

# Level 2 NVQ Diploma in Trowel Occupations (Construction) (6570-04)

May 2020 Version 1

# **Qualification Handbook**

# Qualification at a glance

Subject area	Trowel Occupations (Construction)
City & Guilds number	6570
Age group approved	16-18, 19+
Assessment types	Portfolio of evidence
Support materials	Centre Handbook and Candidate Logbook
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds qualification number	Ofqual accreditation number
Level 2 NVQ Diploma in Trowel Occupations (Construction)	6570-04	603/5922/5

Version and date	Change detail	Section
1.0 May 2020 from 6570-02 to 6570-04	CITB incremental changes. Unit aims and ref to credits removed. Updated GLH and TQT throughout.	Structure Units
	Unit 101 (A/503/1170) updated to Unit 102	
	Unit 218 (J/503/1169) updated to Unit 219	
	Unit 232 (T/503/9476) updated to Unit 234	
	Unit 233 (A/503/9463) updated to Unit 235	
	Unit 236 (H/503/9490) updated to Unit 238	
	Unit 608 (F/503/1171) updated to Unit 609	
	Unit 700 (Y/503/9471) updated to Unit 701	
	Unit 689 (L/503/9550) updated to Unit 690	

Version and date	Change detail	Section
	Unit 8 <sub>35</sub> (Y/504/6775) updated to Unit 8 <sub>37</sub>	
	Added optional Unit 817	
	Added optional Unit 828	
	Removed optional Unit 299 (K/503/9538)	
	Removed optional Unit 672 (D/600/7695)	
	Removed optional Unit 674 (R/600/7693)	
	Removed optional Unit 834 (R/504/6774)	
	Address updated	Last page

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# 1 Introduction

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

Area	Description
Who is the qualification for?	This occupational qualification is for learners who work or want to work as bricklayers or craft masons in the construction sector.
What does the qualification cover?	It allows learners to learn, develop and practise the skills required for employment and/or career progression in bricklaying or craft masonry. The bricklaying pathway covers areas such as working on a construction site, setting out basic structures, building brick and block walling, laying domestic drainage, placing and finishing concrete and render surfaces. The craft masonry pathway covers areas such as working to given specifications, setting out and erecting masonry structures, placing and finishing concrete and render surfaces.
What opportunities for progression are there?	It allows learners to progress into employment or onto the Level 3 NVQ Diploma in Trowel Occupations.  Bricklaying and craft masonry have a wide range of opportunities that apprentices can be involved with in a structured career path, such as new builds and refurbishments. This apprenticeship will enable progression to the Advanced (Level 3) Apprenticeship in Construction Building: pathway 1- Trowel Occupations (Bricklaying).  After gaining work experience in the chosen occupational area there are also opportunities to progress into occupational work supervision, management or technical support areas.
Is it part of an apprenticeship framework or initiative?	This qualification forms the competence based element of the Intermediate Apprenticeship in Construction Building (Level 2), pathway 3: Trowel Occupations.

#### **Structure**

To achieve the **Level 2 NVQ Diploma in Trowel Occupations 6570-04**, learners must complete all the mandatory units and a minimum of 1 optional unit.

Unit accreditation number	City & Guilds unit no.	Unit title	TQT	Level
Mandatory				
T/618/1367	102	Conforming to general health, safety and welfare in the workplace	20	1
A/618/1368	219	Conforming to productive working practices in the workplace	30	2
R/618/1375	235	Erecting masonry structures in the workplace	310	2
F/618/1369	609	Moving, handling and storing resources in the workplace	50	2
Y/618/1376	701	Setting out to form masonry structures in the workplace	230	2
Optional				
H/618/1378	234	Erecting masonry cladding in the workplace	240	2
D/618/1380	238	Erecting thin joint masonry structures in the workplace	240	2
K/618/1382	690	Repairing and maintaining masonry structures in the workplace	250	3
M/618/1383	817	Placing and compacting concrete in the workplace	110	2
T/618/1384	828	Installing and forming specialist masonry elements in the workplace	210	3
A/618/1385	837	Installing drainage in the workplace	190	2

## Total qualification time and guided learning values

Total qualification time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. Guided learning, also expressed in hours, is time spent under the direct supervision of a provider of education or training (including assessment). Guided learning contributes to TQT.

TQT and GL values are estimates.

Title and level	GLH	TQT
Level 2 NVQ Diploma in Trowel Occupations 6570-04	394	670

### 2 Centre requirements

#### **Approval**

The approval process for Construction qualifications is available at our website. Please visit www.cityandguilds.com/construction for further information.

#### Resource requirements

#### Centre staffing

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

Centres may design course programmes of study in any which way:

- Best meets the needs and capabilities of their learners
- Satisfies the requirements of the qualification.

When designing and delivering the course programme, centres might wish to incorporate other teaching and learning that is not assessed as part of the qualification. This might include the following:

- literacy, language and /or numeracy
- learning and thinking
- personal and social development
- employability.

Where applicable, this could involve enabling the learner to access relevant qualifications covering these skills.

Centre staff may undertake more than one role, e.g. tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

#### **Assessors and Internal Quality Assurer**

Assessors must have sufficient, verifiable, relevant current industry experience, knowledge and understanding of the occupational working area at, or above, the level being assessed.

This must be of sufficient depth to be effective and reliable when judging learner's competence. Assessor's experience, knowledge and understanding can be verified by a combination of:

- curriculum vitae and employer endorsement
- references
- possession of a relevant NVQ/SVQ, or vocationally related qualification
- corporate membership of relevant professional institution
- interview.

(The verification process must be recorded and available for audit)

Assessors must have sufficient occupational expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are assessing. This could be verified by records of continuing professional development achievements. Assessors:

- should only assess in their acknowledged area of occupational competence
- shall be prepared to participate in training activities for their continued professional development
- must have a sound, in-depth knowledge of, and uphold the integrity of, the sector's NOS and the Assessment Strategy
- must hold, or be working towards, a qualification as listed within 'Assessing and Assuring Quality of Assessment', either in the Qualifications and Credit Framework (QCF), or the Scottish Credit and Qualifications Framework (SCQF):
  - o Level 3 Award in Assessing Competence in the Work Environment
  - o Level 3 Certificate in Assessing Vocational Achievement
  - o SVQ (SCQF level) Assessing Competence in the Work Environment
  - o SVQ (SCQF level) Assessing Vocational Achievement

#### Or hold one of the following:

- A1 Assess candidates using a range of methods
- D<sub>32</sub>/<sub>33</sub> Assess candidate performance, using differing sources of evidence

Holders of A1 and D32/33 must assess to the reviewed National Occupational Standards (NOS) for Learning and Development.

In Scotland, approval for exemptions must be obtained from the Scottish Qualifications Authority.

#### Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

#### Learner entry requirements

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

#### Age restrictions

City & Guilds cannot accept any registrations for learners under 16 as these qualifications are not approved for learners under 16.

## 3 Delivering the qualification

#### Initial assessment and induction

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

#### **Support materials**

The following resources are available for this qualification:

Description	How to access
Qualification approval form	Available to download from the City & Guilds website
Candidate logbook	Available to download from the City & Guilds website

#### **Recording documents**

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, Learning Assistant, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: www.cityandquilds.com/eportfolios.

City & Guilds has developed a set of *recording forms* including examples of completed forms, for new and existing centres to use as appropriate. Recording forms are available on the City & Guilds website.

Although new centres are expected to use these forms, centres may devise or customise alternative forms, which must be approved for use by the external verifier, before they are used by candidates and assessors at the centre. Amendable (MS Word) versions of the forms are available on the City & Guilds website.

#### 4 Assessment

#### Assessment of the qualification

Candidates must have a completed portfolio of evidence for each unit.

Centres are able to download the 6570 logbook from the City and Guilds website.

#### Aspects to be assessed through performance in the workplace

Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This includes naturally occurring documentary evidence (hard copy and electronic), direct observation of activities and witness testimony as relevant.

Individual units will specify and exceptions to this position.

Workplace evidence must be supported by the required evidence of knowledge and understanding. This evidence may be identified by:

- questioning the candidate
- recognised industry education and training programme assessment or professional interview assessment that has been matched to NOS requirements
- performance evidence.

An holistic approach towards the collection of evidence should be encouraged. The focus should be on assessing activities generated by the whole work experience rather than focusing on specific tasks. This would show how evidence requirements could be met across the qualification to make the most efficient use of evidence.

## 5 Units

## Structure of the units

These units each have the following:

- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- total qualification time (TQT)
- guided learning hours (GLH)
- learning outcomes, which are comprised of a number of assessment criteria
- notes for guidance.

# Unit 102 Conf

# Conforming to general health, safety and welfare in the workplace

UAN:	
Level:	1
TQT:	20
GLH:	17
Relationship to NOS:	This unit is linked to NOS COSVR641 Conform to general workplace health, safety and welfare.

#### Learning outcome

The learner will:

1. comply with all workplace health, safety and welfare legislation requirements.

#### Assessment criteria

- comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area
- use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements
- 1.3 comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment

- 1.4 state why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:
  - a Collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)
- 1.5 state how the health and safety control equipment relevant to the work should be used in accordance with the given instructions
- 1.6 state which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment
- 1.7 state why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area
- 1.8 state how to comply with control measures that have been identified by risk assessments and safe systems of work.

#### The learner will:

2. recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures.

#### Assessment criteria

#### The learner can:

- 2.1 report any hazards created by changing circumstances within the workplace in accordance with organisational procedures
- 2.2 list typical hazards associated with the work environment and occupational area in relation to: resources, substances, asbestos, equipment, obstructions, storage, services and work activities
- 2.3 list the current health and safety executive top ten safety risks
- 2.4 list the current health and safety executive top five health risks
- 2.5 state how changing circumstances within the workplace could cause hazards
- 2.6 state the methods used for reporting changed circumstances, hazards and incidents in the workplace.

#### Learning outcome

#### The learner will:

3. comply with organisational policies and procedures to contribute to health, safety and welfare.

#### Assessment criteria

#### The learner can:

- 3.1 interpret and comply with given instructions to maintain safe systems of work and quality working practices
- 3.2 contribute to discussions by offering/providing feedback relating to health, safety and welfare
- 3.3 contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures
- 3.4 safely store health and safety control equipment in accordance with given instructions
- 3.5 dispose of waste and/or consumable items in accordance with legislation
- 3.6 state the organisational policies and procedures for health, safety and welfare, in relation to:
  - a dealing with accidents and emergencies associated with the work and environment
  - b methods of receiving or sourcing information
  - c reporting
  - d stopping work
  - e evacuation
  - f fire risks and safe exit procedures
  - g consultation and feedback
- 3.7 state the appropriate types of fire extinguishers relevant to the work
- 3.8 state how and when the different types of fire extinguishers are used in accordance with legislation and official guidance.

#### Learning outcome

#### The learner will:

4. work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area.

#### Assessment criteria

- 4.1 demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare
- 4.2 state how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to:
  - a recognising when to stop work in the face of serious and imminent danger to self and/or others
  - b contributing to discussions and providing feedback
  - c reporting changed circumstances and incidents in the workplace
  - d complying with the environmental requirements of the workplace
- 4.3 give examples of how the behaviour and actions of individuals could affect others within the workplace.

The learner will:

5. comply with and support all organisational security arrangements and approved procedures.

#### Assessment criteria

- 5.1 provide appropriate support for security arrangements in accordance with approved procedures:
  - a during the working day
  - b on completion of the day's work
  - c for unauthorised personnel (other operatives and the general public)
  - d for theft
- 5.2 state how security arrangements are implemented in relation to:
  - a the workplace
  - b the general public
  - c site personnel
  - d resources

# Unit 102 Conforming to general health, safety and welfare in the workplace

# Supporting information

#### Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

# Unit 219 Conforming to productive working practices in the workplace

UAN:	
Level:	2
TQT:	30
GLH:	20
Relationship to NOS:	This unit is linked to NOS COSVR642 Conform to productive work practices.

#### Learning outcome

The learner will:

1. communicate with others to establish productive work practices.

#### Assessment criteria

- communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively
- 1.2 describe the different methods of communicating with:
  - a line management
  - b colleagues
  - c customers
- 1.3 describe how to use different methods of communication to ensure that the work carried out is productive.

The learner will:

2. follow organisational procedures to plan the sequence of work.

#### Assessment criteria

The learner can:

- 2.1 interpret relevant information from organisational procedures in order to plan the sequence of work
- 2.2 plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively
- 2.3 describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to:
  - a using resources for own and other's work requirements
  - b allocating appropriate work to employees
  - c organising the work sequence
  - d reducing carbon emissions
- 2.4 describe how to contribute to zero/low carbon work outcomes within the built environment.

#### Learning outcome

The learner will:

3. maintain relevant records in accordance with the organisational procedures.

#### Assessment criteria

- 3.1 complete relevant documentation according to the occupation as required by the organisation
- 3.2 describe how to complete and maintain documentation in accordance with organisational procedures, in relation to:
  - a job cards
  - b worksheets
  - c material/resource lists
  - d time sheets
- 3.3 explain the reasons for ensuring documentation is completed clearly and within given timescales.

#### The learner will:

4. maintain good working relationships when conforming to productive working practices.

#### Assessment criteria

- 4.1 carry out work productively, to the agreed specification, in conjunction with line management, colleagues, customers and/or other relevant people involved in the work to maintain good working relationships
- 4.2 apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others
- 4.3 describe how to maintain good working relationships, in relation to:
  - a individuals
  - b customer and operative
  - c operative and line management
  - d own and other occupations
- 4.4 describe why it is important to work effectively with:
  - a line management
  - b colleagues
  - c customers
- 4.5 describe how working relationships could have an effect on productive working
- 4.6 describe how to apply principles of equality and diversity when communicating and working with others.

# Unit 219 Conforming to productive working practices in the workplace

# Supporting information

#### Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

# Unit 234 Erecting masonry cladding in the workplace

UAN:	
Level:	2
TQT:	240
GLH:	120
Relationship to NOS:	This unit is linked to the NOS COSVR42 Erect masonry cladding

#### Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when erecting masonry cladding.

#### Assessment criteria

- 1.1 interpret and extract relevant information from:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented

- 1.4 describe different types of information, their source and how they are interpreted in relation to:
  - a drawings
  - b specifications
  - c current legislation
  - d schedules
  - e method statements
  - f risk assessments
  - q manufacturers' information
  - h oral and written instructions
  - i sketches
  - j electronic data
  - k official guidance and current regulations associated with erecting masonry cladding

#### The learner will:

2. know how to comply with relevant legislation and official guidance when erecting masonry cladding.

#### Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:
  - a in the workplace
  - b below ground level
  - c in confined spaces
  - d at height
  - e with tools and equipment
  - f with materials and substances
  - q with movement/storage of materials
  - h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
  - e vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

3. maintain safe and healthy working practices when erecting masonry cladding.

#### Assessment criteria

The learner can:

- 3.1 use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when erecting masonry cladding
- 3.2 demonstrate compliance with given information and relevant legislation when erecting masonry cladding in relation to the following:
  - a safe use of access equipment
  - b safe use, storage and handling of materials, tools and equipment
  - c specific risks to health
- explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to erecting masonry cladding, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
  - a collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries
  - d other task-related activities.

#### Learning outcome

The learner will:

4. select the required quantity and quality of resources for the methods of work to erect masonry cladding.

#### Assessment criteria

- 4.1 select resources associated with own work in relation to:
  - a materials

- b components
- c fixings
- d tools and equipment
- describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
  - a bricks
  - b blocks
  - c mortars
  - d frames
  - e insulation
  - f damp-proof barriers
  - g brick slips
  - h cloak systems
  - i cavity closers
  - j fire breaks
  - k lintels
  - I fixings
  - m ties
  - n hand and power tools and equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification
- describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- describe how to calculate quantity, length, area and wastage of materials associated with the 4.7 method and procedure to erect masonry cladding.

The learner will:

5. minimise the risk of damage to the work and surrounding area when erecting masonry cladding.

#### Assessment criteria

The learner can:

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- protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- explain why the disposal of waste should be carried out safely in accordance with: 5.5

- a environmental responsibilities
- b organisational procedures
- c manufacturers' information
- d statutory regulations
- e official guidance.

The learner will:

6. complete the work within the allocated time when erecting masonry cladding.

#### Assessment criteria

The learner will:

- 6.1 demonstrate completion of the work within the estimated allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a types of productivity targets and time scales
  - b how times are estimated
  - c organisational procedures for reporting circumstances which will affect the work programme.

#### Learning outcome

The learner will:

7. comply with the given contract information to erect masonry cladding to the required specification.

#### Assessment criteria

- 7.1 demonstrate the following work skills when erecting masonry cladding:
  - a measuring
  - b marking out
  - c laying
  - d positioning
  - e levelling
  - f plumb
  - g fitting
  - h fixing
  - i securing
- 7.2 use and maintain hand and power tools and equipment
- 7.3 erect brick and block and/or local material cladding to given working instructions, including the formation of openings and joint finishes, for at least one of the following structures:

- a pre-erected timber frame
- b pre-erected concrete
- c pre-erected steel
- d existing masonry structure
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
  - a erect brick, block and thin joint blocks cladding to pre-erected timber frame, concrete, steel and existing structures
  - b clad structures using local materials
  - c install brick slips
  - d position and secure wall ties including spaces, particularly around openings and movement joints
  - e form and maintain the integrity of cavities
  - f install and maintain the integrity of fire barriers and breaks
  - q form joint finishes
  - h form openings
  - i position, level, plumb, fix and integrate brick soffit systems
  - j install masonry support angles
  - k prop and support structures
  - I remove temporary structures
  - m position, fix and bed damp-proof barriers, cloak systems and cavity trays
  - n form and install weep holes and vents
  - o position, bond and tape installation materials
  - p install wind posts
  - q mix mortar
  - r recognise and determine when specialist skills and knowledge are required and report accordingly
  - s identify and follow the installation quality requirements
  - t work with, around and in close proximity to plant and machinery
  - u use hand and power tools, and equipment
  - v work at height
  - w use access equipment
- 7.5 describe the needs of other occupations and how to communicate effectively within a team when erecting masonry cladding
- 7.6 describe how to maintain the tools and equipment used when erecting masonry cladding.

# Unit 234 Erecting masonry cladding in the workplace

# Supporting information

#### Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

# Unit 235 Erecting masonry structures in the workplace

UAN:	
Level:	2
TQT:	310
GLH:	160
Relationship to NOS:	This unit is linked to the NOS COSVR40 Erect masonry structures

#### Learning outcome

#### The learner will:

1. interpret the given information relating to the work and resources when erecting masonry structures.

#### Assessment criteria

- 1.1 interpret and extract relevant information from:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- describe different types of information, their source and how they are interpreted in relation to:
  - a drawings
  - b specifications
  - c current legislation
  - d schedules
  - e method statements
  - f risk assessments
  - g manufacturers' information
  - h oral and written instructions
  - i sketches

- j electronic data
- k official guidance
- l current regulations governing buildings associated with erecting structures.

The learner will:

2. know how to comply with relevant legislation and official guidance when erecting masonry structures.

#### Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:
  - a in the workplace
  - b below ground level
  - c in confined spaces
  - d at height
  - e with tools and equipment
  - f with materials and substances
  - g with movement/storage of materials
  - h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
  - e vehicles.
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

#### Learning outcome

The learner will:

3. maintain safe and healthy working practices when erecting masonry structures.

#### Assessment criteria

The learner can:

3.1 use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when erecting masonry structures

- 3.2 demonstrate compliance with given information and relevant legislation when erecting masonry structures in relation to the following:
  - a safe use of access equipment
  - b safe use, storage and handling of materials, tools and equipment
  - c specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to erecting masonry structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
  - a collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries
  - d other task-related activities

The learner will:

4. select the required quantity and quality of resources for the methods of work to erect masonry structures.

#### Assessment criteria

- 4.1 select resources associated with own work in relation to:
  - a materials
  - b components
  - c fixings
  - d tools and equipment
- describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
  - a bricks
  - b blocks
  - c mortars
  - d frames
  - e insulation
  - f damp-proof barriers
  - q cloak systems
  - h cills

- i copings and cappings
- j lintels
- k fixings
- I ties
- m hand and power tools and equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification
- describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate quantity, length, area and wastage of materials associated with the method and procedure to erect masonry structures.

The learner will:

5. minimise the risk of damage to the work and surrounding area when erecting masonry structures.

#### Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
  - a environmental responsibilities
  - b organisational procedures
  - c manufacturers' information
  - d statutory regulations
  - e official guidance.

#### Learning outcome

The learner will:

6. complete the work within the allocated time when erecting masonry structures.

#### Assessment criteria

#### The learner can:

- 6.1 demonstrate completion of the work within the estimated allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a types of productivity targets and time scales
  - b how times are estimated
  - c organisational procedures for reporting circumstances which will affect the work programme

#### Learning outcome

#### The learner will:

7. comply with the given contract information to erect masonry structures to the required specification.

#### Assessment criteria

- 7.1 demonstrate the following work skills when erecting masonry structures:
  - a measuring
  - b marking out
  - c laying
  - d positioning
  - e plumb
  - f levelling
  - g securing
- 7.2 use and maintain hand and power tools, and equipment
- 7.3 erect masonry in brick and block and/or local materials to given working instructions for the following:
  - a cavity wall structures
  - b blockwork structures
  - c solid wall structures
  - d form openings
  - e joint finishes
  - f cills
  - g capping and copings
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
  - a erect cavity walling and solid walling using brick and block and local materials
  - b erect walling of the local style
  - c lay blocks (traditional and thin joint)
  - d determine brick and block bonds
  - e form and maintain the integrity of cavities

- f install lintels
- g install movement joints
- h install wind posts
- i cut bricks, blocks and local materials
- j form joint finishes, including mechanical pointing systems
- k form openings
- I position, level, plumb, fix and integrate brick soffit systems
- m position and fix cills, copings and capping's
- n install masonry support angles
- o prop and support structures
- p complete and remove temporary works
- q position, bond and tape insulation materials
- r position, fix and bed damp-proof barriers, cloak systems and cavity trays
- s form and install weep holes and vents
- t install and maintain the integrity of fire barriers and breaks
- position and secure wall ties, including spacing, particularly around openings and movement joints
- v mix mortar
- w recognise and determine when specialist skills and knowledge are required and report accordingly
- x identify and follow the installation quality requirements
- y work with, around and in close proximity to plant and machinery
- z use hand and power tools, and equipment
- aa work at height
- bb use access equipment
- 7.5 describe the needs of other occupations and how to communicate effectively within a team when erecting masonry structures
- 7.6 describe how to maintain the tools and equipment used when erecting masonry structures.

# Unit 235 Erecting masonry structures in the workplace

# Supporting information

#### **Assessment guidance**

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

# Unit 238 Erecting thin joint masonry structures in the workplace

UAN:	2
Level:	2
TQT:	240
GLH:	127
Relationship to NOS:	This unit is linked to the NOS COSVR44 Erect thin joint masonry structures

## Learning outcome

#### The learner will:

1. interpret the given information relating to the work and resources when erecting thin joint masonry structures.

### Assessment criteria

- 1.1 interpret and extract relevant information from:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
  - a drawings
  - b specifications
  - c current legislation
  - d schedules
  - e method statements
  - f risk assessments
  - g manufactures' information

- h oral and written instructions
- i sketches
- j electronic data
- k official guidance
- I current regulations associated with erecting thin joint masonry structures

The learner will:

2. know how to comply with relevant legislation and official guidance when erecting thin joint masonry structures.

#### Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:
  - a in the workplace
  - b below ground level
  - c in confined spaces
  - d at height
  - e with tools and equipment
  - f with materials and substances
  - g with movement and storage of materials
  - h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
  - e vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

## Learning outcome

The learner will:

3. maintain safe and healthy working practices when erecting thin joint masonry structures.

#### Assessment criteria

The learner can:

3.1 use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when erecting thin joint masonry structures

- demonstrate compliance with given information and relevant legislation when erecting thin joint masonry structures in relation to the following:
  - a safe use of access equipment
  - b safe use, storage and handling of materials, tools and equipment
  - c specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to erecting thin joint masonry structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
  - a collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries
  - d other task-related activities

The learner will:

4. select the required quantity and quality of resources for the methods of work to erect thin joint masonry structures.

#### Assessment criteria

- 4.1 select resources associated with own work in relation to:
  - a materials
  - b components
  - c fixings
  - d tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
  - a blocks
  - b joining compounds
  - c frames
  - d insulation
  - e damp-proof barriers
  - f cloak systems
  - g lintels

- h fixings
- i ties
- j hand and power tools and equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate quantity, length, area and wastage of materials associated with the method and procedure to erect thin joint masonry structures.

The learner will:

5. minimise the risk of damage to the work and surrounding area when erecting thin joint masonry structures.

#### Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
  - a environmental responsibilities
  - b organisational procedures
  - c manufacturers' information
  - d statutory regulations
  - e official guidance.

## Learning outcome

The learner will:

6. complete the work within the allocated time when erecting thin joint masonry structures.

#### Assessment criteria

#### The learner can:

- 6.1 demonstrate completion of the work within the estimated allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a types of productivity targets and time scales
  - b how times are estimated
  - c organisational procedures for reporting circumstances which will affect the work programme.

## Learning outcome

#### The learner will:

7. comply with the given contract information to erect thin joint masonry structures to the required specification.

#### Assessment criteria

- 7.1 demonstrate the following work skills when erecting thin joint masonry structures:
  - a measuring
  - b marking out
  - c cutting
  - d preparing
  - e laying
  - f positioning
  - g securing
- 7.2 use and maintain hand and power tools, and equipment
- 7.3 erect thin joint masonry block structures to given working instructions for at least three of the following:
  - a cavity wall structures
  - b solid wall structures
  - c form openings
  - d mix jointing compounds
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
  - a erect cavity walling and solid walling using thin joint blocks
  - b determine thin joint block bonds
  - c level bed (course one)
  - d check plumb
  - e form and maintain the integrity of cavities
  - f form openings
  - g position, level, plumb, fix and integrate brick soffit systems
  - h install masonry support angles

- i position, fix and bed damp-proof barriers, cloak systems and cavity trays
- j position and secure wall ties, including spacing, particularly around openings
- k form and install movement joints
- I install and maintain the integrity of fire barriers and breaks
- m form and install weep holes and vents
- n position, bond and tape insulation materials
- o install wind posts
- p mix jointing compound
- q recognise and determine when specialist skills and knowledge are required and report accordingly
- r identify and follow the installation quality requirements
- s work with, around and in close proximity to plant and machinery
- t use hand and power tools, and equipment
- u work at height
- v use access equipment
- 7.5 describe the needs of other occupations and how to communicate effectively within a team when erecting thin joint masonry structures
- 7.6 describe how to maintain the tools and equipment used when erecting thin joint masonry structures.

# Unit 238 Erecting thin joint masonry structures in the workplace

## Supporting information

## Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

## Unit 609 Moving, handling and storing resources in the workplace

UAN:	
Level:	2
TQT:	50
GLH:	27
Relationship to NOS:	This unit is linked to the NOS COSVR643 Move, handle or store resources

## Learning outcome

The learner will:

1. comply with given information when moving, handling and/or storing resources.

#### Assessment criteria

The learner can:

- 1.1 interpret the given information relating to moving, handling and/or storing resources, relevant to the given occupation
- 1.2 interpret the given information relating to the use and storage of lifting aids and equipment
- 1.3 describe the different types of technical, product and regulatory information, their source and how they are interpreted
- 1.4 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.5 describe how to obtain information relating to using and storing lifting aids and equipment.

### Learning outcome

The learner will:

2. know how to comply with relevant legislation and official guidance when moving, handling and/or storing resources.

#### Assessment criteria

- 2.1 describe their responsibilities under current legislation and official guidance whilst working:
  - a in the workplace
  - b in confined spaces

- c below ground level
- d at height
- e with tools and equipment
- f with materials and substances
- g with movement/ storage of materials
- h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making the reports
- 2.4 state the appropriate types of fire extinguishers relevant to the work
- describe how and when the different types of fire extinguishers, relevant to the given occupation, are used in accordance with legislation and official guidance.

The learner will:

3. maintain safe working practices when moving, handling and/or storing resources.

#### Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when moving, handling and/or storing resources
- 3.2 use lifting aids safely as appropriate to the work
- 3.3 protect the environment in accordance with safe working practices as appropriate to the work
- 3.4 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to moving, handling and/or storing resources, and the types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:
  - a collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)
- 3.5 describe how the health and safety control equipment relevant to the work should be used in accordance with the given instructions
- 3.6 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries

#### The learner will:

4. select the required quantity and quality of resources for the methods of work to move, handle and/or store occupational resources.

#### Assessment criteria

#### The learner can:

- 4.1 select the relevant resources to be moved, handled and/or stored, associated with own work
- describe the characteristics, quality, uses, sustainability, limitations and defects associated with the occupational resources in relation to:
  - a lifting and handling aids
  - b container(s)
  - c fixing, holding and securing systems
- 4.3 describe how the resources should be handled and how any problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work.

### Learning outcome

#### The learner will:

5. prevent the risk of damage to occupational resources and surrounding environment when moving, handling and/or storing resources.

#### Assessment criteria

- 5.1 protect occupational resources and their surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 dispose of waste and packaging in accordance with legislation
- 5.3 maintain a clean work space when moving, handling or storing resources
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
  - a environmental responsibilities
  - b organisational procedures
  - c manufacturers' information

- d statutory regulations
- e official guidance.

The learner will:

6. complete the work within the allocated time when moving, handling and/or storing resources.

#### Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a progress charts, timetables and estimated times
  - b organisational procedures for reporting circumstances which will affect the work programme.

## Learning outcome

The learner will:

7. comply with the given occupational resource information to move, handle and/or store resources to the required guidance.

#### Assessment criteria

- 7.1 demonstrate the following work skills when moving, handling and/or storing occupational resources:
  - a moving
  - b positioning
  - c storing
  - d securing and/or using lifting aids and kinetic lifting techniques
- 7.2 move, handle and/or store occupational resources to meet product information and organisational requirements relating to three of the following:
  - a sheet material
  - b loose material
  - c bagged or wrapped material
  - d fragile material
  - e tools and equipment
  - f components
  - g liquids
- 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them when moving, handling and/or storing occupational resources

7.4	describe the needs of other occupations when moving, handling and/or storing resources.

# Unit 609 Moving, handling and storing resources in the workplace

## Supporting information

## Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

## Unit 690

## Repairing and maintaining masonry structures in the workplace

UAN:	
Level:	3
TQT:	250
GLH:	143
Relationship to NOS:	This unit is linked to the NOS COSVR50 Repair and maintain masonry structures

## Learning outcome

#### The learner will:

1. interpret the given information relating to the work and resources when repairing and maintaining masonry structures.

#### Assessment criteria

- 1.1 interpret and extract relevant information from:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
  - a drawings
  - b specifications
  - c current legislation
  - d schedules
  - e method statements
  - f risk assessments
  - g manufactures' information

- h oral and written instructions
- i sketches
- j electronic data
- k official guidance and current regulations governing buildings associated with the repair and maintenance of masonry structures

The learner will:

2. know how to comply with relevant legislation and official guidance when repairing and maintaining masonry structures.

#### Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:
  - a in the workplace
  - b below ground level
  - c in confined spaces
  - d at height
  - e with tools and equipment
  - f with materials and substances
  - g with movement and storage of materials
  - h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
  - e vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

## Learning outcome

The learner will:

3. maintain safe and healthy working practices when repairing and maintaining masonry structures.

#### Assessment criteria

- 3.1 use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when repairing and maintaining masonry structures
- 3.2 demonstrate compliance with given information and relevant legislation when repairing and maintaining masonry structures in relation to the following:
  - a safe use of access equipment
  - b safe use, storage and handling of materials, tools and equipment
  - c specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to repairing and maintaining masonry structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
  - a collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries
  - d other task-related activities.

The learner will:

4. select the required quantity and quality of resources for the methods of work to repair and maintain masonry structures.

### Assessment criteria

- 4.1 select resources associated with own work in relation to:
  - a materials
  - b components
  - c fixings
  - d tools and equipment
- describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
  - a bricks
  - b blocks
  - c natural stones
  - d mortars
  - e sand

- f lime
- g additives
- h frames
- i insulation
- j damp-proof barriers
- k cloak systems
- I lintels and ties
- m fittings and fixings
- n hand and power tools, and equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate quantity, length, area and wastage of materials associated with the method and procedure to repair and maintain masonry structures.

The learner will:

5. minimise the risk of damage to the work and surrounding area when repairing and maintaining masonry structures.

#### Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
  - a environmental responsibilities
  - b organisational procedures
  - c manufacturers' information
  - d statutory regulations
  - e official guidance.

### Learning outcome

The learner will:

6. complete the work within the allocated time when repairing and maintaining masonry structures.

## Assessment criteria

#### The learner can:

- 6.1 demonstrate completion of the work within the estimated allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a types of productivity targets and time scales
  - b how times are estimated
  - c organisational procedures for reporting circumstances which will affect the work programme.

## Learning outcome

#### The learner will:

7. comply with the given contract information to repair and maintain masonry structures to the required specification.

#### Assessment criteria

- 7.1 demonstrate the following work skills when repairing and maintaining masonry structures:
  - a measure
  - b mark out
  - c cut
  - d remove
  - e lay
  - f position
  - g secure
- 7.2 use and maintain hand and power tools, and equipment
- 7.3 prepare, repair and maintain existing brick, and/or block masonry and/or local material style structures to given working instructions for at least three of the following:
  - a match existing materials
  - b continue existing bonding
  - c match existing quality of structure
  - d form openings
  - e prop existing walls and floors
  - f form internal and external angles
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
  - a prepare, repair and maintain existing masonry structures in brick, traditional and thin joint blocks or local materials and styles
  - b identify material and components and restore structures to original state
  - c form joint finishes
  - d form openings
  - e prop existing walls and floors

- f form and maintain the integrity of cavities
- g position, fix and bed damp-proof barriers, cloak systems and cavity trays
- h form and install weep holes and vents
- i form internal and external angles
- j position, bond and tape insulation materials
- k install and maintain the integrity of fire barriers and breaks
- I dress surfaces
- m form finishes
- n mix mortars
- o recognise and determine when specialist skill and knowledge are required and report accordingly
- p determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
- q identify and follow the installation quality requirements
- r work with, around and in close proximity to plant and machinery
- s use hand and power tools, and equipment
- t work at height
- u use access equipment
- 7.5 describe the needs of other occupations and how to communicate effectively within a team when repairing and maintaining masonry structures
- 7.6 describe how to maintain the tools and equipment used when repairing and maintaining masonry structures.

# Unit 690 Repairing and maintaining masonry structures in the workplace

## Supporting information

## Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

## Unit 701 Setting out to form masonry structures in the workplace

UAN:	
Level:	2
TQT:	230
GLH:	123
Relationship to NOS:	This unit is linked to the NOS COSVR <sub>41</sub> Set out masonry structures

## Learning outcome

The learner will:

1. interpret the given information relating to the work and resources when setting out to form masonry structures.

### Assessment criteria

- 1.1 interpret and extract relevant information from:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented

- 1.4 describe different types of information, their source and how they are interpreted in relation to:
  - a drawings
  - b specifications
  - c current legislation
  - d schedules
  - e method statements
  - f risk assessments
  - q manufacturers' information
  - h oral and written instructions
  - i sketches
  - j electronic data
  - k official guidance
  - I current regulations governing buildings associated with setting out to form masonry structures

The learner will:

2. know how to comply with relevant legislation and official guidance when setting out to form masonry structures.

#### **Assessment criteria**

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:
  - a in the workplace
  - b below ground level
  - c in confined spaces
  - d at height
  - e with tools and equipment
  - f with materials and substances
  - q with movement and storage of materials
  - h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
  - e vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

The learner will:

3. maintain safe and healthy working practices when setting out to form masonry structures.

#### Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when setting out to form masonry structures.
- 3.2 demonstrate compliance with given information and relevant legislation when setting out to form masonry structures in relation to the following:
  - a safe use of access equipment
  - b safe use, storage and handling of materials, tools and equipment
  - c specific risks to health.
- explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to setting out to form masonry structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
  - a collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries
  - d other task-related activities.

## Learning outcome

The learner will:

4. select the required quantity and quality of resources for the methods of work to set out to form masonry structures.

#### Assessment criteria

The learner can:

4.1 select resources associated with own work in relation to:

- a materials
- b components
- c fixings
- d tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
  - a levels
  - b lines
  - c trammels
  - d templates
  - e profiles
  - f tape measures
  - g pegs
  - h squares and fixings
  - i hand and power tools
  - j setting out equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate distances, length, levels and diagonals, area and wastage of materials associated with the method and procedure to set out to form masonry structures.

The learner will:

5. minimise the risk of damage to the work and surrounding area when setting out to form masonry structures.

#### Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
  - a environmental responsibilities
  - b organisational procedures

- c manufacturers' information
- d statutory regulations
- e official guidance.

The learner will:

6. complete the work within the allocated time when setting out to form masonry structures.

#### Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the estimated allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a types productivity targets and time scales
  - b how times are estimated
  - c organisational procedures for reporting circumstances which will affect the work programme.

## Learning outcome

The learner will:

7. comply with the given contract information to set out to form masonry structures to the required specification.

#### Assessment criteria

- 7.1 demonstrate the following work skills when setting out to form masonry structures:
  - a measuring
  - b marking out
  - c levelling
  - d plumbing
  - e positioning
  - f transferring
  - g transposing
  - h fixing
  - i securing
- 7.2 use and maintain hand and power tools and setting out equipment
- 7.3 determine dimensions and positions using line, level, depth, area, height and angle to given working instructions to establish at least four of the following lines:
  - a straight (180 degrees)
  - a right angles (90 degrees)

- b obtuse angles (between 90 and 180 degrees including batters)
- c acute angles (between o and 90 degrees)
- d curves on plan
- e curves in elevation
- f openings
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
  - a measure and set out to form masonry structures on level and sloping ground
  - b identify and mark datum points
  - c make trammels, templates and profiles
  - d mark straight lines, right angles, obtuse angles, acute angles, curves on plan, curves in elevation and openings
  - e set out using trammels, templates and profiles
  - f plumb from ranging lines
  - g transfer lines and levels (spirit level, straight edge and laser level)
  - h determine convex and concave curves using pegs and line
  - i recognise and determine when specialist skills and knowledge are required and report accordingly
  - j identify and follow the installation quality requirements
  - k work with around and in close proximity to plant and machinery
  - I use hand and power tools, and setting out equipment
  - m work at height
  - n use access equipment
- 7.5 describe the needs of other occupations and how to communicate effectively within a team when setting out to form masonry structures
- 7.6 describe how to maintain the tools and equipment used when setting out to form masonry structures.

## Unit 701 Setting out masonry structures in the workplace

## Supporting information

## Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

# Unit 817 Placing and compacting concrete in the workplace

UAN:	
Level:	2
TQT:	110
GLH:	47

## Learning outcome

#### The learner will:

1. interpret the given information relating to the work and resources when placing and compacting concrete.

#### Assessment criteria

- 1.1 interpret and extract relevant information from:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
  - g oral and written instructions
  - h current regulations governing buildings
  - i official guidance associated with the placement and compaction of concrete

#### The learner will:

2. know how to comply with relevant legislation and official guidance when placing and compacting concrete.

#### Assessment criteria

#### The learner can:

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:
  - a in the workplace
  - b below ground level
  - c in confined spaces
  - d at height
  - e with tools and equipment
  - f with materials and substances
  - g with movement and storage of materials
  - h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

## Learning outcome

#### The learner will:

3. maintain safe and healthy working practices when placing and compacting concrete.

#### Assessment criteria

- 3.1 use health and safety and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when placing and compacting concrete
- demonstrate compliance with given information and relevant legislation when placing and compacting concrete in relation to the following:
  - a safe use of access equipment
  - b safe use, storage and handling of materials, tools and equipment
  - c specific risks to health
- explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to placing and compacting concrete, and the types,

purpose and limitations of each type, the work situation and general work environment, in relation to:

- a collective protective measures
- b Personal Protective Equipment (PPE)
- c Respiratory Protective Equipment (RPE)
- d Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries
  - d other task-related activities.

## Learning outcome

The learner will:

4. select the required quantity and quality of resources for the methods of work to place and compact concrete.

#### Assessment criteria

- 4.1 select resources associated with own work in relation to:
  - a materials
  - b components
  - c fixings
  - d tools and equipment
- describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
  - a aggregates
  - b cements
  - c concrete
  - d reinforcement
  - e membranes
  - f release agents
  - g anti-heave materials
  - h moulds
  - i additives
  - j retardants
  - k hand tools
  - I portable power tools and equipment
  - m slump test equipment
  - n skips

- o compaction equipment
- p poker vibrator
- q tampers
- r floats
- s trowels
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method and procedure to place and compact concrete

The learner will:

5. minimise the risk of damage to the work and surrounding area when placing and compacting concrete.

#### Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
  - a environmental responsibilities
  - b organisational procedures
  - c manufacturers' information
  - d statutory regulations
  - e official guidance.

### Learning outcome

The learner will:

6. complete the work within the allocated time when placing and compacting concrete.

#### Assessment criteria

#### The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a types of progress charts, timetables and estimated times
  - b organisational procedures for reporting circumstances which will affect the work programme.

## Learning outcome

The learner will:

7. comply with the given contract information to place and compact concrete to the required specification.

#### Assessment criteria

- 7.1 demonstrate the following work skills when:
  - a measuring
  - b marking out
  - c inspecting
  - d receiving
  - e handling
  - f transporting
  - g placing
  - h spreading
  - i levelling
  - j vibrating
  - k compacting
  - I testing
  - m protecting
- 7.2 use and maintain hand tools, and portable power tools, plant or machinery and ancillary equipment
- 7.3 place, lay and compact concrete to given working instructions using three of the following placement methods:
  - a chute
  - b elephant's trunk
  - c skip
  - d pump
  - e mono-rail
  - f manually
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:

- a identify installation quality requirements
- b conform to agreed specification
- c confirm integrity of formwork and temporary supports
- d handle and transport concrete
- e place concrete using shuts, elephant's trunk, skip, pump, mono-rail and manually
- f visually assess the quality of the concrete prior to and during pouring and placement
- g extract samples for testing
- h work with, around and in close proximity to plant and machinery
- i direct and guide the operations and movement of plant and machinery
- j compact and finish concrete
- k protect concrete to assist the curing process
- lapply curing accelerants and aids
- m recognise requirements for working with concretes containing additives for waterproofing and retardants
- n recognise and determine when additional specialist skills and knowledge are required and report accordingly
- o determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
- p use hand tools, portable power tools, plant machinery and equipment
- q work at height
- r use access equipment
- 7.5 describe the needs of other occupations and how to communicate effectively within a team when placing and compacting concrete
- 7.6 describe how to maintain the tools and equipment used when placing and compacting concrete

# Unit 817 Placing and compacting concrete in the workplace

Supporting information

## **Assessment guidance**

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Evidence for assessment criteria 7.2 must be for at least three different structures/placements.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

## Unit 828 Installing and forming specialist masonry elements in the workplace

UAN:	
Level:	3
TQT:	210
GLH:	150

## Learning outcome

#### The learner will:

1. interpret the given information relating to the work and resources when installing and forming specialist masonry elements.

#### Assessment criteria

- 1.1 interpret and extract relevant information from:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
  - a drawings
  - b specifications
  - c schedules
  - d method statements
  - e risk assessments
  - f manufacturers' information
  - g oral and written instructions
  - h sketches
  - i electronic data

j official guidance and regulations associated with the installing and forming specialist masonry support elements

## Learning outcome

The learner will:

2. know how to comply with relevant legislation and official guidance when installing and forming specialist masonry elements

#### Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:
  - a in the workplace
  - b below ground level
  - c in confined spaces
  - d at height
  - e with tools and equipment
  - f with materials and substances
  - g with movement and storage of materials
  - h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
  - e vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

### Learning outcome

The learner will:

3. maintain safe and healthy working practices when installing and forming specialist masonry elements.

#### Assessment criteria

- 3.1 use health and safety and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when installing and forming specialist masonry elements
- 3.2 demonstrate compliance with given information and relevant legislation when installing and forming specialist masonry element in relation to the following:

- a safe use of access equipment
- b safe use, storage and handling of materials, tools and equipment
- c specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to install and form specialist masonry elements, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
  - a collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries
  - d other task-related activities.

The learner will:

4. select the required quantity and quality of resources for the methods of work to install and form specialist masonry elements.

#### Assessment criteria

- 4.1 select resources associated with own work in relation to:
  - a materials
  - b components
  - c fixings
  - d tools and equipment
- describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
  - a specialist masonry support elements
  - b fittings and fixings
  - c hand and power tools, and equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification
- describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work

describe how to calculate quantity, length, area and wastage of materials associated with the method and procedure to install and form specialist masonry elements

# Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when installing and forming specialist masonry elements.

#### Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
  - a environmental responsibilities
  - b organisational procedures
  - c manufacturers' information
  - d statutory regulations
  - e official guidance.

### Learning outcome

The learner will:

6. complete the work within the allocated time when installing and forming specialist masonry elements.

#### Assessment criteria

- 6.1 demonstrate completion of the work within the estimated allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a types of productivity targets and time scales
  - b how times are estimated

С	organisational procedures for reporting circumstances which will affect the work programme.		

#### The learner will:

7. comply with the given contract information to install and form specialist masonry elements to the required specification.

#### Assessment criteria

- 7.1 demonstrate the following work skills when:
  - a positioning
  - b levelling
  - c plumb
  - d adjusting
  - e fixing
- 7.2 use and maintain hand and power tools and equipment
- 7.3 install and/or form fire barriers and/or breaks and support angles plus at least two of the following specialist masonry support elements to given working instructions:
  - a brick soffit systems
  - b channel systems
  - c wind posts
  - d vapour and/or moisture barriers
  - e wall starter kits
- describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
  - a identify the types, uses and characteristics of specialist masonry support elements; brick soffit systems, support angles, fire barriers and breaks, wind posts and wall starter kits
  - b position, level, plumb, fix and integrate brick soffit systems
  - c install and adjust masonry support angles
  - d install and maintain the integrity of fire barriers and breaks
  - e form and maintain the integrity of cavities
  - f position and secure wall ties including spacing, particularly around openings
  - q position and fix damp-proof barriers, cloak systems and cavity trays
  - h form and install weep holes and vents
  - i position bond and tape insulation materials
  - j install wind posts
  - k use wall starter kits
  - I recognise and determine when specialist skills and knowledge are required and report accordingly
  - m identify and follow the installation quality requirements
  - n work with, around and in close proximity to plant and machinery
  - o use hand and power tools, and equipment
  - p work at height
  - q use access equipment
- 7.5 describe the needs of other occupations and how to communicate effectively within a team when installing and forming specialist masonry elements

7.6 describe how to maintain the tools and equipment used when installing and forming specialist masonry elements

# Unit 828 Installing and forming specialist masonry elements in the workplace

# Supporting information

## Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

# Unit 837 Installing drainage in the workplace

UAN:	
Level:	2
TQT:	190
GLH:	110
Relationship to NOS:	This unit is linked to the NOS COSVR639 Install drainage

## Learning outcome

#### The learner will:

1. interpret the given information relating to the work and resources when installing drainage.

#### Assessment criteria

- 1.1 interpret and extract relevant information from:
  - a drawings
  - b risk assessments
  - c method statements
  - d specifications
  - e schedules
  - f manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
  - a drawings
  - b risk assessments
  - c method statements
  - d specifications
  - e schedules
  - f manufacturers' information
  - g regulations governing the installation and construction of drainage systems.

The learner will:

2. know how to comply with relevant legislation and official guidance when installing drainage.

#### Assessment criteria

The learner can:

- 2.1 describe their responsibilities regarding potential accidents and health hazards, whilst working:
  - a in the workplace
  - b below ground level
  - c in confined spaces
  - d at height
  - e with tools and equipment
  - f with materials and substances
  - g with movement/storage of materials
  - h by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
  - a site
  - b workplace
  - c company
  - d operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

## Learning outcome

The learner will:

3. maintain safe and healthy working practices when installing drainage.

### Assessment criteria

- 3.1 use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when installing drainage
- 3.2 comply with information relating to specific risks to health when installing drainage
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to installing drainage, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
  - a collective protective measures
  - b Personal Protective Equipment (PPE)
  - c Respiratory Protective Equipment (RPE)
  - d Local Exhaust Ventilation (LEV)

- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
  - a fires
  - b spillages
  - c injuries
  - d other task-related hazards.

The learner will:

4. select the required quantity and quality of resources for the methods of work to install drainage.

#### Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
  - a materials
  - b components and fixings
  - c tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
  - a pipes, fittings and ancillary components
  - b pre-cast (metal, concrete, clay or plastic) components
  - c bricks, blocks and sandbags
  - d granular materials, aggregates, cement, concrete, mortars and sand
  - e sealant materials (adhesives, compounds, solvents)
  - f hand and/or powered tools and equipment
- 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to install drainage.

### Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when installing drainage.

#### Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 minimise damage and maintain a clean work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
  - a general workplace activities
  - b other occupations
  - c adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
  - a environmental responsibilities
  - b organisational procedures
  - c manufacturers' information
  - d statutory regulations
  - e official guidance.

The learner will:

6. complete the work within the allocated time when installing drainage.

### Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
  - a types of progress charts, timetables and estimated times
  - b organisational procedures for reporting circumstances which will affect the work programme.

# Learning outcome

The learner will:

7. comply with the given contract information to install drainage to the required specification.

#### Assessment criteria

- 7.1 demonstrate the following work skills when installing drainage:
  - a measuring
  - b marking out
  - c laying
  - d positioning

- e fitting
- f levelling
- g plumbing
- h aligning
- i securing
- j testing
- 7.2 install and test new and/or replacement, foul and/or surface water drainage for two of the following to given working instructions:
  - a pipework (e.g. clay, concrete, metal, or plastic)
  - b inspection chambers (e.g. brick, concrete, metal or plastic)
  - c surface water systems (e.g. cells, culverts, high capacity, linear, balancing ponds, interceptors, recycling equipment, soak-a-ways, sustainable urban drainage systems)
  - d foul water systems (e.g. cess pools, septic tanks, reed beds, treatment plants)
- 7.3 safely use:
  - a materials
  - b hand tools
  - c portable power tools
  - d ancillary equipment
- 7.4 safely store the materials, tools and equipment used when installing drainage
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
  - a excavate trenches and provide trench support
  - b confirm ground conditions, site and excavations are suitable for the drainage installation work
  - c prepare bedding for pipework
  - d determine levels and gradients
  - e identify the differences between surface and foul water drainage
  - f lay, position, level, plumb, align, fit, fix and secure new and replacement drainage systems
  - g construct structures of a drainage system (storm alleviation, culverts, inspection chambers, lateral drains, overflows, sumps, filter drains, sustainable urban drainage systems)
- 7.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
  - a assemble pre-cast components (metal, concrete, clay and plastic) of a drainage system structure (inspection chambers, street iron work)
  - b connect and seal new systems to existing systems
  - c conduct smoke, water, ball, air mandrel and close circuit television tests on drainage systems
  - d work with plant and machinery
  - e use hand tools, power tools and equipment
  - f work at height and below ground level
  - q use access equipment
- 7.7 describe the needs of other occupations and how to effectively communicate within a team when installing drainage
- 7.8 describe how to maintain the tools and equipment used when installing drainage.

# Unit 837 Installing drainage in the workplace

# Supporting information

# Assessment guidance

This unit must be assessed in a work environment, in accordance with the ConstructionSkills Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

# Appendix 1 Relationships to other qualifications

# Links to other qualifications

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that candidates meet requirements of all units/qualifications.

## Literacy, language, numeracy and ICT skills development

This qualification can develop skills that can be used in the following qualifications:

- Functional Skills (England) see www.cityandguilds.com/functionalskills
- Essential Skills (Northern Ireland) see www.cityandguilds.com/essentialskillsni
- Essential Skills Wales see www.cityandguilds.com/esw

# Appendix 2 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 Centres and Training Providers homepage on www.cityandguilds.com.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues.

Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications 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 homepage** section of the City & Guilds website also contains useful information on such things as:

- Walled Garden: how to register and certificate candidates on line
- Events: dates and information on the latest Centre events
- Online assessment: how to register for e-assessments.

Centre Guide – Delivering International Qualifications contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification.

Specifically, the document includes sections on:

- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre

- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

# Appendix 3 Useful contacts

<b>UK learners</b> General qualification information	E: learnersupport@cityandguilds.com
International learners General qualification information	E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	E: centresupport@cityandguilds.com
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	E: business@cityandguilds.com
Publications Logbooks, Centre documents, Forms, Free literature	F: +44 (0)20 7294 2413

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If you have a complaint, or any suggestions for improvement about any of the services that we provide, email: feedbackandcomplaints@cityandguilds.com

# **About City & Guilds**

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

# City & Guilds Group

The City & Guilds Group is a leader in global skills development. Our purpose is to help people and organisations to develop their skills for personal and economic growth. Made up of City & Guilds, City & Guilds Kineo, The Oxford Group and ILM, we work with education providers, businesses and governments in over 100 countries.

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