

Syllabus

CIOB Level 6 Certificate in Fire Safety for
Building Control – Complex Buildings (QAN:
610/0104/7)

Contents

	Pg. No.
1. Programme Structure	3
1.1 Qualification Aims	3
1.2 Progression to other Qualifications	3
1.3 Programme Structure	3
1.4 Unit Exemptions	3
1.5 Entry Requirements	3
1.6 Grading	3
1.7 Assessment	3-4
1.8 Indicative Marking Descriptors	5
1.9 Indicative Reading List	6-7
1.10 Knowledge and Skills Matrix	7
2. Unit Contents	
Unit 1 Fire Safety in Complex Buildings	8-9

1. Programme Structure and Rules of Combination

1.1 Qualification Aims

This qualification is designed for Building Control Officers in England with at least 3 years' experience in Public Sector Building Control. The qualification develops the learner's knowledge and skills in this building control specialism dealing with fire related matters for complex buildings. This qualification comprises one unit.

1.2 Progression to other Qualifications

The certificate is at level 6 on the Regulated Qualifications Framework and carries 20 credits. Higher education providers may consider this qualification for exemption from certain modules within their degree or other relevant programmes.

1.3 Programme Structure

To achieve the qualification, learners are required to undertake one unit.

Unit 1 – Fire Safety in Complex Buildings

Total Qualification Time for the Certificate is 200 hours; 60 guided learning hours plus 140 personal study hours.

1.4 Exemptions

No exemptions are offered for this qualification.

1.5 Entry Requirements

A CIOB Level 4 Diploma in Public Service Building Control and at least 3 years' experience in Public Sector Building Control

or

A CIOB Level 5 Diploma in Public Service Building Control and at least 2 years' experience in Public Sector Building Control

or

At least 5 years' experience in building control, with at least two of those years working on complex buildings.

1.6 Grading

The tutor will award the learner a grade for the qualification (pass, merit and distinction). Grades reflect overall performance including assignments, practical exercises and course work.

Indicative marking descriptors for differentiating between levels of achievement when marking assignments are provided below (Section 1.8).

1.7 Assessment

Assessments are by scenario-based assignments approved by the CIOB Awarding Organisation.

Centres may design their own assignment briefs which must be approved by the Awarding Organisation (CIOB) prior to issue to learners.

All completed assessments are marked by the centre, internally verified and subject to external moderation.

The assessment criteria are based on three areas:

1. **Task achievement** – This is a measure of how well the learner answers the task question/questions and the identification of the key aspects of the task.
2. **Technical Content** – This is a measure of how well the learner addresses the technical aspects of the task.
3. **Presentation** – This is a measure of how well the learner presents the assignment and includes the quality of the structure and paragraphing, the quality and relevance of visual or graphical content and the referencing used for quoted sources.

1.8 Indicative Marking Descriptors – CIOB Level 6 Certificate in Fire Safety for Building Control – Complex Buildings

* Please note that the bands below describe indicative characteristics only. An overall holistic approach is required when assessing a learners' work and assigning a grade.

Grade	Task Achievement The Relevance of the Response	Inclusion of Relevant Technical Knowledge in Content	Presentation/Coherence
Distinction			
70%+	The work demonstrates a comprehensive understanding of the task. All relevant information is included. The main issues are effectively identified and analysed. There is evaluation and some analysis of solutions to issues relevant to the task. The response shows control of content within the word count.	The work demonstrates a strong understanding of a wide range of technical issues relevant to the task. There is analysis of the advantages/disadvantages of possible choices, risks and potential outcomes.	The work is appropriately structured, and the argument is developed coherently. There is a recognised form and correctly used of source referencing which supports the points in the task. Paragraphing and titling are used effectively to assist the reader. The use of visual/graphical information is clear and effective in assisting the reader. The graphical information is relevant to the task and is accurate.
Merit			
60-69%	The work demonstrates a clear understanding of the main issues relevant to the task. The issues are explained effectively, and potential solutions identified. There is some attempt to analyse the merits of the solutions to the task. The task is broadly achieved within the word count, if relevant to assignment.	The work demonstrates an understanding of the key technical issues of the task. There is clear description of relevant technical aspects with some attempt to evaluate the merits of these as appropriate to the task.	Demonstrates an awareness of presentation and an attempt to present the information with clarity and coherence. There is well structured referencing of sources and use of paragraphing and titling to assist the reader. There is use of clear graphical information to support the assignment which has broad relevance to the task. There may be some limited inaccuracies/omissions in these.
Pass			
40-59%	The work demonstrates an understanding of the task. The main points are identified, and the task is achieved. There is no attempt to evaluate or analyse the solutions. There may be some inaccuracies, omissions and irrelevant content. There may be lack of control in relation to the word count.	The work demonstrates an understanding of the main technical issues which are identified. This may be limited to description with little evidence of evaluation. There may be some omissions and inaccuracies in the detail. There may be some irrelevant details.	There is an attempt to structure the information. There is evidence of paragraphing and titling which is not always appropriate. Some basic graphical information may be included which is of some assistance to the reader. There may be some omissions or inaccuracies. There is clear evidence of appropriate referencing. The work is generally coherent but there may be occasional lapses in coherence and structure.
Fail			
0-39%	The work shows a poor understanding of the task. Frequent inaccuracies. Failure to identify important aspects of the task. Much of the information is irrelevant to the task. There may be evidence of copy and paste from external sources. The response may be limited to lists of words with no attempt to explain the relevance/merits of these to the task. The assignment falls short of the word count.	The work demonstrates a lack of understanding of the technical aspects. There are omissions of important technical information. Errors are evident in the technical content. There is no attempt to explain the relevance of the technical content to the task.	Lacks structure and may be limited to lists of points which are not developed. Disorganised in structure causing difficulty for the reader to understand the points. The response is illegible or incoherent in places. No referencing of external sources. The graphical illustrations are of poor quality or absent. They may be irrelevant. There may be errors and a lack of clarity causing difficulty for the reader to understand.

1.9 Indicative Reading List

The reference materials listed can be accessed through the CIOB Library and Information Service. For further information and how to join please see the website page at the link below:

<https://www.ciob.org/library>

Unit 1 – Fire Safety in Complex Buildings

Todd, C (2008) A Comprehensive Guide to Fire Safety 3rd edn; London: British Standards Institution (BSI)

Read R and Morris W (1993) Aspects of Fire Precautions in Buildings CI/SfB98(K); London: IHS BRE Press

BRE Expert Collection – 11 Fire Engineering (2016); London: IHS BRE Press

BS 9999:2017 Fire safety in the design, management and use of buildings. Code of practice; London: BSI

BS 9991:2015 Fire safety in the design, management and use of residential buildings. Code of practice; London: BSI

BS 7974:2001 Application of fire safety engineering principles to the design of buildings. Code of practice; London: BSI

Morgan H (1994) Smoke control in buildings: design principles Digest DG396; London: IHS BRE Press

Morris W, Read R and Cooke G (1988) Guidelines for the construction of fire-resisting structural elements 2nd edn; London: IHS BRE Press

BRE Expert Collection – 10 Fire Protection (2016); London: IHS BRE Press

Almond G (2017) Elementary Fire Engineering Handbook 4th edn IFE50; Stratford-upon-Avon: Institution of Fire Engineers

Fire and Rescue Services Act 2004:
<http://www.legislation.gov.uk/ukpga/2004/21/contents>

BS 9999:2017 Fire safety in the design, management and use of buildings. Code of practice; London: BSI

BS 7974:2001 Application of fire safety engineering principles to the design of buildings. Code of practice; London: BSI

BS EN 1993-1-2:2005 Eurocode 3. Design of steel structures. General rules. Structural fire design; London: BSI

BS EN 1995-1-2:2004 Eurocode 5. Design of timber structures. General. Structural fire design; London: BSI

Building Bulletin 100: Design for Fire Safety in Schools (2007); London: DCSF, UK Government

BS 13501-1:2018 Fire classification of construction products and building elements. Classification using data from reaction to fire tests; London: BSI

BS 13501-2:2016 Fire classification of construction products and building elements. Classification using data from fire resistance tests, excluding ventilation services; London: BSI

BS 5839-1: 2017 Fire detection and fire alarm systems for buildings. Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises; London: BSI

1.10 Knowledge and Skills Matrix

Unit 1 – Fire Safety in Complex Buildings

Specialist Knowledge	Subject Knowledge and Understanding Specialist Skills	
Transferable Skills	Digital Skills Analysing Information Communication Skills Problem Solving Numeracy Project Management Skills	

Unit 1 – Fire Safety in Complex Buildings

Title	Fire Safety in Complex Buildings
Unit Reference Number	Unit 1
RQF Level	6
Credit value	20
Unit Guided Learning Hours	60
Unit Personal Study Hours	140
Total Qualification Time	200

Learning Outcomes The Learner will:	Assessment Criteria The Learner can:
1. Be able to apply fire safety legislation to a range of complex buildings.	1.1 Evaluate the role of building control in regulating critical fire safety systems for a range of building types. 1.2 Describe the interaction between stakeholders when dealing with complex and relevant buildings. 1.3 Evaluate the process for the proportionate management of non-compliances for a range of scenarios.
2. Be able to analyse fire safety solutions and improvements for complex buildings.	2.1 Evaluate the pros and cons of the fire safety provisions from a range of guidance documents. 2.2 Critically evaluate fire safety solutions for a given design.
3. Be able to produce fire safety improvement reports for complex buildings.	3.1 Produce a report providing a fire safety compliant solution at design stage. 3.2 Create an on-site report for complex buildings at construction stage.
4. Be able to assess a range of complex dynamic factors that can impact on fire safety.	4.1 Evaluate the conditions that impacted on fire safety in a range of case studies. 4.2 Assess factors such as fire engineered design, smoke control, human behaviour and partial occupation that can impact on fire safety. 4.3 Justify a safety case for deviating from guidance to ensure continued compliance for fire safety. 4.4 Critically evaluate a fire risk assessment recognising dynamic factors.

Unit Information:

Scope:

This Unit is designed to provide the knowledge and practical skills to work on both existing and new High Risk Residential Buildings and other Complex Buildings such as hospitals, shopping centres, multi-occupancy premises, schools, leisure complexes, sports grounds, tall buildings, etc.

It provides learners with the:

Ability to apply Regulations and legislation associated with fire safety.

- Ability to apply Regulations and legislation associated with fire safety for specialist buildings.
- Ability to engage with those with safety management responsibilities.
- Understanding of building design, management and construction activities to ensure holistic building safety.
- Ability to apply standards, testing, assessment and maintenance procedures for building materials, products, components, assemblies, and systems to ensure safety throughout the building lifecycle.
- Understanding of how to use, manage, distribute, maintain and contribute to information critical to ensuring that buildings are designed, built and/or operated to be safe throughout the building life cycle:
 - Obtain building safety information
 - Share building safety information
 - Manage building safety information
- Ability to assess fire safety risks in higher risk buildings.
- Understanding the impact of procurement and commissioning activity on building safety.
- Understanding of the characteristics, purpose, and function of fire safety systems.
- Ability to apply fire safety theory and principles in practice.
- Understanding of key principles and factors in structural safety and their impact on the design, installation, commissioning, inspection, management, or maintenance of structural systems.
- Ability to undertake enforcement action to ensure safety is not compromised in the course of routine occupation, operation, installation and maintenance.
- Understanding of relevant risk assessment processes such as:
 - Fire risk assessment
 - Safety case development, management or use
 - Assessing risk of using different products and systems.

The curriculum covers topic areas such as:

Means of escape provisions; Passive fire protection measures; Active fire protection measures; External fire spread; Management of the premises; Fire and Rescue Service access; Fire Engineering; Smoke control; Human behaviour; Partial occupation; Fire risk assessments; Compliance; Strategic evolution/direction of fire legislation such as BS991; BS999; BS7974; PAS79.