



**ProQual Level 3 NVQ Diploma in Heritage Skills
(Construction) - Mason**

Qualification Specification

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Introduction

The ProQual Level 3 NVQ Diploma in Heritage Skills (Construction) – Mason qualification provides a nationally recognised qualification for those working in the construction industry who want to specialise in Heritage Skills, specifically stone masonry. As assessment for this qualification must take place in the workplace, candidates must be currently employed in this area.

The awarding body for this qualification is ProQual Awarding Body (www.proqualab.com) and the regulatory body is the Office of Qualifications and Examinations Regulation (Ofqual). It is also endorsed by the sector body for construction - CITB.

The qualification has been accredited onto the Regulated Qualifications Framework (RQF) and is published on Ofqual's Register of Qualifications.

Qualification Profile

Qualification title	ProQual Level 3 NVQ Diploma in Heritage Skills (Construction) - Mason
Ofqual qualification number	610/4146/4
Level	3
Total qualification time	1494 Hours
Guided learning hours	663 Hours
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	07/05/2024
Qualification end date	

Entry Requirements

There are no formal entry requirements for this qualification.

Centres should carry out an **initial assessment** of candidate skills and knowledge to identify any gaps and help plan the assessment.

Qualification Structure

Candidates must complete all of the mandatory units for this qualification. There are nine mandatory units:

Mandatory Units				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref No.
K/651/1379	Setting Out Complex Stonemasonry Structures in the Workplace	3	80	201v3
R/651/1380	Erecting Complex Stonemasonry Structures in the Workplace	3	140	202v4
A/503/2772	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	3	43	209v2
T/618/8495	Developing and Maintaining Good Occupational Working Relationships in the Workplace	3	37	210v3
R/503/2924	Confirming the Occupational Method of Work in the Workplace	3	47	211v2
T/651/1381	Working on Conservation and Restoration Projects in the Workplace <i>This unit has the following endorsement requirements:</i> One of the following: <ul style="list-style-type: none"> • Roofing • Lead work and hard metal roofing • Brickwork • Earthen structures • Stonemasonry • Decorative Occupations • Plastering • Wall and floor tiling • Carpentry and joinery • Iron or metalwork • Thatching • Lime worker 	3	119	546v3
D/616/9200	Conserving or Restoring Stonemasonry, Brickwork or Earthen Structures in the Workplace	3	100	547v2
H/616/9201	Preparing and Mixing Lime Mortars in the Workplace <i>This unit has the following endorsement requirements:</i> <i>Preparing and mixing non-hydraulic (lime putty) and hydraulic lime mortars (coarse and fine stuff) for at least one of the following:</i> <ul style="list-style-type: none"> • Lime mortars and additives • Lime mortars with fibres (natural or synthetic) 	3	80	548v2
M/508/6537	Conforming to General Health, Safety and Welfare in the Workplace	1	17	641v1

Centre Requirements

Centres must be approved to offer this qualification. If your centre is not approved please complete and submit form **ProQual Additional Qualification Approval Application**.

Staff

Staff delivering this qualification must be appropriately qualified and/or occupationally competent.

Assessors/Internal Quality Assurance

Assessors for each 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.

Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or internal quality assurance qualifications.

Support for Candidates

Materials produced by centres to support candidates should:

- Enable them to track their achievements as they progress through the learning outcomes and assessment criteria;
- Provide information on where ProQual's policies and procedures can be viewed;
- Provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence

Assessment

This qualification is competence-based, candidates must demonstrate the level of competence described in the units. Assessment is the process of measuring a candidate's skill, knowledge and understanding against the standards set in the qualification.

This qualification must be internally assessed by an appropriately experienced and qualified assessor.

Each candidate is required to produce a portfolio of evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include:

- Observation report by assessor
- Assignments/projects/reports
- Professional discussion
- Witness testimony
- Candidate product
- Worksheets
- Record of oral and written questioning
- Recognition of Prior Learning

Learning outcomes set out what a candidate is expected to know, understand or be able to do.

Assessment criteria specify the standard a candidate must meet to show the learning outcome has been achieved.

Learning outcomes and assessment criteria can be found from page 8.

Additional information for assessment and requirements for unit **endorsements** where relevant is included after all of the learning outcomes and assessment criteria for each unit.

Assessment for this qualification must take place in the workplace. Simulation is **not** allowed for this qualification.

Internal Quality Assurance

An internal quality assurance verifier confirms that assessment decisions made in centres are made by competent and qualified assessors, that they are the result of sound and fair assessment practice and that they are recorded accurately and appropriately.

Adjustments to Assessments

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

Results Enquiries and Appeals

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.

Certification

Candidates who achieve the requirements for this qualification will be awarded:

- A certificate listing all units achieved, and
- A certificate giving the full qualification title -

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Claiming certificates

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the qualification. All certificates will be issued to the centre for successful candidates.

Unit certificates

If a candidate does not achieve all of the units required for a qualification, the centre may claim a unit certificate for the candidate which will list all of the units achieved.

Replacement certificates

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement.

Units – Learning Outcomes and Assessment Criteria

Title: Setting Out Complex Stonemasonry Structures in the Workplace
Unit Number: K/651/1379

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

1	Interpret the given information relating to the work and resources when setting out complex stonemasonry structures.	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments and 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: <ul style="list-style-type: none"> • Drawings. • Specifications. • Schedules. • Method statements. • Risk assessments. • Manufacturers' and technical information. • Official guidance and current regulations associated with setting out complex stonemasonry structures.
2	Know how to comply with relevant legislation and official guidance when setting out complex stonemasonry structures.	2.1	Describe their responsibilities regarding potential accidents, incidents, health hazards and the environment, whilst working: <ul style="list-style-type: none"> • In the workplace. • Below ground level. • In confined spaces. • At height. • With tools and setting out equipment. • With materials and substances. • With movement/storage of materials by manual handling and mechanical lifting.
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, public, operative, plant and machinery.

2	<i>Cont.</i>	2.3	Explain what the accident reporting procedures are and who is responsible for making reports.
3	Maintain safe and healthy working practices when setting out complex stonemasonry structures.	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 complex stonemasonry structures.
		3.2	Demonstrate compliance with given information and relevant legislation when setting out complex stonemasonry structures, in relation to the following: <ul style="list-style-type: none"> • Safe use of access equipment. • Safe use, storage and handling of materials, tools, and equipment. • 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 setting out complex stonemasonry structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • Collective protective measures. • Personal protective equipment (PPE). • Respiratory protective equipment (RPE). • 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 fires, spillages, injuries, near misses, evacuations, and other task-related activities.

4	Select the required quantity and quality of resources for the methods of work to set out complex stonemasonry structures.	4.1	Select resources associated with own work in relation to materials, components, setting out equipment, and hand and power tools.
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> • Lines, levels, tape measures, pegs, profiles, square. • Hand tools, power tools, setting out equipment, ancillary and safety 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 and check distance, length, curve, level and diagonal associated with the method/procedure to set out complex stonemasonry structures.
5	Minimise the risk of damage to the work and surrounding area when setting out complex stonemasonry structures.	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	Explain how to comply with employer's quality procedures.
		5.5	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.

6	Complete the work within the allocated time when setting out complex stonemasonry structures.	6.1	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational and quality procedures, manufacturers' information, statutory regulations and official guidance.
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> • Types of programmes of work and estimated times • Organisational procedures for reporting circumstances which will affect the work programme.
7	Comply with the given contract information to set out complex stonemasonry structures to the required specification.	7.1	Demonstrate the following work skills when setting out complex stonemasonry structures: <ul style="list-style-type: none"> • Measuring. • Marking out. • Levelling. • Plumb and positioning.
		7.2	Use and maintain hand tools, power tools, setting out equipment, ancillary and safety equipment.
		7.3	Set out regular and irregular shaped stonemasonry structures on level and sloping surfaces to given working instructions.
		7.4	Set out stonemasonry structures with curved, splayed and angled walls to given working instructions.

7 Cont.

7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:

- Identify and follow the organisational quality requirements.
- Set out and check regular and irregular shaped structures on level and sloping surfaces and structures with curved, splayed and angled walls.
- Set out using the appropriate method.
- Construct corner profiles.
- Transfer lines and levels from datums.
- Use setting out equipment.
- Determine when specialist skills and knowledge are required and report accordingly.
- Understand specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
- Work with, around and in close proximity to plant and machinery.
- Use access equipment.
- Work at height.
- Use hand tools, power tools, setting out equipment, ancillary and safety equipment.

7.6 Describe the needs of other occupations and how to communicate effectively within a team when setting out complex stonemasonry structures.

7.7 Describe how to maintain the tools and equipment used when setting out complex stonemasonry structures.

Title: Setting Out Complex Stonemasonry Structures in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	70
Assessment Hours	10

Title:

Erecting Complex Stonemasonry Structures in the Workplace

Unit Number:

R/651/1380

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

1	Interpret the given information relating to the work and resources when erecting complex stonemasonry structures.	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments and 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: <ul style="list-style-type: none">• Drawings.• Specifications.• Schedules.• Method statements.• Risk assessments.• Manufacturers' and technical information.• Official guidance and current regulations associated with setting out complex stonemasonry structures.
2	Know how to comply with relevant legislation and official guidance when erecting complex stonemasonry structures.	2.1	Describe their responsibilities regarding potential accidents, incidents, health hazards and the environment, whilst working: <ul style="list-style-type: none">• In the workplace.• Below ground level.• In confined spaces.• At height.• With tools and setting out equipment.• With materials and substances.• With movement/storage of materials by manual handling and mechanical lifting.
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, public, operative, plant and machinery.
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports.

- 3 Maintain safe and healthy working practices when erecting complex stonemasonry structures.
- 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 complex stonemasonry structures.
- 3.2 Demonstrate compliance with given information and relevant legislation when setting out complex stonemasonry structures, in relation to the following:
- Safe use of access equipment.
 - Safe use, storage and handling of materials, tools, and equipment.
 - 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 setting out complex stonemasonry structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
- Collective protective measures.
 - Personal protective equipment (PPE).
 - Respiratory protective equipment (RPE).
 - 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 fires, spillages, injuries, near misses, evacuations, and other task-related activities.

4	Select the required quantity and quality of resources for the methods of work to erect complex stonemasonry structures.	4.1	Select resources associated with own work in relation to materials, components, fittings, tools and equipment.
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> • Prepared complex stone components. • Fine aggregates, cement, lime, additives • Damp-proof courses. • Frames, lintels, insulation. • Centres, props and struts. • Retention and load bearing fixings • Fittings. • Hand tools, portable power tools, ancillary and safety equipment and mechanical lifting 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, volume and wastage associated with the method/procedure to erect complex stonemasonry structures.
		5	Minimise the risk of damage to the work and surrounding area when erecting complex stonemasonry structures.
5.2	Maintain a clear and tidy work space.		
5.3	Dispose of waste in accordance with current legislation.		
5.4	Explain how to comply with employer's quality procedures		

5	<i>Cont.</i>	5.5	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
		5.6	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational and quality procedures, manufacturers' information, statutory regulations and official guidance.
6	Complete the work within the allocated time when erecting complex stonemasonry structures.	6.1	Demonstrate safe completion of the work within the estimated, agreed allocated time.
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> • Types of programmes of work and estimated times. • Organisational procedures for reporting circumstances which will affect the work programme.
7	Comply with the given contract information to erect complex stonemasonry structures to the required specification.	7.1	Demonstrate the following work skills when erecting complex stonemasonry structures: <ul style="list-style-type: none"> • Measuring. • Checking. • Plumb. • Levelling. • Marking out. • Fitting. • Cutting. • Drilling. • Lifting. • Positioning. • Securing.
		7.2	Use and maintain hand tools, power tools, ancillary and safety equipment.
		7.3	Arrange the lifting of stonemasonry components to given working instructions.

7 Cont.

- 7.4 Erect complex natural stone structures using prepared stonemasonry components to given working instructions for the following:
- Curved, splayed, and angled walls.
 - Centring, props, and struts.
 - Arches.
 - Tracery.
 - Projecting courses.
 - Pilasters and/or buttresses.
- 7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
- Identify and follow the organisational quality requirements.
 - Lift, position and lay prepared complex stone components.
 - Carry out overhand work.
 - Cut, drill and fix retention and load bearing fixings.
 - Erect curved, splayed and angled walls.
 - Form arches and traceries.
 - Install projecting courses.
 - Install temporary centring, props and struts.
 - Form pilasters and/or buttresses.
 - Mix mortars to specifications.
 - Install damp-proof courses, expansion and compression gaps.
 - Determine when specialist skills and knowledge are required and report accordingly.
 - Understand specific requirements for structures of special interest, traditional build (pre 1919) and historical significance.
 - Work with, around and in close proximity to plant and machinery.
 - Use hand tools, power tools, ancillary and safety equipment.
 - Work at height.
 - Use access equipment.
- 7.6 Describe the needs of other occupations and how to communicate effectively within a team when erecting complex stonemasonry structures.
- 7.7 Describe how to maintain the tools and equipment used when erecting complex stonemasonry structures.

Title: Erecting Complex Stonemasonry Structures in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	130
Assessment Hours	10

Title: Confirming Work Activities and Resources for an Occupational Work Area in the Workplace
Unit Number: A/503/2772

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

1	Identify work activities, assess required resources and plan the sequence of work.	1.1	Identify work activities, assess required resources and plan the sequence of work.
		1.2	Identify work activities and formulate a plan for their own sequence of work.
		1.3	Explain the types of work relative to the occupational area and how to identify different work activities.
		1.4	Explain methods of assessing the resources needed from a range of available information.
		1.5	Explain the required information and the different methods used to prepare a work programme relative to the occupational area.
2	Obtain clarification and advice where the resources required are not available.	2.1	Seek advice and clarity from appropriate sources on resources available and the alternatives that can be used for the work when required resources are not available.
		2.2	Explain the different sources and methods that can be used to obtain clarification and advice when the required resources are not available.
3	Evaluate the work activities and the requirements of any significant external factors against the project requirements.	3.1	Assess progress of work against project requirements, taking into account external factors relating to: <ul style="list-style-type: none"> • Other occupations and /or customers. • Resources. • Weather conditions. • Health and safety requirements.
		3.2	Explain different methods of evaluating work activities against the following project requirements: <ul style="list-style-type: none"> • Contract conditions. • Contract programme. • Health and safety requirements of operatives.

3	<i>Cont.</i>	<p>3.3 Evaluate the requirements of significant external factors that could affect the progress of work, in relation to:</p> <ul style="list-style-type: none"> • Other related programmes. • Special working conditions. • Weather conditions. • Other occupations/people. • Resources. • Health and safety requirements.
4	Identify work activities which influence each other and make the best use of the resources available.	<p>4.1 Determine work activities that have an influence on each other.</p> <p>4.2 Evaluate which work activities make the best use of available resources in relation to:</p> <ul style="list-style-type: none"> • Occupations and/or customers associated with the work. • Tools, plant and/or ancillary equipment. • Materials and components. <p>4.3 Explain different methods and sources that can identify which work activities influence each other.</p> <p>4.4 Describe how to determine the sequence of work activities and how long each work activity will take.</p> <p>4.5 Describe what zero and low carbon requirements are.</p> <p>4.6 Explain how work activities and different ways of using resources can impact on zero and low carbon requirements, and make a positive contribution to the environment.</p>
5	Identify changed circumstances that require alterations to the work programme and justify them to decision makers.	<p>5.1 Evaluate project progress against the work programme to identify any changed circumstances.</p> <p>5.2 Inform line management and/or customers on the type and extent of any required changes to the work programme.</p> <p>5.3 Explain how to identify possible alterations to the work programme to meet changed circumstances relating to action lists, method statements, duration, schedules and/or occupation specific requirements.</p> <p>5.4 Explain how to assess contractual/work effects resulting from alterations to the work programme.</p>

- 5 *Cont.* 5.5 Explain the methods used to justify to decision makers on the effects resulting from alterations to the work programme.

Title: Confirming Work Activities and Resources for an Occupational Work Area in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	33
Assessment Hours	10

Title: Developing and Maintaining Good Occupational Working Relationships in the Workplace
Unit Number: T/618/8495

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

1	Develop, maintain and encourage working relationships to promote good will and trust.	1.1	Give appropriate advice and information to relevant people about the occupational work activities and/or associated occupations involved.
		1.2	Apply the principles of equality and diversity by considering the needs of individuals when working and communicating with others.
		1.3	Explain the methods and techniques used and personal attributes required to encourage and maintain working relationships that promote goodwill and trust with relevant people.
		1.4	Explain the principles of equality and diversity and how to apply them when working and communicating with others.
2	Inform relevant people about work activities in an appropriate level of detail, with the appropriate level of urgency.	2.1	<p>Communicate on the following work activity information to relevant people following organisational procedures:</p> <ul style="list-style-type: none"> • Appropriate timescales. • Health and safety requirements. • Co-ordination of work procedures.
		2.2	Explain the different methods and techniques used to inform relevant people about work activities.
		2.3	Explain the effects of not informing relevant people with the expected level of urgency.
		2.4	<p>Explain the different types of work activity related information and to what level of detail the following people would expect to receive:</p> <ul style="list-style-type: none"> • Colleagues. • Employers. • Customers. • Contractors. • Suppliers of products and services. • Other people affected by the work/project.

3	Offer advice and help to relevant people about work activities and encourage questions/requests for clarification and comments.	<p>3.1 Give appropriate advice and information to relevant people about the different methods of carrying out occupational work activities to achieve the required outcome.</p> <p>3.2 Explain the techniques of encouraging questions and/or requests for clarification and comments.</p> <p>3.3 Explain the different ways of offering advice and help to different people about work activities, in relation to:</p> <ul style="list-style-type: none"> • Progress. • Results. • Achievements. • Occupational problems. • Occupational opportunities. • Health and safety requirements. • Co-ordinated work.
4	Clarify proposals with relevant people and discuss alternative suggestions.	<p>4.1 Engage regular discussions with relevant people about the occupational work activity and/or other occupations involved.</p> <p>4.2 Explain the methods of clarifying alternative proposals with relevant people.</p> <p>4.3 Explain the methods of suggesting alternative proposals.</p>
5	Resolve differences of opinion in ways that minimise offence and maintain goodwill, trust and respect.	<p>5.1 Examine and agree the work activities that satisfy all people involved and will meet the required outcome of the proposed method of work.</p> <p>5.2 Explain the methods and techniques used to resolve differences of opinion in ways which minimise offence and maintain goodwill, trust and respect.</p>

Title: Developing and Maintaining Good Occupational Working Relationships in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	27
Assessment Hours	10

Title: Confirming the Occupational Method of Work in the Workplace
Unit Number: R/503/2924

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

1	Assess available project data accurately to determine the occupational method of work.	1.1	Interpret and extract information from drawings, specifications, schedules, manufacturer's information, methods of work, risk assessments and programmes of work.
		1.2	Explain how to summarise the following project data: <ul style="list-style-type: none">• Required quantities.• Specifications.• Detailed drawings.• Health and safety requirements.• Timescales.• Scope of works.
		1.3	Explain the different methods of assessing available project data.
		1.4	Explain how to use project data to interpret the work method, in relation to: <ul style="list-style-type: none">• Standard work procedures.• Sequence of work.• Organisation of resources (people, equipment, materials).• Work techniques.• Working conditions (health, safety and welfare).• Risk assessment.
2	Obtain additional information from alternative sources in cases where the available project data is insufficient.	2.1	Collect and collate additional information from alternative sources to clarify the work to be carried out.
		2.2	Explain different methods and techniques of obtaining additional information from the following alternative sources when available project data is insufficient: <ul style="list-style-type: none">• Customers or representatives.• Suppliers.• Regulatory authorities.• Manufacturer's literature.

3	Identify work methods that will make best use of resources and meet project, statutory and contractual requirements.	3.1	Examine potential work methods to carry out the occupational work activity.
		3.2	Determine which work methods will make best use of relevant resources and meet health and safety requirements relating to technical and/or project criteria.
		3.3	Explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against technical criteria, in relation to: <ul style="list-style-type: none"> • Health and safety welfare (principles of protection). • Fire protection. • Access and egress. • Equipment availability. • Availability of competent workforce. • Pollution risk. • Waste and disposal. • Zero and low carbon outcomes. • Weather conditions.
		3.4	Explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against project criteria, in relation to: <ul style="list-style-type: none"> • Conforming to statutory requirements. • Customer and user needs. • Contract requirements in terms of time, quantity and quality. • Environmental considerations.
		3.5	Explain how different methods of work can achieve zero/low carbon outcomes.
4	Confirm and communicate the selected work method to relevant personnel.	4.1	Confirm the selected occupational work method that meets project, statutory and contractual requirements.
		4.2	Communicate appropriately to relevant people on the selected occupational work method.
		4.3	Describe the different techniques and methods of confirming and communicating work methods to relevant people.
		4.4	Explain the principles of equality and diversity and how to apply them when working and communicating with others.

Title: Confirming the Occupational Method of Work in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	37
Assessment Hours	10

Title:

Working on Conservation and Restoration Projects in the Workplace

Unit Number:

T/651/1381

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

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| 1 | Interpret the information relating to the work and resources when working on conservation and restoration projects. | 1.1 | Interpret the information relating to the work and resources as relevant to geographical location and climatic conditions to confirm its relevance for the following: <ul style="list-style-type: none">• Drawings.• Specifications.• Schedules.• Method statements.• Risk assessments.• Manufacturers' and suppliers' information.• Oral, written or electronic instructions.• Current regulations, legislation, official guidance and permits. |
| | | 1.2 | Comply with information and/or instructions derived from risk assessments and method statements. |
| | | 1.3 | Describe why organisational procedures have been developed and how they are implemented. |
| | | 1.4 | Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none">• Drawings.• Specifications.• Schedules.• Method statements.• Risk assessments.• Manufacturers' and suppliers' information.• Contractual information.• Current legislation, regulations, official guidance and permits including but not limited to listed buildings and scheduled monuments.• Conservation reports and plans.• Oral, written or electronic instructions. |
| | | 1.5 | Explain the importance of organisational procedures to solve problems with the information, and why it is important to follow them. |

- 2 Know how to comply with environmentally responsible work practices to meet current legislation and official guidance when working on conservation and restoration projects.
- 2.1 Describe how to comply with environmentally responsible work practices to meet current legislation and official guidance when dealing with potential accidents, health hazards and the environment, whilst working in the workplace in relation to:
- Below ground level.
 - Confined spaces.
 - Working at height.
 - Tools, plant and equipment.
 - Materials and substances.
 - Moving and storing materials by manual handling and mechanical lifting.
- 2.2 Describe the organisational and site-specific security procedures for tools, plant and equipment in relation to:
- Site.
 - Workplace.
 - Vehicles.
 - Company.
 - Operatives.
 - Clients.
 - The general public.
- 2.3 Explain the accident reporting procedures and who is responsible for making the report.

- 3 Maintain safe and healthy work practices when working on conservation and restoration projects.
- 3.1 Outline information for relevant, current legislation, official guidance and site-specific requirements and how it is applied.
- 3.2 Demonstrate compliance with relevant, current legislation and official guidance to carry out the work and maintain safe and healthy work practices relating to the following:
- Methods of work.
 - Safe use of appropriate personal protective equipment (PPE).
 - Safe use of access or lifting equipment.
 - Safe use, storage and handling of materials, tools and equipment.
 - Safe use of health and safety control equipment.
 - Specific risks to occupational health and safety including mental health awareness.
 - Specific risks associated with hazardous or asbestos containing materials.
 - Specific risks associated with heat, particulates, gas and electricity associated with processes, equipment and materials.
- 3.3 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used, in relation to:
- Collective protective measures.
 - Personal protective equipment (PPE).
 - Respiratory protective equipment (RPE).
 - Local exhaust ventilation (LEV).
- 3.4 Describe how the relevant health and safety control equipment should be used in accordance with the work instructions.

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| 3 | <i>Cont.</i> | <p>3.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:</p> <ul style="list-style-type: none"> • Fires and the types of fire extinguishers and how and when they are used in relation to water, CO2, foam and powder. • Spillages and injuries. • Emergencies relating to occupational activities. • Identification of and reporting of hazardous substances including but not limited to asbestos containing materials and lead carbonate. <p>3.6 Describe how to report risks and hazards identified by the following:</p> <ul style="list-style-type: none"> • Methods of work. • Risk assessments. • Personal assessment. • Manufacturers' technical information. • Statutory regulations. • Official guidance. • Control of Substances Hazardous to Health (COSHH). |
| 4 | Select the required quantity and quality of resources for the methods of work to work on conservation and restoration projects. | <p>4.1 Select resources associated with own work in relation to:</p> <ul style="list-style-type: none"> • Materials and components. • Tools and equipment. <p>4.2 Describe why the characteristics, quality, uses, sustainability, suitability, limitations and defects associated with the resources are important and how defects should be reported.</p> <p>4.3 Explain why sustainable and ethical work practices and materials should be adopted.</p> <p>4.4 Describe how to confirm the resources and materials conform with the specification.</p> |

4	<i>Cont.</i>	<p>4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to:</p> <ul style="list-style-type: none"> • Conservation and restoration materials and structural components. • Hand and power tools and ancillary equipment. • Digital equipment. <p>4.6 Explain the organisational procedures to select resources, why they have been developed and how they are used.</p> <p>4.7 Describe how to identify and report the hazards associated with the resources and methods of work and how they are managed with reference to method statements and risk assessments.</p> <p>4.8 Describe methods of calculating the quantity, length, area and wastage associated with the method and procedure to work on conservation and restoration projects.</p>
5	Minimise the risk of damage to the work and surrounding area when working on conservation and restoration projects.	<p>5.1 Comply with organisational procedures to minimise the risk of damage to the work and surrounding area by:</p> <ul style="list-style-type: none"> • Taking relevant steps to protect the work and its surrounding area from accidental or unintended damage. • Working with an awareness of the environment in liaison with other occupations. • Maintaining a safe, clear and tidy work area. • Controlling and disposing of waste in accordance with current legislation. <p>5.2 Explain why it is important to maintain a safe, clear and tidy work area.</p> <p>5.3 Describe how to protect work and its surrounding area from damage and the purpose of protection from general workplace activities, other operations and adverse weather conditions and how to minimise damage.</p>

5	<i>Cont.</i>	5.4	<p>Explain how to, and the importance of, carrying out the safe disposal of waste in accordance with the following:</p> <ul style="list-style-type: none"> • Environmental responsibilities. • Organisational procedures. • Manufacturers' information. • Suppliers' information. • Statutory regulations. • Official guidance.
6	Complete the work within the allocated time when working on conservation and restoration projects.	6.1	<p>Demonstrate completion of the work within the estimated, allocated time, taking account of climatic conditions, in accordance with organisational procedures, the programme of work and to meet the needs of other occupations and/or client.</p>
		6.2	<p>Describe the programme of work to be carried out including the estimated and allocated time and explain why deadlines should be kept or reported if likely to be missed, in relation to:</p> <ul style="list-style-type: none"> • The types of progress charts, timetables and estimated times. • The organisational procedures for reporting circumstances which will affect the work programme.

- 7 Comply with the given contract and specification information to carry out the work safely and efficiently.
- 7.1 Demonstrate the following work skills to:
- Measure.
 - Mark out.
 - Adapt.
 - Align.
 - Apply.
 - Make good.
 - Maintain.
 - Repair.
 - Conserve.
 - Restore or reinstate.
 - Finish.
 - Position and secure.
- 7.2 Use and maintain:
- Hand and power tools.
 - Ancillary equipment.
- 7.3 Use skills for heritage and historical conservation and restoration projects to sample, select, prepare, match, maintain and repair to working instructions, for at least one of the following:
- Roofing.
 - Lead work and hard metal roofing.
 - Brickwork.
 - Earthen structures.
 - Dry stone.
 - Stonemasonry.
 - Decorative occupations.
 - Plastering.
 - Wall and floor tiling.
 - Carpentry and joinery.
 - Iron or metal work.
 - Thatching.
 - Lime worker.

7 Cont.

7.4 Describe how the methods of work to meet the specification are carried out and how problems are identified and reported, by the application of knowledge for safe, healthy and sustainable work practices, procedures and skills relating to:

- How to validate appropriate ways in which the work should be carried out.
- How to recognise sensitive areas.
- How to maintain heritage and archaeological integrity.
- How to maintain the principles of minimum intervention and reversible alterations.
- When to remove deteriorated and inappropriate materials.
- How to remove, repair, restore and replace fabric, materials and structural components.
- The effects of climate change on projects.
- Adaptation measures that can be applied to the project.
- Retrofit measures that can be applied to the project.
- How to repair fabric, materials or structural components in-situ.
- Why it is necessary to maintain the existing structure.
- How to integrate existing and appropriate new constructional components and finishes.
- How to protect in-situ and store salvageable fabric, materials and structural components, including recycling and re-using to minimise waste.
- Why it is necessary to stop work at the point where guesswork begins and report findings.
- How to record work carried out (written and digital formats).
- How to recognise and report endangered and protected flora and fauna.
- How and when to use hand and power tools and ancillary equipment.
- How and why operative care and maintenance of all hand and power tools and ancillary equipment is carried out.

7	<i>Cont.</i>	<i>Cont.</i>	<ul style="list-style-type: none"> • The relevance of an assessment of significance. • How to recognise specific requirements for: <ul style="list-style-type: none"> ○ structures of special interest. ○ traditional construction. ○ hard-to-treat buildings. ○ historical significance. • How to work with, around and in close proximity to plant and machinery.
		7.5	Describe the importance of methods of work, interpersonal relations and communication and the needs of other occupations associated with working on conservation and restoration projects.
		7.6	Explain the organisational procedures with respect to site behaviours, and recognise and action fairness, inclusion and respect within the working environment and how to address and report inappropriate site behaviours.

Endorsements

This unit has the following endorsement requirements:

One of the following:

- Roofing.
- Lead work and hard metal roofing.
- Brickwork.
- Earthen structures.
- Stonemasonry.
- Decorative Occupations.
- Plastering.
- Wall and floor tiling.
- Carpentry and joinery.
- Iron or metalwork.
- Thatching.
- Lime worker.

Title: Working on Conservation and Restoration Projects in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	104
Assessment Hours	15

Title: Conserving or Restoring Stonemasonry, Brickwork or Earthen Structures in the Workplace
Unit Number: D/616/9200

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

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| 1 | Interpret the information relating to the work and resources when conserving or restoring stonemasonry, brickwork or earthen structures. | 1.1 | Interpret the information relating to the work and resources as relevant to geographical location and climatic conditions to confirm its relevance for the following: <ul style="list-style-type: none">• Drawings.• Specifications.• Schedules.• Method statements.• Risk assessments.• Manufacturers' and suppliers' information.• Oral, written or electronic instructions.• Current regulations, legislation, official guidance and permits. |
| | | 1.2 | Comply with information and/or instructions derived from risk assessments and method statements. |
| | | 1.3 | Describe why organisational procedures have been developed and how they are implemented. |
| | | 1.4 | Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none">• Drawings.• Specifications.• Schedules.• Method statements.• Risk assessments.• Manufacturers' and suppliers' information.• Contractual information.• Current legislation, regulations, official guidance and permits including but not limited to listed buildings and scheduled monuments.• Conservation reports and plans.• Oral, written or electronic instructions. |
| | | 1.5 | Explain the importance of organisational procedures to solve problems with the information, and why it is important to follow them. |

- 2 Know how to comply with environmentally responsible work practices to meet current legislation and official guidance when conserving or restoring stonemasonry, brickwork or earthen structures.
- 2.1 Describe how to comply with environmentally responsible work practices to meet current legislation and official guidance when dealing with potential accidents, health hazards and the environment, whilst working in the workplace in relation to:
- Below ground level.
 - Confined spaces.
 - Working at height.
 - Tools, plant and equipment.
 - Materials and substances.
 - Moving and storing materials by manual handling and mechanical lifting.
- 2.2 Describe the organisational and site-specific security procedures for tools, plant and equipment in relation to:
- Site.
 - Workplace.
 - Vehicles.
 - Company.
 - Operatives.
 - Clients.
 - The general public.
- 2.3 Explain the accident reporting procedures and who is responsible for making the report.

- 3 Maintain safe and healthy work practices when conserving or restoring stonemasonry, brickwork or earthen structures.
- 3.1 Outline information for relevant, current legislation, official guidance and site-specific requirements and how it is applied.
- 3.2 Demonstrate compliance with relevant, current legislation and official guidance to carry out the work and maintain safe and healthy work practices relating to the following:
- Methods of work.
 - Safe use of appropriate personal protective equipment (PPE).
 - Safe use of access or lifting equipment.
 - Safe use, storage and handling of materials, tools and equipment.
 - Safe use of health and safety control equipment.
 - Specific risks to occupational health and safety including mental health awareness.
 - Specific risks associated with hazardous or asbestos containing materials.
 - Specific risks associated with heat, particulates, gas and electricity associated with processes, equipment and materials.
- 3.3 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used, in relation to:
- Collective protective measures.
 - Personal protective equipment (PPE).
 - Respiratory protective equipment (RPE).
 - Local exhaust ventilation (LEV).
- 3.4 Describe how the relevant health and safety control equipment should be used in accordance with the work instructions.

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| 3 | <i>Cont.</i> | <p>3.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:</p> <ul style="list-style-type: none"> • Fires and the types of fire extinguishers and how and when they are used in relation to water, CO2, foam and powder. • Spillages and injuries. • Emergencies relating to occupational activities. • Identification of and reporting of hazardous substances including but not limited to asbestos containing materials and lead carbonate. <p>3.6 Describe how to report risks and hazards identified by the following:</p> <ul style="list-style-type: none"> • Methods of work. • Risk assessments. • Personal assessment. • Manufacturers' technical information. • Statutory regulations. • Official guidance. • Control of Substances Hazardous to Health (COSHH). |
| 4 | Select the required quantity and quality of resources for the methods of work to conserve or restore stonemasonry, brickwork or earthen structures. | <p>4.1 Select resources associated with own work in relation to:</p> <ul style="list-style-type: none"> • Materials and components. • Tools and equipment. <p>4.2 Describe why the characteristics, quality, uses, sustainability, suitability, limitations and defects associated with the resources are important and how defects should be reported.</p> <p>4.3 Explain why sustainable and ethical work practices and materials should be adopted.</p> <p>4.4 Describe how to confirm the resources and materials conform with the specification.</p> |

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| 4 | <i>Cont.</i> | <p>4.5 Describe how the resources should be used and how any problems associated with the resources are reported in relation to:</p> <ul style="list-style-type: none"> • Timber. • Props. • Brick. • Stone. • Aggregates. • Cement. • Lime. • Mortar (lime and cements). • Earth. • Damp-proof barriers (slate). • Insulation. • Fixings. • Aftercare equipment and associated ancillary items. • Hand and power tools and ancillary equipment. • Digital equipment. |
| | | <p>4.6 Explain the organisational procedures to select resources, why they have been developed and how they are used.</p> |
| | | <p>4.7 Describe how to identify and report the hazards associated with the resources and methods of work and how they are managed with reference to method statements and risk assessments.</p> |
| | | <p>4.8 Describe methods of calculating the quantity, length, area and wastage associated with the method and procedure to conserve or restore stonemasonry, brickwork or earthen structures.</p> |
| 5 | <p>Minimise the risk of damage to the work and surrounding area when conserving or restoring stonemasonry, brickwork or earthen structures.</p> | <p>5.1 Comply with organisational procedures to minimise the risk of damage to the work and surrounding area by:</p> <ul style="list-style-type: none"> • Taking relevant steps to protect the work and its surrounding area from accidental or unintended damage. • Working with an awareness of the environment in liaison with other occupations. • Maintaining a safe, clear and tidy work area. • Controlling and disposing of waste in accordance with current legislation. |

- 5 *Cont.*
- 5.2 Explain why it is important to maintain a safe, clear and tidy work area.
- 5.3 Describe how to protect work and its surrounding area from damage and the purpose of protection from general workplace activities, other operations and adverse weather conditions and how to minimise damage.
- 5.4 Explain how to, and the importance of, carrying out the safe disposal of waste in accordance with the following:
- Environmental responsibilities.
 - Organisational procedures.
 - Manufacturers' information.
 - Suppliers' information.
 - Statutory regulations.
 - Official guidance.
- 6 Minimise the risk of damage to the work and surrounding area when conserving or restoring stonemasonry, brickwork or earthen structures.
- 6.1 Demonstrate completion of the work within the estimated, allocated time, taking account of climatic conditions, in accordance with organisational procedures, the programme of work and to meet the needs of other occupations and/or client.
- 6.2 Describe the programme of work to be carried out including the estimated and allocated time and explain why deadlines should be kept or reported if likely to be missed, in relation to:
- The types of progress charts, timetables and estimated times.
 - The organisational procedures for reporting circumstances which will affect the work programme.

- 7 Comply with the contract and specification information to carry out the work safely and efficiently.
- 7.1 Demonstrate the following work skills to:
- Measure.
 - Mark out.
 - Adapt.
 - Align.
 - Apply.
 - Make good.
 - Maintain.
 - Repair.
 - Conserve.
 - Restore or reinstate.
 - Finish.
 - Position and secure.
- 7.2 Use and maintain:
- Hand and power tools.
 - Ancillary equipment.
- 7.3 Prepare, conserve, repair or refurbish existing stonemasonry, brickwork or earthen structures to working instructions, for the following:
- Replicate existing structures.
 - Stabilise existing structures.
 - Prepare mortars appropriate to the existing.
 - Joint finishes.
 - Integrate surface finishes.

7.4 Describe how the methods of work to meet the specification are carried out and how problems are identified and reported, by the application of knowledge for safe, healthy and sustainable work practices, procedures and skills relating to:

- How to erect and dismantle temporary support to structures.
- How to replicate existing structures to agreed specification (honest repair).
- How to stabilise structures.
- Why it is important joint finish structures to agreed specification.
- Why it is important to prepare mortars to agreed specification.
- How to render surfaces.
- Why it is necessary to validate appropriate ways in which the work should be carried out.
- How to recognise sensitive areas.
- Why it is important to maintain heritage and archaeological integrity.
- Why it is important to maintain the principles of minimum intervention and reversible alterations.
- Why it is necessary to stop work at the point when guesswork begins and report findings.
- How to record work carried out (written and digital formats).
- Why it is necessary to recognise and report endangered and protected flora and fauna.
- How to remove deteriorated and inappropriate materials.
- Why it is necessary to maintain the existing structure.
- How to integrate existing and new constructional components or finishes.
- How to store salvageable materials and structural components.
- How to use all hand and power tools and ancillary equipment.
- How to work at height using access equipment.
- The relevance of an assessment of significance.
- How to recognise specific requirements for:
 - Structures of special interest.
 - Traditional construction.
 - Hard-to-treat buildings.
 - Historical significance.
- How to work with, around and in close proximity to plant and machinery.

7	<i>Cont.</i>	<i>Cont.</i>	<ul style="list-style-type: none"> How and why operative care and maintenance of all hand and power tools and ancillary equipment is carried out.
		7.5	Describe the importance of methods of work, interpersonal relations and communication and the needs of other occupations associated with conserving or restoring stonemasonry, brickwork or earthen structures.
		7.6	Explain the organisational procedures with respect to site behaviours, and recognise and action fairness, inclusion and respect within the working environment and how to address and report inappropriate site behaviours.

Title: Conserving or Restoring Stonemasonry, Brickwork or Earthen Structures in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	80
Assessment Hours	20

Title:

Preparing and Mixing Lime Mortars in the Workplace

Unit Number:

H/616/9201

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

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| 1 | Interpret the information relating to the work and resources when preparing and mixing lime mortars. | 1.1 | Interpret the information relating to the work and resources as relevant to geographical location and climatic conditions to confirm its relevance for the following: <ul style="list-style-type: none">• Drawings.• Specifications.• Schedules.• Method statements.• Risk assessments.• Manufacturers' and suppliers' information.• Oral, written or electronic instructions.• Current regulations, legislation, official guidance and permits. |
| | | 1.2 | Comply with information and/or instructions derived from risk assessments and method statements. |
| | | 1.3 | Describe why organisational procedures have been developed and how they are implemented. |
| | | 1.4 | Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none">• Drawings.• Specifications.• Schedules.• Method statements.• Risk assessments.• Manufacturers' and suppliers' information.• Contractual information.• Current legislation, regulations, official guidance and permits including but not limited to listed buildings and scheduled monuments.• Conservation reports and plans.• Oral, written or electronic instructions. |
| | | 1.5 | Explain the importance of organisational procedures to solve problems with the information, and why it is important to follow them. |

- 2 Know how to comply with environmentally responsible work practices to meet current legislation and official guidance when preparing and mixing lime mortars.
- 2.1 Describe how to comply with environmentally responsible work practices to meet current legislation and official guidance when dealing with potential accidents, health hazards and the environment, whilst working in the workplace in relation to:
- Below ground level.
 - Confined spaces.
 - Working at height.
 - Tools, plant and equipment.
 - Materials and substances.
 - Moving and storing materials by manual handling and mechanical lifting.
- 2.2 Describe the organisational and site-specific security procedures for tools, plant and equipment in relation to:
- Site.
 - Workplace.
 - Vehicles.
 - Company.
 - Operatives.
 - Clients.
 - The general public.
- 2.3 Explain the accident reporting procedures and who is responsible for making the report.

- 3 Maintain safe and healthy work practices when preparing and mixing lime mortars.
- 3.1 Outline information for relevant, current legislation, official guidance and site-specific requirements and how it is applied.
- 3.2 Demonstrate compliance with relevant, current legislation and official guidance to carry out the work and maintain safe and healthy work practices relating to the following:
- Methods of work.
 - Safe use of appropriate personal protective equipment (PPE).
 - Safe use of access or lifting equipment.
 - Safe use, storage and handling of materials, tools and equipment.
 - Safe use of health and safety control equipment.
 - Specific risks to occupational health and safety including mental health awareness.
 - Specific risks associated with hazardous or asbestos containing materials.
 - Specific risks associated with heat, particulates, gas and electricity associated with processes, equipment and materials.
- 3.3 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used, in relation to:
- Collective protective measures.
 - Personal protective equipment (PPE).
 - Respiratory protective equipment (RPE).
 - Local exhaust ventilation (LEV).
- 3.4 Describe how the relevant health and safety control equipment should be used in accordance with the work instructions.

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| 3 | <i>Cont.</i> | <p>3.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:</p> <ul style="list-style-type: none"> • Fires and the types of fire extinguishers and how and when they are used in relation to water, CO2, foam and powder. • Spillages and injuries. • Emergencies relating to occupational activities. • Identification of and reporting of hazardous substances including but not limited to asbestos containing materials and lead carbonate. <p>3.6 Describe how to report risks and hazards identified by the following:</p> <ul style="list-style-type: none"> • Methods of work. • Risk assessments. • Personal assessment. • Manufacturers' technical information. • Statutory regulations. • Official guidance. • Control of Substances Hazardous to Health (COSHH). |
| 4 | Select the required quantity and quality of resources for the methods of work to prepare and mix lime mortars. | <p>4.1 Select resources associated with own work in relation to:</p> <ul style="list-style-type: none"> • Materials and components. • Tools and equipment. <p>4.2 Describe why the characteristics, quality, uses, sustainability, suitability, limitations and defects associated with the resources are important and how defects should be reported.</p> <p>4.3 Explain why sustainable and ethical work practices and materials should be adopted.</p> <p>4.4 Describe how to confirm the resources and materials conform with the specification.</p> |

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| 4 | <i>Cont.</i> | <p>4.5 Describe how the resources should be used and how any problems associated with the resources are reported in relation to:</p> <ul style="list-style-type: none"> • Aggregates. • Limes: <ul style="list-style-type: none"> ○ Non-hydraulic (putty lime). ○ Hydraulic. ○ Pozzolans. ○ Fibres. • Hand and power tools, plant, mixing machinery and associated equipment. • Digital equipment. <p>4.6 Explain the organisational procedures to select resources, why they have been developed and how they are used.</p> <p>4.7 Describe how to identify and report the hazards associated with the resources and methods of work and how they are managed with reference to method statements and risk assessments.</p> <p>4.8 Describe methods of calculating the quantity, length, area and wastage associated with the method and procedure to prepare and mix lime mortars.</p> |
| 5 | Minimise the risk of damage to the work and surrounding area when preparing and mixing lime mortars. | <p>5.1 Comply with organisational procedures to minimise the risk of damage to the work and surrounding area by:</p> <ul style="list-style-type: none"> • Taking relevant steps to protect the work and its surrounding area from accidental or unintended damage. • Working with an awareness of the environment in liaison with other occupations. • Maintaining a safe, clear and tidy work area. • Controlling and disposing of waste in accordance with current legislation. <p>5.2 Explain why it is important to maintain a safe, clear and tidy work area.</p> <p>5.3 Describe how to protect work and its surrounding area from damage and the purpose of protection from general workplace activities, other operations and adverse weather conditions and how to minimise damage.</p> |

5	<i>Cont.</i>	5.4	<p>Explain how to, and the importance of, carrying out the safe disposal of waste in accordance with the following:</p> <ul style="list-style-type: none"> • Environmental responsibilities. • Organisational procedures. • Manufacturers' information. • Suppliers' information. • Statutory regulations. • Official guidance.
6	Complete the work within the allocated time when preparing and mixing lime mortars.	6.1	Demonstrate completion of the work within the estimated, allocated time, taking account of climatic conditions, in accordance with organisational procedures, the programme of work and to meet the needs of other occupations and/or client.
		6.2	<p>Describe the programme of work to be carried out including the estimated and allocated time and explain why deadlines should be kept or reported if likely to be missed, in relation to:</p> <ul style="list-style-type: none"> • The types of progress charts, timetables and estimated times. • The organisational procedures for reporting circumstances which will affect the work programme.
7	Comply with the contract and specification information to carry out the work safely and efficiently.	7.1	<p>Demonstrate the following work skills to prepare and mix lime mortars:</p> <ul style="list-style-type: none"> • Grade aggregates. • Measure raw materials using gauging buckets. • Batch. • Mix or knock up. • Create control samples. • Store and protect.
		7.2	<p>Use and maintain:</p> <ul style="list-style-type: none"> • Hand and power tools. • Mixing machinery and associated equipment.

7 Cont.

7.3 Prepare the mixing of non-hydraulic (lime putty) and hydraulic lime mortars (coarse and fine stuff) to include lime mortars without additives or fibres, mechanically and by hand to work instructions for at least one of the following:

- Lime mortars and additives.
- Lime mortars with fibres (natural or synthetic).

7.4 Demonstrate how to work safely and cleanly in protected and well-ventilated areas when preparing and mixing lime mortars.

7.5 Describe how the methods of work to meet the specification are carried out and how problems are identified and reported, by the application of knowledge for safe, healthy and sustainable work practices, procedures and skills relating to:

- How to source and select materials, lime, aggregates, pozzolans, pigments, additives, fibres.
- The complete lime cycle.
- Why it is necessary to mix materials in ratios.
- How to mix or knock up lime mortars – non-hydraulic (lime putty), hydraulic (with additives and fibres).
- How to identify natural and synthetic fibres to be used in lime mortars.
- The advantages and disadvantages of natural and synthetic fibres in lime mortar mixes.
- The benefits of pre-mixing non-hydraulic lime renders and plasters.
- The difference between a hot lime mix and a traditional non-hydraulic lime putty-based mix.
- When would a hot lime mix be used rather than a traditional non-hydraulic lime putty-based mix.
- Where and when could a chalk and hydrated lime mix be used.
- Why it is necessary to protect and store non-hydraulic lime mortars and putties from the elements:
 - Frost.
 - Rain.
 - Heat.
- How to prevent premature carbonisation of pre-mixed non-hydraulic lime mortars.

7	<i>Cont.</i>	<i>Cont.</i>	<ul style="list-style-type: none"> • Why it is necessary to create control samples. • Why it is important to work safely and cleanly in protected, well-ventilated areas. • Where and when to use coarse (backing coats) and fine stuff (finishing coats) . • How natural fibres degrade. • The consequences of natural fibres degrading. • How to use hand and power tools and associated equipment how to use mixing machinery. • How to work at height using access equipment. • The relevance of an assessment of significance. • How to recognise specific requirements for: <ul style="list-style-type: none"> ○ Structures of special interest. ○ Traditional construction. ○ Hard-to-treat buildings . ○ Historical significance. • How to work with, around and in close proximity to plant and machinery. • How to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment. • How and why operative care and maintenance of all hand and power tools and mixing and associated equipment is carried out.
		7.6	Describe the importance of methods of work, interpersonal relations and communication and the needs of other occupations associated with preparing and mixing lime mortars.
		7.7	Explain the organisational procedures with respect to site behaviours, and recognise and action fairness, inclusion and respect within the working environment and how to address and report inappropriate site behaviours.

Endorsements

This unit has the following endorsement requirements:

Preparing and mixing non-hydraulic (lime putty) and hydraulic lime mortars (coarse and fine stuff) for at least **one** of the following:

- Lime mortars and additives
- Lime mortars with fibres (natural or synthetic)

Title: Preparing and Mixing Lime Mortars in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	70
Assessment Hours	10

Title: Conforming to General Health, Safety and Welfare in the Workplace
Unit Number: M/508/6537

Learning Outcomes

The learner will be able to:

Assessment Criteria

The learner can:

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| 1 | Comply with all workplace health, safety and welfare legislation requirements. | 1.1 | Comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area. |
| | | 1.2 | 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: <ul style="list-style-type: none">• Collective protective measures.• Personal protective equipment (PPE).• Respiratory protective equipment (RPE).• 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. |

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| 2 | Recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures. | <p>2.1 Report any hazards created by changing circumstances within the workplace in accordance with organisational procedures.</p> <p>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.</p> <p>2.3 List the current Health and Safety Executive top ten safety risks.</p> <p>2.4 List the current Health and Safety Executive top five health risks.</p> <p>2.5 State how changing circumstances within the workplace could cause hazards.</p> <p>2.6 State the methods used for reporting changed circumstances, hazards and incidents in the workplace.</p> |
| 3 | Comply with organisational policies and procedures to contribute to health, safety and welfare. | <p>3.1 Interpret and comply with given instructions to maintain safe systems of work and quality working practices.</p> <p>3.2 Contribute to discussions by offering/providing feedback relating to health, safety and welfare.</p> <p>3.3 Contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures.</p> <p>3.4 Safely store health and safety control equipment in accordance with given instructions.</p> <p>3.5 Dispose of waste and/or consumable items in accordance with legislation.</p> <p>3.6 State the organisational policies and procedures for health, safety and welfare, in relation to:</p> <ul style="list-style-type: none"> • Dealing with accidents and emergencies associated with the work and environment. • Methods of receiving or sourcing information. • Reporting. • Stopping work. • Evacuation. • Fire risks and safe exit procedures. • Consultation and feedback. <p>3.7 State the appropriate types of fire extinguishers relevant to the work.</p> |

3	<i>Cont.</i>	3.8	State how and when the different types of fire extinguishers are used in accordance with legislation and official guidance.
4	Work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area.	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: <ul style="list-style-type: none"> • Recognising when to stop work in the face of serious and imminent danger to self and/or others. • Contributing to discussions and providing feedback. • Reporting changed circumstances and incidents in the workplace. • 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.
5	Comply with and support all organisational security arrangements and approved procedures.	5.1	Provide appropriate support for security arrangements in accordance with approved procedures: <ul style="list-style-type: none"> • During the working day. • On completion of the day's work. • For unauthorised personnel (other operatives and the general public). • For theft.
		5.2	State how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources.

Title: Conforming to General Health, Safety and Welfare in the Workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Subject Sector Area	05.2 Building and Construction
Availability for Use	Shared Unit
Unit Guided Learning Hours	7
Assessment Hours	10



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