



# **City & Guilds Level 3 Diploma in Bricklaying (6705-33)**

**Version 2.4 (September 2024)**

**Qualification Handbook**

## Qualification at a glance

<b>Subject area</b>	Building and construction
<b>City &amp; Guilds number</b>	6705
<b>Age group approved</b>	16+
<b>Entry requirements</b>	None
<b>Assessment</b>	Online multiple choice, Multiple choice, Assignment
<b>Grading</b>	Pass/Fail
<b>Approvals</b>	Full approval required
<b>Support materials</b>	Centre handbook, Assessor guidance, Practical task manual
<b>Registration and certification</b>	Consult the Walled Garden/Online Catalogue for last dates

<b>Title and level</b>	<b>City &amp; Guilds qualification number</b>	<b>Regulatory reference number</b>	<b>GLH</b>	<b>TQT</b>
City & Guilds Level 3 Diploma in Bricklaying	6705-33	600/8083/8	532	570

<b>Version and date</b>	<b>Change detail</b>	<b>Section</b>
1.1 July 2013	Amended the third bullet point under Centre staffing	Centre requirements
1.2 Aug 2013	Correct AC 3.4 – Unit 301/701	Units
2.0 Jan 2014	Entry requirement information added	Centre requirements
2.1 July 2014	Amended Centre staffing	Centre requirements
2.2 Dec 2015	Updated range for LO 1, 3 and 4 in unit 201	Units
2.3 Sep 2017	Added GLH and TQT details	Qualification at a Glance, Structure
	Deleted QCF	Appendix
2.4 Feb 2024	Handbook reviewed and updated to new template	Throughout Assessment and Assessment related sections

# Contents

Qualification at a glance .....	2
Contents .....	4
1 Introduction .....	5
Structure	6
Total Qualification Time (TQT) .....	6
2 Centre requirements .....	8
Approval	8
Resource requirements .....	8
Quality assurance .....	8
Learner entry requirements.....	10
Age restrictions.....	10
Access arrangements and reasonable adjustments .....	10
3 Delivering the qualification.....	11
Initial assessment and induction .....	11
Inclusion and diversity.....	11
Sustainability.....	11
Support materials.....	12
4 Assessment.....	13
Assessment of the qualification.....	13
Assessment strategy .....	15
Time constraints .....	15
Recognition of prior learning (RPL).....	15
Test specifications .....	16
5 Units.....	19
Structure of the units .....	19
Guidance for delivery of the units.....	23
Unit 201/601Health, safety and welfare in construction .....	24
Unit 301/701Principles of organising, planning and pricing construction work.....	31
Unit 302Repair and maintain masonry structures .....	35
Unit 303Constructing radial and battered brickwork.....	40
Unit 304Carrying out decorative and reinforced brickwork .....	45
Unit 305Constructing fireplaces and chimneys .....	49
Appendix 1Sources of general information.....	53

# 1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	This qualification is for those individuals who work or want to work as a Bricklayer in the construction sector.
What does the qualification cover?	This qualification allows candidates to learn, develop and practise the skills required for employment and/or career progression in Bricklaying. It covers the following skills: <ul style="list-style-type: none"><li>• Interpreting working drawings to set out masonry structures</li><li>• Producing thin joint masonry and masonry cladding</li><li>• Building solid walling, isolated and attached piers</li><li>• Construct cavity walling forming masonry structures.</li></ul>
What opportunities for progression are there?	It allows candidates to progress into employment or to the following City & Guilds qualification: <ul style="list-style-type: none"><li>• Level 3 NVQ Diploma in Trowel Occupations</li></ul>
Who did we develop the qualification(s) with?	N/A
Is it part of an apprenticeship framework or initiative?	The qualification was designed as a technical certificate for the Construction Building Apprenticeship Framework.

## Structure

To achieve the City & Guilds Level 3 Diploma in Bricklaying, learners must achieve 57 credits from the mandatory units:

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	GLH
<b>Mandatory units</b>				
F/504/7029	Unit 301/701	Principles of organising, planning and pricing construction work	7	67
T/504/7027	Unit 302	Repair and maintain masonry structures	5	41
H/504/7024	Unit 303	Constructing radial and battered brickwork	16	151
K/504/7025	Unit 304	Carrying out decorative and reinforced brickwork	12	107
M/504/7026	Unit 305	Constructing fireplaces and chimneys	10	96
A/504/6719	Unit 201/601	Health, safety and welfare in construction	7	70

## Total Qualification Time (TQT)

Total Qualification Time (TQT) is the number of notional hours which represents an estimate of the total amount of time that could reasonably be expected for a learner to demonstrate the achievement of the level of attainment necessary for the award of a qualification.

TQT comprises of the following two elements:

- 1) the number of hours that an awarding organisation has assigned to a qualification for guided learning
- 2) an estimate of the number of hours a learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by – but, unlike guided learning, not under the immediate guidance or supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

Title and level	GLH	TQT
City & Guilds Level 3 Diploma in Bricklaying	532	570

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## 2 Centre requirements

### Approval

#### Full approval

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the document **Centre Approval Process: Quality Assurance Standards** for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

### Resource requirements

#### Physical resources and site agreements

Centres will have well equipped workshops with a comprehensive range of hand and portable power tools that meet current industry standards. All powered equipment should be well maintained and PAT certified. Centres will have special designated areas within their Bricklaying workshop (cubicles or project areas) allowing candidates to practise the requirements of the units and carry out the Practical Assignments.

#### Centre staffing

Staff delivering these qualifications must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the area(s) for which they are delivering training and/or have experience of providing training (this knowledge must be to the same level as the training being delivered)
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

#### Continuing professional development (CPD)

Centres are expected to support their staff in ensuring that their knowledge remains current of the occupational area and of best practice in delivery, mentoring, training, assessment and quality assurance, and that it takes account of any national or legislative developments.

### Quality assurance

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications. Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance and City & Guilds is responsible for external quality assurance. All external quality assurance processes reflect the minimum requirements for verified and moderated assessments, as detailed in the Centre Assessment Standards



Scrutiny (CASS), section H2 of Ofqual's General Conditions. For more information on both CASS and City and Guilds Quality Assurance processes visit: the [What is CASS?](#) and [Quality Assurance Standards](#) documents on the City & Guilds website.

Standards and rigorous quality assurance are maintained by the use of:

- Internal quality assurance
- City & Guilds external quality assurance.

To carry out the quality assurance role, Internal Quality Assurers must:

- have appropriate teaching and vocational knowledge and expertise
- have experience in quality management/internal quality assurance
- hold or be working towards an appropriate teaching/training/assessing qualification
- be familiar with the occupation and technical content covered within the qualification.

All staff who quality assure these qualifications must:

- have a good working knowledge and experience within the construction industry
- have a CV available demonstrating relevant experience and any qualifications held.

While the Assessor/Verifier (A/V) units/TAQA are valued as qualifications for centre staff, they are not currently a requirement for these qualifications. However, we encourage trainers and assessors to qualify to the current TAQA standard.

External quality assurance for the qualification will be provided by City & Guilds EQA process. EQAs are appointed by City & Guilds to approve centres, and to monitor the assessment and internal quality assurance carried out by centres. External quality assurance is carried out to ensure that assessment is valid and reliable, and that there is good assessment practice in centres.

The role of the EQA is to:

- provide advice and support to centre staff
- ensure the quality and consistency of assessments and marking/grading within and between centres by the use of systematic sampling
- provide feedback to centres and to City & Guilds.

## Learner entry requirements

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that candidates have the potential and opportunity to gain the qualification successfully.

Whilst there are no formal entry requirements for this qualification, learners are advised to take the Level 1 and Level 2 Diplomas to ensure they have the right skills and knowledge for Level 3. Alternatively, the learner should provide evidence of significant industry experience, at the centres discretion.

## Age restrictions

This qualification is approved for learners aged 16 or above.

## Access arrangements and reasonable adjustments

City & Guilds has considered the design of this qualification and its assessments in order to best support accessibility and inclusion for all learners. We understand however that individuals have diverse learning needs and may require reasonable adjustments to fully participate. Reasonable adjustments, such as additional time or alternative formats, may be provided to accommodate learners with disabilities and support fair access to assessment.

Access arrangements are adjustments that allow candidates with disabilities, special educational needs, and temporary injuries to access the assessment and demonstrate their skills and knowledge without changing the demands of the assessment. These arrangements must be made before assessment takes place.

Equities legislation requires City & Guilds to make reasonable adjustments where a disabled person would be at a substantial disadvantage in undertaking an assessment.

It is the responsibility of the centre to ensure at the start of a programme of learning that candidates will be able to access the requirements of the qualification.

Please refer to the Joint Council for Qualifications (JCQ) access arrangements and reasonable adjustments and access arrangements in the **Centre Document Library** on the City & Guilds website [www.cityandguilds.com](http://www.cityandguilds.com) for when and how applications need to be made to City & Guilds.

## 3 Delivering the qualification

### Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs
- support and guidance they may need when working towards their qualification(s)
- any units they have already completed or credit they have accumulated which is relevant to the qualification
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualification(s), their responsibilities as a learner and the responsibilities of the centre. This information can be recorded on a learning contract.

### Inclusion and diversity

City & Guilds is committed to improving inclusion and diversity within the way we work and how we deliver our purpose which is to help people and organisations develop the skills they need for growth.

More information and guidance to support centres in supporting inclusion and diversity through the delivery of City & Guilds qualifications can be found here:

[Inclusion and diversity | City & Guilds \(cityandguilds.com\)](https://www.cityandguilds.com)

### Sustainability

City & Guilds are committed to net zero. Our ambition is to reduce our carbon emissions by at least 50% before 2030 and develop environmentally responsible operations to achieve net zero by 2040 or sooner if we can. City & Guilds is committed to supporting qualifications that support our customers to consider sustainability and their environmental footprint.

More information and guidance to support centres in developing sustainable practices through the delivery of City & Guilds qualifications can be found here:

[Our Pathway to Net Zero | City & Guilds \(cityandguilds.com\)](https://www.cityandguilds.com)

Centres should consider their own carbon footprint when delivering this qualification and consider reasonable and practical ways of delivering this qualification with sustainability in mind. This could include:

- reviewing purchasing and procurement processes (such as buying in bulk to reduce the amount of travel time and energy, considering and investing in the use of components that can be reused, instead of the use of disposable or single use consumables)
- reusing components wherever possible
- waste procedures (ensuring that waste is minimised, recycling of components is in place wherever possible)
- minimising water use and considering options for reuse/salvage as part of plumbing activities wherever possible.

## Support materials

The following resources are available for this qualification:

Description	How to access
Assessor guidance	<a href="http://www.cityandguilds.com">www.cityandguilds.com</a>
Practical task manual	<a href="http://www.cityandguilds.com">www.cityandguilds.com</a>
SmartScreen	<a href="http://www.smartscreen.co.uk">www.smartscreen.co.uk</a>

## 4 Assessment

### Assessment of the qualification

This qualification is assessed by a combination of online multiple choice tests (201, 301) marked by City & Guilds, or City & Guilds set, or on demand externally marked multiple choice test (601, 701), and practical assignments and multiple choice tests (302, 303, 304, 305) set by City & Guilds, delivered and marked by the tutor/assessor. The multiple choice tests cover the knowledge within the related units, and the practical assignments cover the related performance outcomes. The table below provides details on the assessment methods for each unit.

Unit	Title	Assessment method	Where to obtain assessment materials
301/701	Principles of organising, planning and pricing construction work	Online multiple choice test or on demand externally marked multiple choice test  The test covers all of the knowledge in the unit.	<a href="http://www.cityandguilds.com">www.cityandguilds.com</a>
302	Repair and maintain masonry structures	Multiple choice and Assignment	<a href="http://www.cityandguilds.com">www.cityandguilds.com</a>
303	Constructing radial and battered brickwork	Multiple choice and Assignment	<a href="http://www.cityandguilds.com">www.cityandguilds.com</a>
304	Carrying out decorative and reinforced brickwork	Multiple choice and Assignment	<a href="http://www.cityandguilds.com">www.cityandguilds.com</a>
305	Constructing fireplaces and chimneys	Multiple choice and Assignment	<a href="http://www.cityandguilds.com">www.cityandguilds.com</a>
201/601	Health, safety and welfare in construction	Online multiple choice test or on demand externally marked multiple choice test  The test covers all of the knowledge in the unit.	<a href="http://www.cityandguilds.com">www.cityandguilds.com</a>



## **Assessment strategy**

City & Guilds has set the following assessments to use with this qualification:

- practical assignments
- knowledge tests.

These are available from City & Guilds.

## **Time constraints**

The following must be applied to the assessment of these qualification:

Qualification registration is valid for five years.

## **Recognition of prior learning (RPL)**

Recognition of prior learning means using a person's previous experience or qualifications which have already been achieved to contribute to a new qualification.

RPL is not allowed for this qualification.

## Test specifications

The way the knowledge is covered by each test is laid out in the tables below:

**Test 1:** Unit 301/701 Principles of organising, planning and pricing construction work

**Duration:** 60 minutes

Unit	Outcome	Number of questions	%
301/701	1 Understand different types of drawn information in construction	7	17.5
	2 Understand energy efficiency and sustainable materials for construction	8	20
	3 Understand how to estimate quantities and price work for construction	10	25
	4 Understand how to plan work activities for construction	6	15
	5 Understand how to communicate effectively in the workplace	9	22.5
	<b>Total</b>	<b>40</b>	<b>100</b>

**Test 2:** Unit 302 Repair and maintain masonry structures

**Duration:** 45 minutes

Unit	Outcome	Number of questions	%
302	1 Understand the materials used to repair masonry structures	16	53
	2 Understand methods for repairing and renewing masonry structures	14	47
	<b>Total</b>	<b>30</b>	<b>100</b>

**Test 3:** Unit 303 Constructing radial and battered brickwork

**Duration:** 40 minutes



Unit	Outcome	Number of questions	%
303	1 Understand how to set out and build arches	16	80
	3 Understand how to set out and build brickwork curved on plan	2	10
	5 Understand how to set out and build concave and convex brickwork	1	5
	7 Understand how to set out and build battered brickwork	1	5
	<b>Total</b>	<b>20</b>	<b>100</b>

**Test 4:** Unit 304 Carrying out decorative and reinforced brickwork

**Duration:** 40 minutes

Unit	Outcome	Number of questions	%
304	1 Understand how to set out and build decorative brickwork features	7	35
	3 Understand how to set out and build obtuse and acute angle quoins	6	30
	5 Understand how to set out and build reinforced brickwork	7	35
	<b>Total</b>	<b>20</b>	<b>100</b>

**Test 5:** Unit 305 Constructing fireplaces and chimneys

**Duration:** 40 minutes

Unit	Outcome	Number of questions	%
305	1 Understand how to select resources for fireplace and chimney construction	12	60
	3 Understand how to set out and build fireplaces and chimneys	8	40
<b>Total</b>		<b>20</b>	<b>100</b>

**Test 6:** Unit 201/601 Health, safety and welfare in construction

**Duration:** 60 minutes

Unit	Outcome	Number of questions	%
201/601	1 Know the health and safety regulations, roles and responsibilities	7	17.5
	2 Know accident and emergency reporting procedures and documentation	5	12.5
	3 Know how to identify hazards in the workplace	7	17.5
	4 Know about health and welfare in the workplace	3	7.5
	5 Know how to handle materials and equipment safely	2	5
	6 Know about access equipment and working at heights	3	7.5
	7 Know how to work with electrical equipment in the workplace	4	10
	8 Know how to use personal protective equipment (PPE)	5	12.5
	9 Know the cause of fire and fire emergency procedures	4	10
<b>Total</b>		<b>40</b>	<b>100</b>

## 5 Units

### Structure of the units

These units each have the following:

- City & Guilds reference number
- title
- level
- guided learning hours (GLH)
- credit value
- unit aim
- learning outcomes, which are comprised of a number of assessment criteria
- range statements

### Range explained

Range gives further scope on what areas within an assessment criterion must be covered. The range in a unit **must** be taught to learners and parts of the range will be assessed.

### Glossary of terms

The following key words and terms are used in the units.

<b>Term</b>	<b>Definition</b>
Abutment	The brickwork on either side of an arch opening which supports the haunches.
Apron	A slightly projecting panel under a window opening, or the metal or lead cover below a chimney stack
Axed Arch	An arch formed of bricks cut to appropriate wedge shape
Batter	A backward Slope
Batter-Board	A template used in setting out the batter of a wall. Often referred to as a “profile” or a “template”.
Bevel	Adjustable tool for marking various angles. Splayed or chamfered edge
Bird’s Mouth	An oblique cut in brickwork

Bullseye	A circular opening in brickwork formed with a complete ring of voussoirs, also known as a wheel arch.
Camber	A very flat upward curve
Camber-Arch	An arch with slight upward curvature.
Cant	A special shaped brick with a splayed surface joining two adjacent faces
Chimney Back	The back of the fireplace.
Chimney Breast	A projecting portion of an internal wall face which contains the fireplace and the flue.
Chimney Stack	The portion of the chimney containing the tops of the flues which passes through and projects above the roof
Chimney Throating	The portion of the flue just above the gathering over the fireplace.
Collar joint	The joint between the concentric rings of brickwork of a double ring arch.
Concave	Curved like a segment of the interior of a circle or hollow sphere;
Convex	Having a surface that is curved or rounded outward
Corbel	A support projecting from the face of a wall (usually of brick or stone.
Corbelling	Building out from the face of a wall in successive projecting courses.
Dentil Course	Arrangement of bricks with indented and or protruding bricks
Dog Leg	A special brick serving the same purpose as the squint.
Dog Tothing	Arrangement of decorative bricks where the heading face is laid at a 45 <sup>0</sup> angle to the wall leaving the arris on the face
Drip Groove	Small chase cut on the underside of the edge of a projection to throw off rain water.
Easing	The lowering of an arch centre for removal
Extrados	The outside edge of the arch.
Fender Wall	A dwarf wall to carry the hearth of a groundfloor fireplace.
Flashing	Dressed lead or zinc over a joint in construction arranged
Flat Arch	An arch having a very small camber
Flue	A pipe or tube formed for conveying smoke or air
Flue Linings	Pre-cast hollow fireclay blocks which are built in position during chimney construction to form a complete flue

Folding Wedges	Wedges placed against each other with their thinner edges facing in opposite directions.
Gathering	The reduction of the brickwork opening over the mouth of a fireplace to the required size of the fire Bringing together all the flues to the base of the stack
Gauged Arch	An arch built of purpose-made or carefully cut bricks laid with very thin joints.
Gauged Work	Built of purpose-made or carefully cut bricks with very thin joints, built to a specified number of courses.
Haunches	Brickwork on either side of an arch between the springing points and the crown.
Hearth	The slab projecting in front of the fireplace opening and jambs.
Intrados	The inside edge of the arch.
Key or Key Brick	A brick or keystone is the centre voussoir in an arch.
Lime stain	Also known as bleed or bloom. White insoluble calcareous deposits on the face of brickwork derived from Portland cement mortars that have been subject to severe weathering during the setting process
Polychromatic brickwork	Decorative brickwork featuring different colours
Thermal values	Often referred to as the U value which is an efficiency of a building and is used to calculate the heat loss, it is found by dividing the materials thickness by its conductivity or K value which in turn gives a resistance which can be used to calculate the heat loss from a building.
Rise	The vertical height of the arch from the springing line
Rise of an Arch	The vertical height between the springing line and the intrados of an arch.
Rough Arch	An arch formed with bricks not cut to shape
Rubbers	Soft bricks specially made for cutting or rubbing to any shape required.
Shoring	Operation of temporarily supporting the wall of an excavation or a structure.
Shuttering	Temporary framework erected to receive wet cement, the framework remaining until the concrete is set.
Skewback	The inclined surface of brickwork from which a segmental arch springs.
Soffit	The under surface of the arch

Span	The horizontal width of the opening that the arch will span.
Springer	The first voussoir of the arch.
Springing line	The horizontal line from which the arch springs
Squint	A special brick for the construction of non-right angled quoins
Striking Point	Point from which the arc on an arch radiates, it is also used to form the angle of skew back and to mark out voussoirs
Trammel	A lath or batten used to mark out a circular curve by being pivoted at one end.
Travel in a Flue	The horizontal distance which a flue is moved from one position to another.
Turning Piece	A centre cut from one piece of timber.
Voussoirs	Are bricks that are tapered or shaped units that form the arch.
Thermal values	Often referred to as the U value which is an efficiency of a building and is used to calculate the heat loss, it is found by dividing the materials thickness by its conductivity or K value which in turn gives a resistance which can be used to calculate the heat loss from a building.

## Guidance for delivery of the units

These qualification(s) comprise a number of **units**. A unit describes what is expected of a competent person in particular aspects of their job.

Each **unit** is divided into **learning outcomes** which describe in further detail the skills and knowledge that a candidate should possess.

Each **learning outcome** has a set of **assessment criteria** (performance and knowledge and understanding) which specify the desired criteria that must be satisfied before an individual can be said to have performed to the agreed standard.

**Range** statements define the breadth or scope of a learning outcome and its assessment criteria by setting out the various circumstances in which they are to be applied.

**Supporting information** provides guidance of the evidence requirement for the unit and specific guidance on delivery and range statements. Centres are advised to review this information carefully before delivering the unit.

## Unit 201/601 Health, safety and welfare in construction

<b>UAN:</b>	<b>A/504/6719</b>
<b>Level:</b>	2
<b>Credit value:</b>	7
<b>GLH:</b>	70
<b>Endorsement by a sector or regulatory body:</b>	This unit is endorsed by Construction Skills (now known as Construction Industry Training Board), the Sector Skills Council for the construction industry.
<b>Aim:</b>	The aim of this unit is to provide the learner with the knowledge to carry out safe working practices in construction, in relation to sourcing relevant safety information and using the relevant safety procedures at work

### Learning outcome

The learner will:

1. know the health and safety regulations, roles and responsibilities

### Assessment criteria

The learner can:

1.1 identify **health and safety legislation** relevant to and used in the construction environment

1.2 state **employer and employee responsibilities** under the Health and Safety at Work Act (HASWA)

1.3 state **roles and responsibilities** of the Health and Safety Executive (HSE)

1.4 Identify **organisations** providing relevant health and safety information

1.5 state the importance of holding on-site safety inductions and toolbox talks.

### Range

#### Health and safety legislation

Health and Safety at Work Act, Reporting Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), Control of Substances Hazardous to Health (COSHH), Construction, Design and Management (CDM) regulations, Provision and Use of Work Equipment Regulations (PUWER), manual handling operations Regulations, Personal Protective Equipment (PPE) at Work Regulations, Work at Height Regulations, Control of



Noise at Work Regulations, Control of Vibration at Work Regulations , Electricity at Work Regulations, Lifting operations and Lifting Equipment Regulations (LOLER)

### **Employer responsibilities**

Safe working environment, adequate staff training, health and safety information, site inductions, toolbox talks, risk assessment, supervision, PPE, reporting hazards, accidents and near misses, sections 2 to 9 of Health and Safety at Work Act, CDM reg's, construction phase plans, welfare, display public liability Insurance and health and safety law poster.

### **Employee responsibilities**

Working safely, working in partnership with the employer, reporting hazards, accidents and near misses, following organisational procedures per Sections 2 to 9 of Health and Safety at Work Act.

### **Roles and responsibilities:**

Enforcement (including fees for intervention), legislation and advice, inspection, investigation eg site investigations.

### **Organisations**

Health and Safety Executive (HSE) website, Institute of Occupational Safety and Health, British Safety Council, 'manufacturer', ROSPA.

### **Learning outcome**

The learner will:

2 know accident and emergency reporting procedures and documentation

### **Assessment criteria**

The learner can:

- 2.1 state legislation used for reporting accidents
- 2.2 state major **types of emergencies** that could occur in the workplace
- 2.3 identify reportable injuries, diseases and dangerous occurrences as per RIDDOR
- 2.4 state main types of **records** used in the event of an accident, emergency and near miss and reasons for reporting them
- 2.5 identify **authorised personnel** involved in dealing with accident and emergency situations
- 2.6 state **actions** to take when discovering an accident.

### **Range**

#### **Types of emergencies**

Fires, security incidents, gas leaks.

**Records**

Accident book, first aid records, organisational records and documentation.

**Authorised personnel**

First aiders, supervisors/managers, health and safety executive, emergency services, safety officer.

**Actions**

Area made safe, call for help, emergency services.

**Learning outcome**

The learner will:

3 know how to identify hazards in the workplace

**Assessment criteria**

The learner can:

3.1 state the importance of **good housekeeping**

3.2 state reasons for risk assessments and method statements

3.3 identify **types of hazards** in the workplace

3.4 state the importance of the correct storage of combustibles and chemicals on site

3.5 identify different **signs and safety notices** used in the workplace.

**Range****Good housekeeping:**

Cleanliness, tidiness, use of skips and chutes, segregation of materials, clear access to fire escapes, clear access to fire extinguishers.

**Types of hazards:**

Fires, slips, trips and falls, hazardous substances (relating to inhalation, absorption, exposure, ingestion, cross-contamination), electrical, asbestos, manual handling, plant and vehicle movement, adverse weather.

**Signs and safety notices:**

Prohibition, mandatory, warning, safe condition, supplementary.

**Learning outcome**

The learner will:

4 know about health and welfare in the workplace

**Assessment criteria**

The learner can:

- 4.1 identify requirements for welfare facilities in the workplace as per Construction Design Management (CDM)
- 4.2 state health effects of noise and **precautions** that can be taken
- 4.3 state **risks** associated with drugs, alcohol and medication which could affect performance in the workplace.

### Range

#### Precautions

Reducing noise at source, PPE, isolation, exposure time.

#### Risks

Reduced risk perception, loss of concentration, balance problems, absenteeism and reduced productivity.

### Learning outcome

The learner will:

- 5 know how to handle materials and equipment safely

#### Assessment criteria

The learner can:

- 5.1 identify legislation relating to safe handling of materials and equipment
- 5.2 state procedures for safe lifting and manual handling activities in accordance with guidance and legislation
- 5.3 state the importance of using **lifting aids** when handling materials and equipment.

### Range

#### Lifting aids

Wheelbarrow, sack barrow, mechanical lifting aids, pallet truck.

### Learning outcome

The learner will:

- 6 know about access equipment and working at heights

**Assessment criteria**

The learner can:

- 6.1 identify legislation relating to working at heights
- 6.2 identify types of **access equipment**
- 6.3 state **safe methods** of use for **access equipment**
- 6.4 identify **dangers** of working at height.

**Range****Access equipment:**

Stepladders, ladders (pole, extension), trestles, hop-ups, proprietary scaffolding, podium, stilts

**Safe methods**

Regular inspection, check for broken, damaged or missing components, responsible use, consideration of adverse weather conditions, good housekeeping

**Dangers**

Falling tools, falling equipment, falling materials, persons falling from height (injuries to themselves and others).

**Learning outcome**

The learner will:

- 7 know how to work with electrical equipment in the workplace

**Assessment criteria**

The learner can:

- 7.1 state **precautions** to take to avoid risks to self and others when working with electrical equipment
- 7.2 state **dangers** of using electrical equipment
- 7.3 identify **voltages** and voltage colour coding that are used in the workplace
- 7.4 state **methods** of storing electrical equipment.

**Range****Precautions**

Check leads, check plugs, use of cable hangers, check tools and equipment, current valid PAT certificate

**Dangers:**

Burns, electrocution, fire.

**Voltages**

Battery powered, 110/115 volts, 230/240 volts and 415 volts.

**Methods**

Components present, equipment cleaned, checked for damage, stored in a clean and secure location.

**Learning outcome**

The learner will:

8 know how to use Personal Protective Equipment (PPE)

**Assessment criteria**

The learner can:

8.1 state the legislation governing use of Personal Protective Equipment (PPE)

8.2 state **types of PPE** used in the workplace

8.3 state the importance of PPE

8.4 state why it is important to store, maintain and use PPE correctly

8.5 state the importance of checking and reporting damaged PPE.

**Range**

**PPE:**

Head protection, eye protection, ear protection, face/dust masks, breathing apparatus, high visibility clothing, safety footwear, gloves, sun protection, barrier cream, water proofs, knee pads, overalls/disposable clothing

**Learning outcome**

The learner will:

9 know the cause of fire and fire emergency procedures

**Assessment criteria**

The learner can:

9.1 state **elements** essential to creating a fire

- 9.2 identify methods of fire prevention
- 9.3 state actions to be taken on discovering a fire
- 9.4 state **types of fire extinguishers** and their uses.

**Range**

**Elements**

Oxygen, fuel, heat.

**Types of fire extinguishers:**

Water, foam, CO2, dry powder.

## Unit 301/701 Principles of organising, planning and pricing construction work

<b>UAN:</b>	<b>F/504/7029</b>
<b>Level:</b>	3
<b>Credit value:</b>	7
<b>GLH:</b>	67
<b>Endorsement by a sector or regulatory body:</b>	This unit is endorsed by Construction Skills (now known as Construction Industry Training Board)
<b>Aim:</b>	<p>The aim of this unit is to provide the learner with the knowledge of building methods and construction technology in relation to:</p> <ul style="list-style-type: none"> <li>• understanding a range of building materials used within the construction industry and their suitability to the construction of modern buildings.</li> <li>• organise the building process and communicate the design to work colleagues and others.</li> </ul>

### Learning outcome

The learner will:

10. understand different types of drawn information in construction

### Assessment criteria

The learner can:

10.1 compare advantages and disadvantages of computer-aided design (CAD) programs to traditional drawing methods

10.2 explain **information** required to produce orthographic projection drawings

10.3 explain the process and purpose of producing a schedule from a drawing

10.4 explain the **benefits** of isometric projection drawings

10.5 explain **information** required to produce isometric projection drawings.

### Range

#### Information (AC1.2)

Room dimensions, heights, width, sizes, heights and positions of walls, doors and window specifications, building regulations

#### Benefits

Pictorial view of an object, assembly or design.

Helps the client, customer, supplier or non-technical person understand how the finished product will look or what is required.

### **Information (AC1.5)**

Isometric axis, positioning and required view of the object, lines or surfaces relative to isometric axis. Object dimensions and scale.

### **Learning outcome**

The learner will:

11. understand energy efficiency and sustainable materials for construction

### **Assessment criteria**

The learner can:

11.1 evaluate the uses of thermally insulated **materials**

11.2 describe **construction methods** used to insulate against heat loss and gain

11.3 compare thermal values of **wall construction**

11.4 explain the purpose of an Energy Performance Certificate (EPC)

11.5 describe **sustainable materials** and their use in construction.

### **Range**

#### **Materials**

Polyisocyanurate (PIR), expanded polystyrene (EP) fibre glass, sheep wool, mineral wool, double glazed units, multi-foil insulation.

#### **construction methods**

location of insulation, selection of materials, compliance with Building Regulations

#### **Wall construction**

Cavity, solid and timber frame

#### **Sustainable materials**

Locally sourced, managed timber (FSC), recycled materials.

### **Learning outcome**

The learner will:

12. understand how to estimate quantities and price work for construction



**Assessment criteria**

The learner can:

- 12.1 describe how to estimate quantities of construction materials
- 12.2 describe **information required** to prepare a materials list using a schedule
- 12.3 explain the purpose of preferred suppliers lists when ordering materials
- 12.4 explain the purpose of the Bill of quantities
- 12.5 explain the purpose of the tendering process
- 12.6 explain the difference between quoting and estimating
- 12.7 calculate waste percentages for a construction task
- 12.8 describe the **information required** to prepare a quote.

**Range****information required (AC3.2)**

Quantity, quality, colour, dimensions, location, installation details

**Information required (AC3.8)**

Labour  
Operational costs  
VAT  
Material cost

**Learning outcome**

The learner will:

- 13. understand how to plan work activities for construction

**Assessment criteria**

The learner can:

- 13.1 outline the benefits of **planning** the sequence of material and labour requirements
- 13.2 outline advantages and disadvantages of purchasing or hiring plant and equipment
- 13.3 identify **planning methods**
- 13.4 identify information required to produce a GANTT chart for a building project.

**Range****Planning**

Programmes of work, stock systems, critical path analysis, lead times, schedules, Gantt chart.

**Planning methods**

GANTT chart, critical path analysis.

**Learning outcome**

The learner will:

14. understand how to communicate effectively in the workplace

**Assessment criteria**

The learner can:

14.1 explain the purpose of **site documentation**

14.2 identify information to create an agenda for a meeting

14.3 explain information required to prepare a toolbox talk and site induction

14.4 explain the purpose of a site survey and the information required to prepare a **defects** list

14.5 describe information required to prepare written communications to resolve **problems**.

**Range****Site documentation**

Organisation chart, method statement, risk assessment, manufacturers' technical information, delivery notes, variation orders, permits to work, diaries, minutes, memos.

**Defects**

Poor standard of work, poor quality of materials, damaged materials, human error

**Problems:**

Delivery, materials, quality, human resources.

## Unit 302

## Repair and maintain masonry structures

<b>UAN:</b>	<b>T/504/7027</b>
<b>Level:</b>	3
<b>Credit value:</b>	5
<b>GLH:</b>	41
<b>Endorsement by a sector or regulatory body:</b>	Endorsed by Construction Skills (now known as Construction Industry Training Board).
<b>Aim:</b>	The aim of this unit is to provide the learner with the knowledge and skills to enable them to carry out repairs and to maintain masonry structures.

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### Learning outcome

The learner will:

1. understand the materials used to repair masonry structures.

### Assessment criteria

The learner can:

- 1.1 describe the application of common **materials** used in **masonry maintenance**
- 1.2 analyse typical **defects** associated with **materials** used in masonry structures
- 1.3 investigate how **hazards** associated with using materials and equipment can be minimised
- 1.4 explain the importance of the **relationships** between building materials
- 1.5 **calculate** materials required for masonry repairs.

### Range

#### Materials (AC1.1)

Bricks, mortar, blocks, stone, concrete, timber, copings, pier caps, specials, flashings, DPC and trays, insulation, cavity ties, render, lintels.

#### Masonry maintenance

Repair, replace, rebuild.

#### Defects

Bulging, spalling, cracking, subsidence, mortar failure, damp, staining, stone erosion, metal corrosion, sulphate attack, permanent/heavy efflorescence.

### **Materials (AC1.2)**

Bricks, mortar, blocks, stone, concrete, copings, pier caps, specials, flashings, DPC and trays, insulation, cavity ties, render, lintels.

### **Hazards**

Harmful substances, falling objects, manual handling, adverse weather, inhalation of particulates, services (electric, gas, water), fires, slips, trips and falls, plant and vehicle movement.

**Relationships** affected by:

Movement (expansion & shrinkage), strength, appearance, size (imperial/metric/modular), air-tightness, thermal values, sound transfer.

### **Calculate**

Linear measurements, areas (squares, triangles, circles), volumes, ratios of mortar/concrete, quantities.

## **Learning outcome**

The learner will:

- 2 understand methods for repairing and renewing masonry structures.

## **Assessment criteria**

The learner can:

- 2.1 identify safety checks for **access equipment**
- 2.2 explain methods of providing temporary **supports and bracings** while carrying out **maintenance and repairs**
- 2.3 describe **ways of removing** existing materials and components from masonry structures
- 2.4 describe **hand** and **power tools** required for repair to masonry structures
- 2.5 describe **preparation** and **mixing techniques** used when laying and fixing replacement materials and components
- 2.6 explain methods of fixing and securing doors and windows
- 2.7 investigate the **techniques** used to replace existing wall ties
- 2.8 explain reasons and **methods** of protecting completed work.

## **Range**

### **Access equipment**

Ladders, stepladders, extension ladders, trestles, independent scaffolding, cradle/stack scaffold, towers, hop ups, roof ladders, mobile elevated working platform (MEWP).

### **Supports and bracings**

Dead shores:

- needles/pins
- adjustable steel props.

### **Maintenance and repairs to:**

- Substructure, superstructure.

### **Ways of removing**

Hand, chute, machine.

### **Hand tools**

Brick trowel, pointing trowel, lump hammer and bolster chisel, scutch hammer, line and pins, corner blocks, spirit level, boat/pocket level, hawk, tape measure, builder's square, tingle plate, brick hammer, jointing iron, gauge lath/rod, profiles, storey rod.

### **Power tools**

Disc cutter, mechanical bench saw, drill, cartridge gun, tile cutter, grinder, pneumatic breaker.

### **Preparation**

Access, protection, material selection, cutting out.

### **Mixing techniques**

Mortars, concrete, adhesives, grouts, resins.

### **Techniques**

Removal and replacement of masonry, use of proprietary systems.

### **Methods**

Protective coverings:

- plastic
- hessian
- timber
- insulation

signs and notices, site protection barriers, site security.

**Learning outcome**

The learner will:

- 3 be able to remove and renew masonry materials.

**Assessment criteria**

The learner can:

- 3.1 identify defective and damaged masonry materials
- 3.2 prepare **tools, equipment** and materials for removal and replacing defective masonry materials
- 3.3 remove and replace defective masonry**
- 3.4 follow current environmental and relevant health and safety legislation.**

<b>Range</b>
<p><b>Tools</b></p> <p>Hand tools, portable power tools, materials, tool requisition sheet.</p> <p><b>Equipment</b></p> <p>Access equipment, PPE, mixers, masonry saws.</p> <p><b>Defective masonry</b></p> <p>Cut out joints and remove defective and damaged masonry, lay bricks and blocks to align bond with existing walling including cutting brick/blockwork to a required length, point new brickwork and blockwork to match existing walling.</p> <p><b>Environmental and relevant health and safety legislation</b></p> <p>Use and maintenance of PPE, risk assessment and method statements, COSHH guidance sheet, disposal of materials.</p>

**Learning outcome**

The learner will:

- 4 be able to maintain a safe working environment.

**Assessment criteria**

The learner can:

- 4.1 maintain a clean, **safe and tidy work area** and protect the surrounding area immediately adjacent to the work
- 4.2 clean, check and store **tools, equipment** and materials after use
- 4.3 **dispose** waste materials safely
- 4.4 follow current environmental and relevant health and safety legislation

Range

**Safe and tidy work area**

Consider public, workforce, visitors, site storage, transporting of material

**Tools and equipment**

Mixer, wheelbarrow, bucket, hand tools, power tools

**Dipose**

Recycling, segregation of waste, conform to legislation.

## Unit 303

## Constructing radial and battered brickwork

<b>UAN:</b>	<b>H/504/7024</b>
<b>Level:</b>	3
<b>Credit value:</b>	16
<b>GLH:</b>	151
<b>Endorsement by a sector or regulatory body:</b>	Endorsed by Construction Skills (now known as Construction Industry Training Board).
<b>Aim:</b>	The aim of this unit is to provide the learner with the knowledge and skills to enable them to set out and build arches, brickwork curved on plan and concave and convex brickwork.

### Learning outcome

The learner will:

1. Understand how to set out and build arches.

### Assessment criteria

The learner can:

- 1.1 describe different types of **arch terminology**
- 1.2 identify **components** required to set out arch construction
- 1.3 describe **methods** used to provide temporary support for arches
- 1.4 explain the correct procedures for **arch construction**.

### Range

#### Arch terminology

Soffit, rough ring, axed arch, gauged brickwork, arch centre, turning piece, folding wedges, easing and striking, temporary support, skewbacks, radius, striking point, springing line, bisecting line, springing point, voussoir, key brick, intrados, extrados, abutments, rise, dividers, haunches, span.

#### Components

Templates, arch centre, turning piece, props and bracing, folding wedges, proprietary arch formers, proprietary arch lintel.



**Methods**

Arch centres, props, folding wedges.

**Arch construction**

Semi-circular, segmental, gothic, tudor, bullseye, 3 centred arch.

**Learning outcome**

The learner will:

2. be able to set out and build arches and surrounding brickwork.

**Assessment criteria**

The learner can:

- 2.1** interpret drawings to establish the location, **shape and size of arches to be erected**
- 2.2 produce work method statements to build arches
- 2.3 produce risk assessments for building arches
- 2.4 produce templates for building axed arches
- 2.5 provide temporary support for arches
- 2.6 cut voussoirs
- 2.7 build axed arches and surrounding brickwork
- 2.8 remove temporary support and make good.
- 2.9 follow current environmental and relevant health and safety legislation.

**Range****Shape and size of arches to be erected**

Semi-circular and segmental arch construction.

Learning outcome

The learner will:

3. understand how to set out and build brickwork curved on plan.

**Assessment criteria**

The learner can:

3.1 describe **construction methods** used to build **brickwork curved on plan**.

<b>Range</b>
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<b>Construction methods</b>
-----------------------------

Calculations for curved brickwork (circumference, radius, diameter, templates/trammels), plumbing and levelling brickwork.
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<b>Brickwork curved on plan</b>
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Serpentine walling, radial brickwork.
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**Learning outcome**

The learner will:

4. be able to set out and build brickwork curved on plan.

**Assessment criteria**

The learner can:

4.1 interpret drawings to establish the location, and shape of brickwork curved on plan

4.2 produce work method statements to build brickwork curved on plan

4.3 produce risk assessments for building brickwork curved on plan

4.4 use templates to build brickwork curved on plan

4.5 use trammels to build brickwork curved on plan

4.6 cut components for brickwork curved on plan

4.7 build brickwork curved on plan.

4.8 follow current environmental and relevant health and safety legislation.

**Learning outcome**

The learner will:

5. understand how to set out and build concave and convex brickwork.

**Assessment criteria**

The learner can:

5.1 describe **construction methods** used to build concave and convex brickwork.

<b>Range</b>
--------------

<b>Construction methods</b>
-----------------------------

Trammel, template, specials.
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**Learning outcome**

The learner will:

6. be able to set out and build concave and convex brickwork

**Assessment criteria**

The learner can:

- 6.1 interpret drawings to establish the location, and shape of concave and convex brickwork
- 6.2 produce work method statements to build concave and convex brickwork
- 6.3 produce risk assessments for building concave and convex brickwork
- 6.4 use templates to build concave and convex brickwork
- 6.5 use trammels to build concave and convex brickwork
- 6.6 cut components for concave and convex brickwork
- 6.7 build concave and convex brickwork.
- 6.8 follow current environmental and relevant health and safety legislation.

**Learning outcome**

The learner will:

7. understand how to set out and build battered brickwork.

**Assessment criteria**

The learner can:

- 7.1 describe **construction methods** used to build battered brickwork.

<b>Range</b>
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<b>Construction methods</b>
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Template, battered profile, string line.
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## **Learning outcome**

The learner will:

8. be able to set out and build battered brickwork.

## **Assessment criteria**

The learner can:

- 8.1 interpret drawings to establish the location, and angle of battered brickwork
- 8.2 produce work method statements to build battered brickwork
- 8.3 produce risk assessments for building battered brickwork
- 8.4 use templates to build battered brickwork
- 8.5 cut components for battered brickwork
- 8.6 build battered brickwork.
- 8.7 follow current environmental and relevant health and safety legislation.

## Unit 304

## Carrying out decorative and reinforced brickwork

<b>UAN:</b>	<b>K/504/7025</b>
<b>Level:</b>	3
<b>Credit value:</b>	12
<b>GLH:</b>	107
<b>Endorsement by a sector or regulatory body:</b>	Endorsed by Construction Skills (now known as Construction Industry Training Board).
<b>Aim:</b>	The aim of this unit is to provide the learner with the knowledge and skills to enable them to set out and build decorative brickwork features, obtuse and acute angle quoins and reinforced brickwork.

### Learning outcome

The learner will:

1. understand how to set out and build decorative brickwork **features**.

### Assessment criteria

The learner can:

- 1.1 describe construction methods used to build brickwork incorporating **features**.

### Range

#### Features

Horizontal panels (basket weave and herringbone bonds), diagonal panels (basket weave and herringbone bonds), panel surrounds, over-sailing courses, dog-toothing, dentil courses, tumbling in, ramped work (circular and straight), plinth courses, cant brick, string courses.

### Learning outcome

The learner will:

2. be able to set out and build decorative brickwork features.

### Assessment criteria

The learner can:

2.0 interpret drawings to establish the location and shape to build decorative brickwork features

2.1 produce work method statements to build decorative brickwork features

2.2 produce risk assessments to build brickwork incorporating features

2.3 cut components to build brickwork incorporating features

**2.4** build brickwork incorporating features

2.5 follow current environmental and relevant health and safety legislation.

<b>Range</b>
<b>Features</b> Horizontal and diagonal panels, panel surrounds, over-sailing courses, dog-toothing, dentil courses.

### Learning outcome

The learner will:

3. understand how to set out and build obtuse and acute angle quoins.

### Assessment criteria

The learner can:

3.1 explain **processes** required to build obtuse and acute angle quoins

3.2 describe construction methods used to build **obtuse and acute angle quoins**.

<b>Range</b>
<b>Processes</b> Setting out and measuring (including geometry), bonding, templates, cutting. <b>Obtuse and acute angle quoins</b> up to one and a half brick thick walling: brick specials (dogleg, squint and cut bricks).

### Learning outcome

The learner will:

4. be able to set out and build obtuse and acute angle quoins.

### Assessment criteria

The learner can:

- 4.1 interpret drawings to establish the location of obtuse and acute angle quoins
- 4.2 produce work method statements to build obtuse and acute angle quoins
- 4.3 produce risk assessments for building obtuse and acute angle quoins
- 4.4 use templates to build obtuse and acute angle quoins
- 4.5 cut components for obtuse and acute angle quoins
- 4.6 build obtuse and acute angle quoins in walling one brick thick
- 4.7 follow current environmental and relevant health and safety legislation.

### Learning outcome

The learner will:

5. understand how to set out and build reinforced brickwork.

### Assessment criteria

The learner can:

- 5.1 describe **construction methods** used to build reinforced brickwork
- 5.2 describe **bonding arrangements** for one-and-a-half brick thick walls.

Range
<b>Construction methods</b> Vertical reinforcement, horizontal reinforcement, Quetta bond, 1.5 brick thick.
<b>Bonding arrangements</b> English bond, English garden wall, Flemish bond, Flemish garden wall, Quetta bond.

### Learning outcome

The learner will:

6. be able to set out and build reinforced brickwork.

### Assessment criteria

The learner can:

- 6.1 interpret drawings to establish the location, and shape of reinforced brickwork
- 6.2 produce work method statements to build reinforced brickwork
- 6.3 produce risk assessments for building reinforced brickwork
- 6.4 cut components for reinforced brickwork
- 6.5 build reinforced brickwork in quetta bond
- 6.6 follow current environmental and relevant health and safety legislation.



## Unit 305

## Constructing fireplaces and chimneys

<b>UAN:</b>	<b>M/504/7026</b>
<b>Level:</b>	3
<b>Credit value:</b>	10
<b>GLH:</b>	96
<b>Endorsement by a sector or regulatory body:</b>	Endorsed by Construction Skills (now known as Construction Industry Training Board).
<b>Aim:</b>	The aim of this unit is to provide the learner with the knowledge and skills to enable them to construct fireplaces and chimneys.

### Learning outcome

The learner will:

1. understand how to select resources for fireplace and chimney construction.

### Assessment criteria

The learner can:

- 1.1 identify different types of information
- 1.2 describe the **characteristics and materials** for fireplace and chimney construction
- 1.3 identify checks for different types of resources required for fireplace and chimney construction
- 1.4 identify type, size and position of **components** for fire place and chimney construction
- 1.5 describe the **hazards** associated with fireplace and chimney repair and alteration
- 1.6 describe linear measurements for flue liners.

### Range

#### Types of information

Architect drawings and specification, Building Regulations, British standard specifications, codes of practice, manufacturers' instructions,

HSE guidelines.

#### Characteristics and materials

Quality, strength, defects, durability, sustainability, fire resistance, sulphate resistance, weather resistance.

### **Components**

Throat lintel, flue liners (metal, clay, concrete, specials), chimney breast, fireback and jambs, stack, chimney pot, cowl, bricks, blocks, firebricks, mortar, hearth, DPCs, flashings, aprons, back gutter, flaunching systems, adhesives, reducers, mid-feathers and withers.

### **Hazards**

Structural collapse, inhalation of particulates, slips, trips and falls, working at height, harmful gases, manual handling.

### **Learning outcome**

The learner will:

2. be able to select resources for fireplace and chimney construction.

### **Assessment criteria**

The learner can:

- 2.1 interpret different **types of information** for fireplace and chimney construction
- 2.2 produce work method statements to establish all aspects of fireplace and chimney construction
- 2.3 produce risk assessments to identify safe systems of work
- 2.4 select methods of building fireplaces and chimneys to required specifications
- 2.5 calculate quantities of **material and components** to construct fire place and chimneys
- 2.6 check suitability of resources for building fireplaces and chimneys
- 2.7 follow current environmental and relevant health and safety legislation.

### **Range**

#### **Types of information**

Architect's specification, schedules, good practice guidelines, Building Regulations, British standard specifications, codes of practice, manufacturers' information, current legislation and official guidance, safety regulations, drawings, method statement, risk assessment.

#### **Materials and components**

Flue liners, bricks, blocks, mortar.

### **Learning outcome**

The learner will:

3. understand how to set out and build fireplaces and chimneys.

### Assessment criteria

The learner can:

- 3.1 explain the importance of setting out fireplaces and chimneys
- 3.2 identify **materials** for constructing fireplaces and chimneys
- 3.3 identify methods of cutting and preparing materials by hand
- 3.4 describe **methods** of provision within fireplace construction
- 3.5 explain the importance of the provision of damp-proof barriers
- 3.6 state methods used to provide over-sailing and capping to chimney stacks
- 3.7 describe **techniques** used to construct fireplaces and flues
- 3.8 describe **methods** and materials for finishing chimney tops.

Range
<p><b>Materials</b></p> <p>Throat lintel, flue liners (metal, clay, concrete, specials), chimney breast, fireback and jambs, stack, chimney pot, cowl, bricks, blocks, firebricks, mortar, hearth, DPCs, flashings, aprons, back gutter, flaunching systems, adhesives, reducers, mid-feathers and withers.</p> <p><b>Methods (AC3.4)</b></p> <p>Pipe ducts, back boiler, ventilation, services, liners, expansion.</p> <p><b>Techniques</b></p> <p>Traditional, modern.</p> <p><b>Methods (AC3.8)</b></p> <p>Traditional, modern.</p>

### Learning outcome

The learner will:

4. be able to set out and build fireplaces and chimneys.

### Assessment criteria

The learner can:

- 4.1 set out to construct fireplaces and chimneys

- 4.2 select materials suitable for the construction of fireplaces and chimneys
- 4.3 position bricks, blocks and materials ready for use
- 4.4 prepare and cut materials
- 4.5 build fireplaces and chimneys
- 4.6 follow current environmental and relevant health and safety legislation.

## Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the [Centre document library](http://www.cityandguilds.com) on [www.cityandguilds.com](http://www.cityandguilds.com) or click on the links below:

### **Centre Handbook: Quality Assurance Standards**

This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on:

- centre quality assurance criteria and monitoring activities
- administration and assessment systems
- centre-facing support teams at City & Guilds/ILM
- centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the centre contract.

### **Centre Assessment: Quality Assurance Standards**

This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre-assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre assessments.

### **Access arrangements: When and how applications need to be made to City & Guilds**

provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The [Centre document library](#) also contains useful information on such things as:

- conducting examinations
- registering learners
- appeals and malpractice.

### **Useful contacts**

- Please visit the [Contact us](#) section of the City & Guilds website.

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For over 140 years, we have worked with people, organisations and economies to help them identify and develop the skills they need to thrive. We understand the life-changing link between skills development, social mobility, prosperity and success. Everything we do is focused on developing and delivering high-quality training, qualifications, assessments and credentials that lead to jobs and meet the changing needs of industry.

We partner with our customers to deliver work-based learning programmes that build competency to support better prospects for people, organisations and wider society. We create flexible learning pathways that support lifelong employability because we believe that people deserve the opportunity to (re)train and (re)learn again and again – gaining new skills at every stage of life, regardless of where they start.

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