



Level 3 NVQ Diploma in Steelfixing Occupations (Construction)

Qualification Specification

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Introduction

The aim of this qualification is to recognise the knowledge, skills and competence of individuals who specialise in steelfixing in the construction industry.

The awarding organisation for this qualification is ProQual Awarding Body and the regulatory body is the Office of Qualifications and Examinations Regulation (Ofqual).

This qualification has been accredited onto the Regulated Qualifications Framework (RQF).

Qualification Profile

Qualification title	ProQual Level 3 NVQ Diploma in Steelfixing Occupations (Construction)
Ofqual qualification number	610/0387/6
Level	Level 3
Total qualification time	291 hours
Guided learning hours	231
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	24/1/2022
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.

Mandatory Units – complete ALL units			
Unit Reference Number	Unit Title	Unit Level	CITB ref. for information
A/503/2772	Confirming work activities and resources for an occupational work area in the workplace	3	209v2
M/503/2915	Developing and maintaining good occupational working relationships in the workplace	5	210v2
R/503/2924	Confirming the occupational method of work in the workplace	3	211v2
M/508/6537	Conforming to general health, safety and welfare in the workplace	1	641v2
Y/508/6533	Moving, handling and storing resources in the workplace	2	643v1
K/650/1225	Fixing reinforcement steel in-situ to complex designs in the workplace	3	811

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 occupationally competent.

Assessors/Internal Quality Assurance

For each competence-based unit centres must be able to provide at least one assessor and one internal quality assurance verifier who are suitably qualified for the specific occupational area. Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or verifier qualifications, such as:

- Level 3 Award in Assessing Competence in the Work Environment
- Level 3 Award in Assessing Vocationally Related Achievement
- Level 3 Certificate in Assessing Vocational Achievement
- Level 4 Award in the Internal Quality Assurance of Assessment Processes and Practices
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practices

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

Candidates must demonstrate the level of knowledge described in the unit. Assessment is the process of measuring a candidate's knowledge and understanding against the standards set in the qualification.

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

Evidence can include:

- assignments/projects/reports
- worksheets
- portfolio of evidence
- record of oral and/or written questioning

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 for this qualification can be found from page 8.

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 Assessment

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 qualifications will be awarded:

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

ProQual Level 3 NVQ Diploma in Steelfixing Occupations (Construction)

Claiming certificates

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

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 certificates.

Title:	Conforming to general health, safety and welfare in the workplace.	
Unit Number:	M/508/6537	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
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.
2 Recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures.	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.

Title:	Conforming to general health, safety and welfare in the workplace.	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
2 continued	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.
3 Comply with organisational policies and procedures to contribute to health, safety and welfare.	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: <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.
	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.

Title:	Conforming to general health, safety and welfare in the workplace.	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
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>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	7

Title:	Confirming work activities and resources for an occupational work area in the workplace	
Unit Number:	A/503/2772	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
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.
	3.3	Evaluate the requirements of significant external factors that could affect the progress of work, in relation to: <ul style="list-style-type: none"> – other related programmes – special working conditions – weather conditions – other occupations/people – resources – health and safety requirements.

Title:	Confirming work activities and resources for an occupational work area in the workplace	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
4 Identify work activities which influence each other and make the best use of the resources available.	4.1	Determine work activities that have an influence on each other.
	4.2	Evaluate which work activities make the best use of available resources in relation to: <ul style="list-style-type: none"> – occupations and/or customers associated with the work – tools, plant and/or ancillary equipment – materials and components.
	4.3	Explain different methods and sources that can identify which work activities influence each other.
	4.4	Describe how to determine the sequence of work activities and how long each work activity will take.
	4.5	Describe what zero and low carbon requirements are.
	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.
5 Identify changed circumstances that require alterations to the work programme and justify them to decision makers.	5.1	Evaluate project progress against the work programme to identify any changed circumstances.
	5.2	Inform line management and/or customers on the type and extent of any required changes to the work programme.
	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.
	5.4	Explain how to assess contractual/work effects resulting from alterations to the work programme.
	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

Title:	Developing and maintaining good occupational working relationships in the workplace	
Unit Number:	M/503/2915	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
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	Communicate on the following work activity information to relevant people following organisational procedures: <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	Explain the different types of work activity related information and to what level of detail the following people would expect to receive: <ul style="list-style-type: none"> – colleagues – employers – customers – contractors – suppliers of products and services – other people affected by the work/project.

Title:	Developing and maintaining good occupational working relationships in the workplace	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
3 Offer advice and help to relevant people about work activities and encourage questions/requests for clarification and comments.	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.
	3.2	Explain the techniques of encouraging questions and/or requests for clarification and comments.
	3.3	Explain the different ways of offering advice and help to different people about work activities, in relation to: <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.	4.1	Engage regular discussions with relevant people about the occupational work activity and/or other occupations involved.
	4.2	Explain the methods of clarifying alternative proposals with relevant people.
	4.3	Explain the methods of suggesting alternative proposals.
5 Resolve differences of opinion in ways that minimise offence and maintain goodwill, trust and respect.	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.
	5.2	Explain the methods and techniques used to resolve differences of opinion in ways which minimise offence and maintain goodwill, trust and respect.

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>
Sector Subject Areas	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	27

Title:	Confirming the occupational method of work in the workplace	
Unit Number:	R/503/2924	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
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.
	2.3	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.

Title:	Confirming the occupational method of work in the workplace	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
<p>3 Identify work methods that will make best use of resources and meet project, statutory and contractual requirements.</p>	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	<p>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:</p> <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	<p>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:</p> <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.
<p>4 Confirm and communicate the selected work method to relevant personnel.</p>	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>
Sector Subject Areas	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	37

Title:	Moving, handling and storing resources in the workplace
Unit Number	Y/508/6533
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>
1 Comply with given information when moving, handling and/or storing resources.	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.
2 Know how to comply with relevant legislation and official guidance when moving, handling and/or storing resources.	2.1 Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> – in the workplace, in confined spaces, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and 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 and 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.
	2.5 Describe how and when the different types of fire extinguishers, relevant to the given occupation, are used in accordance with legislation and official guidance.
3 Maintain safe working practices when moving, handling and/or storing resources.	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.

Title:		Moving, handling and storing resources in the workplace	
Learning outcomes <i>The learner will be able to:</i>		Assessment criteria <i>The learner can:</i>	
3	continued	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: <ul style="list-style-type: none"> – collective protective measures – personal protective equipment (PPE) – respiratory protective equipment (RPE) – 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 fires, spillages, injuries and other task-related hazards.
4	Select the required quantity and quality of resources for the methods of work to move, handle and/or store occupational resources.	4.1	Select the relevant resources to be moved, handled and/or stored, associated with own work.
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the occupational resources in relation to: <ul style="list-style-type: none"> – lifting and handling aids – container(s) – 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.
5	Prevent the risk of damage to occupational resources and surrounding environment when moving, handling and/or storing resources.	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.

Title:		Moving, handling and storing resources in the workplace	
Learning outcomes <i>The learner will be able to:</i>		Assessment criteria <i>The learner can:</i>	
5	continued	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 general workplace activities, other occupations and adverse weather conditions.
		5.5	Explain why the disposal of waste should be carried safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.
6	Complete the work within the allocated time when moving, handling and/or storing resources.	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: <ul style="list-style-type: none"> – progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme.
7	Comply with the given occupational resource information to move, handle and/or store resources to the required guidance.	7.1	Demonstrate the following work skills when moving, handling and/or storing occupational resources: <ul style="list-style-type: none"> – moving, positioning, storing, 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: <ul style="list-style-type: none"> – sheet material – loose material – bagged or wrapped material – fragile material – tools and equipment – components – 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.

Title:	Moving, handling and storing resources 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>
Sector Subject Areas	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	17

Title:	Fixing reinforcement steel in situ to complex designs in the workplace	
Unit Number:	K/650/1225	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
1 Interpret the given information relating to the work and resources when fixing steel in situ to complex designs.	1.1	Interpret and extract relevant information from complex 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"> – complex drawings, including those from digital systems, site instructions, specifications, schedules, method statements, risk assessments, manufacturers' information, current regulations and organisational guidance associated with fixing steel reinforcement in situ to complex designs.
2 Know how to comply with relevant legislation and official guidance when fixing steel in situ to complex designs.	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: <ul style="list-style-type: none"> – in the workplace, below ground level, at height, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and storage of materials and 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 and operative.
	2.3	Explain what the accident reporting procedures are and who is responsible for making the report.
3 Maintain safe and healthy working practices when fixing steel in situ to complex designs.	3.1	Use health and safety control equipment and access equipment (if applicable) safely to carry out the activity in accordance with current legislation and organisational requirements when fixing steel in situ to complex designs.
	3.2	Demonstrate compliance with given information and relevant legislation when fixing steel in situ to complex designs 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

Title:	Fixing reinforcement steel in situ to complex designs in the workplace	
Learning outcomes <i>The learner will be able to:</i>	Assessment criteria <i>The learner can:</i>	
3 Continued	3.3 Explain why and when health and safety control equipment, identified by the principles of prevention should be used, relating to fixing steel in situ 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 – local exhaust ventilation (LEV) – personal protective equipment (PPE) – respiratory protective equipment (RPE) 	
	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 and other task-related activities.	
4 Select the required quantity and quality of resources for the methods of work to fix steel in situ to complex designs.	4.1 Select resources associated with own work in relation to materials, components, fixings, tools, plant, equipment and labour.	
	4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> – pre-cut and bent components, reinforcement steel, tie wire, spacers, embedments, fittings and fixings – hand tools, portable power tools, equipment and plant 	
	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 rectified or 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 and area associated with the method and procedure to fix steel in situ to complex designs.	

Title:		Fixing steel in situ to complex designs in the workplace	
Learning outcomes <i>The learner will be able to:</i>		Assessment criteria <i>The learner can:</i>	
5	Minimise the risk of damage to the work and surrounding area when fixing steel in situ to complex designs.	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 organisational procedures.
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.
6	Complete the work within the allocated time when fixing steel in situ to complex designs.	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: <ul style="list-style-type: none"> – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme.
7	Comply with the given contract information to fix steel in situ to complex designs to the required specification.	7.1	Demonstrate the following work skills when fixing steel in situ to complex designs: <ul style="list-style-type: none"> – planning, sequencing, preparing, coordinating, measuring, marking out, fitting, fixing, positioning, bracing, securing and checking.
		7.2	Select, use and maintain hand tools, portable power tools and ancillary equipment.
		7.3	Plan, sequence, prepare, measure, mark out, fit, fix, position, coordinate and install in situ, reinforcement steel to complex designs to given working instructions in order to form high density steel reinforcement with centres of less than 100mm across all horizontal, vertical or inclined planes and a minimum of 3 layers of reinforcement steel bars in the following:

	<ul style="list-style-type: none"> - slabs - bases - walls with junctions that are not a 90 degree angle and at least one complex curved shape from the following list: <ul style="list-style-type: none"> - circular - elliptical - conical - helical <p>Cast-in embedments which require interpretation of information from multiple sources and in conjunction with other trades to meet the agreed specification.</p>
	<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> - coordinate and lead on fixing reinforcement steel in-situ to complex designs - extract details from steel fixing drawings and schedules (hardcopy, digital and Building Information Modelling) and conveying the information to others - identify, communicate and follow the installation quality requirements - plan and sequence steel fixing and embedment works for complex designs - prepare steel bar and resources for in situ installation - fix steel in situ to complex designs that have steel bars spaced at less than 100mm centres across all horizontal, vertical or inclined planes with a minimum of 3 layers of reinforcement steel in the following complex concrete structures: <ul style="list-style-type: none"> - slabs - bases - walls with junctions that are not a 90 degree angle <p>and one complex curved shape from the following list:</p> <ul style="list-style-type: none"> - circular - elliptical - conical - helical <ul style="list-style-type: none"> - Stairs utilising multi layered reinforcement steel (excluding mesh), including risers with a turn, return or curved landing - prepare cast-in embedments which require interpretation of information from multiple sources and in conjunction with other trades to meet the agreed specification and determine appropriate bracing for complex reinforcement steel sections, fix and secure for section movement:

	<ul style="list-style-type: none"> – temporary bars – permanent support bars (riders) – lifting support bars (rakers) – incorporate reinforcement coupler and continuity systems – understand the flow of information for digital systems – recognise and determine when specialist skills and knowledge are required and report accordingly – work with, around and in close proximity to plant and machinery – use hand tools, portable power tools and equipment – work at height – use access equipment
	<p>7.5 Describe the needs of other occupations and how to communicate effectively within a team when fixing reinforcement steel in situ to complex designs</p> <p>7.6 Describe how to maintain hand tools, portable power tools and ancillary equipment used when fixing steel in situ to complex designs</p>

Title:	Fixing steel in situ in the workplace
Additional information about this unit	
Assessment Guidance	<p>This unit must be assessed in a work environment and 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 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>
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	110
Assessment hours	10



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