit. Copies of the Building Act 1984 and amendments and the current Approved Documents are readily available via the internet and can be downloaded as printable documents without charge. Examples of completed application pro-forma and related documentation would also facilitate the learning process.

Indicative reading for learners

Textbooks

Billington M J, Simons M W and Waters J R – *The Building Regulations: Explained and Illustrate, 12th Edition* (Blackwell, 2003) ISBN 0632058374

Billington M – *Using the Building Regulations: Administrative Procedures* (Butterworth-Heinemann, 2005) ISBN 0750662573

Chudley R and Greeno R – *Building Construction Handbook: Incorporating Current Building and Construction Regulations, 6th Edition* (Butterworth-Heinemann, 2006) ISBN 0750668229

Chudley R and Greeno R – *Construction Technology, 4th Edition* (Pearson, 2005) ISBN 0131286420

Emmitt S and Gorse C – *Barry's Introduction to Construction of Buildings* (Blackwell, 2004) ISBN 1405110554

Polley S – *Understanding the Building Regulations, 3rd Edition* (Spon Press, 2005) ISBN 0415349176

Tricker R – *Building Regulations in Brief, 3rd Edition* (Butterworth-Heinemann, 2005) ISBN 0750667036

Websites

www.thenbs.com – NBS. *Building Regulations and Approved Documents* (dates to 2006)

Key skills

Achievement of key skills is not a requirement of this qualification but it is encouraged. Suggestions of opportunities for the generation of Level 3 key skill evidence are given here. Tutors should check that learners have produced all the evidence required by part B of the key skills specifications when assessing this evidence. Learners may need to develop additional evidence elsewhere to fully meet the requirements of the key skills specifications.

Communication Level 3	
When learners are:	They should be able to develop the following key skills evidence:
<ul style="list-style-type: none"> explaining the application of the Building Regulations to a variety of scenarios identifying and describing the legislation and documentation associated with building control analysing and critically evaluating a selected part of the Building Regulations producing a specimen building regulations application. 	<p>C3.1b Make a presentation of at least eight minutes using an image or other support material.</p> <p>C3.2 Read and synthesise information from at least two documents about the same subject. Each document must be a minimum of 1000 words long.</p> <p>C3.3 Write two different types of documents each one giving different information about complex subjects. One document must be at least 1000 words long.</p>
Information and communication technology Level 3	
When learners are:	They should be able to develop the following key skills evidence:
<ul style="list-style-type: none"> using the internet and other electronic media to research and gather information on Building Regulations using ICT processes to produce the assessment evidence. 	<p>ICT3.1 Search for information, using different sources, and multiple search criteria in at least one case.</p> <p>ICT3.2 Enter and develop the information and derive new information.</p> <p>ICT3.3 Present combined information such as text with image, text with number, image with number.</p>

Problem solving Level 3	
When learners are:	They should be able to develop the following key skills evidence:
<ul style="list-style-type: none"> comparing and contrasting private Approved Inspectors with local authority building control officers and explaining the implications for developers. 	<p>PS3.1 Identify a problem and identify different ways of tackling it.</p> <p>PS3.2 Plan and implement at least one way of solving the problem.</p> <p>PS3.3 Check if the problem has been solved and review your approach to problem solving.</p>