



Level 2 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). The specification for these qualifications has been approved by the Curriculum Examinations and Assessment (CCEA) for use by centres in Northern Ireland.

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

Qualification Profile

Qualification title	ProQual Level 2 NVQ Diploma in Steelfixing Occupations (Construction)
Ofqual qualification number	601/1957/3
Level	Level 2
Total qualification time	480 hours
Guided learning hours	160
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	1/12/13
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, plus a minimum of TWO Optional units.

Mandatory Units – complete ALL units			
Unit Reference Number	Unit Title	Unit Level	GLH
A/503/1170	Conforming to general health, safety and welfare in the workplace	1	7
J/503/1169	Conforming to productive working practices in the workplace	2	10
F/503/1171	Moving, handling and storing resources in the workplace	2	17
Optional Units – complete a minimum of TWO units			
Unit Reference Number	Unit Title	Unit Level	GLH
T/504/9585	Cutting and bending reinforcement steel to shape in the workplace <i>Unit Endorsements:</i> One of the following endorsements required: <i>Hand bending machines</i> <i>Power bending machines</i>	2	53
J/504/9591	Fixing steel in situ in the workplace <i>Unit Endorsements:</i> Four of the following endorsements required: <i>Beams</i> <i>Bases</i> <i>Columns</i> <i>Slabs</i> <i>Staircases</i> <i>Walls</i>	2	73
M/504/9598	Prefabricating reinforcement steel sections in the workplace <i>Unit Endorsements:</i> Two of the following endorsements required: <i>Temporary construction bars</i> <i>Bracing</i> <i>Lifting points</i>	2	83

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:

- Award in Assessing Competence in the Work Environment
- Award in Assessing Vocationally Related Achievement
- Certificate in Assessing Vocational Achievement
- Award in the Internal Quality Assurance of Assessment Processes and Practices
- 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
- candidate test papers

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 unit achieved, and
- A certificate giving the full qualification title -

ProQual Level 2 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.

Learning Outcomes and Assessment Criteria

Unit A/503/1170

Conforming to General Health, Safety and Welfare in the Workplace

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
<p>1 Comply with all workplace health, safety and welfare legislation requirements.</p>	<p>1.1 Comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area.</p> <p>1.2 Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements.</p> <p>1.3 Comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment.</p> <p>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:</p> <ul style="list-style-type: none"> – collective protective measures – personal protective equipment (PPE) – respiratory protective equipment (RPE) – local exhaust ventilation (LEV). <p>1.5 State how the health and safety control equipment relevant to the work should be used in accordance with the given instructions.</p> <p>1.6 State which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment.</p> <p>1.7 State why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area.</p> <p>1.8 State how to comply with control measures that have been identified by risk assessments and safe systems of work.</p>

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

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

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

- 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.
- 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:
 - 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:
 - during the working day
 - on completion of the day's work
 - for unauthorised personnel (other operatives and the general public)
 - for theft.

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

- 5.2 State how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources.

Unit J/503/1169

Conforming to Productive Working Practices in the Workplace

Learning Outcome - The learner will:		Assessment Criterion - The learner can:	
1	Communicate with others to establish productive work practices.	1.1	Communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively.
		1.2	Describe the different methods of communicating with line management, colleagues and customers.
		1.3	Describe how to use different methods of communication to ensure that the work carried out is productive.
2	Follow organisational procedures to plan the sequence of work.	2.1	Interpret relevant information from organisational procedures in order to plan the sequence of work.
		2.2	Plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively.
		2.3	Describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to: <ul style="list-style-type: none"> – using resources for own and other’s work requirements – allocating appropriate work to employees – organising the work sequence – reducing carbon emissions.
		2.4	Describe how to contribute to zero/low carbon work outcomes within the built environment.
3	Maintain relevant records in accordance with the organisational procedures.	3.1	Complete relevant documentation according to the occupation as required by the organisation.
		3.2	Describe how to complete and maintain documentation in accordance with organisational procedures, in relation to: <ul style="list-style-type: none"> – job cards – worksheets – material/resource lists – time sheets.

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

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| 4 | Maintain good working relationships when conforming to productive working practices. | 3.3 | Explain the reasons for ensuring documentation is completed clearly and within given timescales. |
| | | 4.1 | Carry out work productively, to the agreed specification, in conjunction with line management, colleagues, customers and/or other relevant people involved in the work to maintain good working relationships. |
| | | 4.2 | Apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others. |
| | | 4.3 | Describe how to maintain good working relationships, in relation to: <ul style="list-style-type: none">– individuals– customer and operative– operative and line management– own and other occupations. |
| | | 4.4 | Describe why it is important to work effectively with line management, colleagues and customers. |
| | | 4.5 | Describe how working relationships could have an effect on productive working. |
| | | 4.6 | Describe how to apply principles of equality and diversity when communicating and working with others. |

Unit F/503/1171

Moving, Handling and Storing Resources in the Workplace

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
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: – 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.

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

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| 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. |
| | | 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. |

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

		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.
		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 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 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:

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

- 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.

Unit T/504/9585

Cutting and Bending Reinforcement Steel to Shape in the Workplace

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Interpret the given information relating to the work and resources when cutting and bending reinforcement steel.	1.1 Interpret and extract relevant information from drawings, specifications, schedules and bending 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: – drawings, specifications, schedules, bending schedules, method statements, risk assessments, manufacturers' information, oral/written information, current regulations and official guidance associated with cutting and bending.
2 Know how to comply with relevant legislation and official guidance when cutting and bending reinforcement steel.	2.1 Describe their responsibilities regarding potential accidents and health hazards, whilst working: – in the workplace, below ground level, at height, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when cutting and bending reinforcement steel.	3.1 Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when cutting and bending reinforcement steel to shape.

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

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| 4 | Select the required quantity and quality of resources for the methods of work to cut and bend reinforcement steel. | 3.2 | Comply with information relating to specific risks to health when cutting and bending reinforcement steel to shape. |
| | | 3.3 | Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to cutting and bending reinforcement steel, 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 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 hazards. |
| | | 4.1 | Select resources associated with own work in relation to materials, components, fixings, 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">– reinforcement steel– bending machines (hand or machine operated)– hand and/or portable power tools and equipment |
| | | 4.3 | Describe how the resources should be used correctly and how problems associated with the resources are reported. |
| | | 4.4 | Explain why the organisational procedures have been developed and how they are used for the selection of required resources. |

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

		4.5	Describe any potential hazards associated with the resources and methods of work.
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to cutting and bending reinforcement steel.
5	Minimise the risk of damage to the work and surrounding area when cutting and bending reinforcement steel.	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
		5.2	Minimise damage and maintain a clean work space.
		5.3	Dispose of waste in accordance with current legislation.
		5.4	Describe how to protect work from damage and the purpose of protection in relation to 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 cutting and bending reinforcement steel.	6.1	Demonstrate completion of the work within the allocated time.
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <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 cut and bend reinforcement steel to the required specification.	7.1	Demonstrate the following work skills when cutting and bending reinforcement steel to shape: <ul style="list-style-type: none">– measuring, marking out, cutting and bending.
		7.2	Cut and bend reinforcement steel to given working instructions to standard shapes using recognised codes by the use of one of the following:

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

- hand bending machines
 - power bending machines.
- 7.3 Safely use and handle materials, hand tools, portable power tools and ancillary equipment.
- 7.4 Safely store the materials, tools and equipment used when cutting and bending reinforcement steel.
- 7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
- extract details from steel fixing drawings (hardcopy, digital and building information modelling)
 - complete work to agreed quality criteria
 - identify grades of steel
 - work to given tolerance
 - measure, mark out, cut and bend reinforcement steel standard shapes using recognised codes
 - use hand bending machines and power bending machines
 - incorporate reinforcement coupler and continuity systems
 - use hand tools, portable power tools and equipment
 - work at height
 - use access equipment.
- 7.6 Describe the needs of other occupations and how to effectively communicate within a team when cutting and bending reinforcement steel.
- 7.7 Describe how to maintain the tools and equipment used when cutting and bending reinforcement steel.

Unit J/504/9591

Fixing Steel in Situ in the Workplace

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
<p>1 Interpret the given information relating to the work and resources when fixing steel in situ</p>	<p>1.1 Interpret and extract relevant information from drawings, specifications, schedules, bending schedules, method statements, risk assessments and manufacturers' information.</p> <p>1.2 Comply with information and/or instructions derived from risk assessments and method statements.</p> <p>1.3 Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.</p> <p>1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, site instructions, specifications, schedules, bending schedules, method statements, risk assessments, manufacturers' information, current regulations and official guidance associated with fixing steel reinforcement.</p>
<p>2 Know how to comply with relevant legislation and official guidance when fixing steel in situ.</p>	<p>2.1 Describe their responsibilities potential accidents and health hazards, whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.</p> <p>2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.</p> <p>2.3 Explain what the accident reporting procedures are and who is responsible for making reports.</p>
<p>3 Maintain safe and healthy working practices when fixing steel in situ.</p>	<p>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.</p> <p>3.2 Comply with information relating to specific risks to health when fixing steel in situ.</p> <p>3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to fixing steel in situ, and the</p>

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

- 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 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 hazards.
- 4 Select the required quantity and quality of resources for the methods of work to fix steel in situ.
- 4.1 Select resources associated with own work in relation to materials, components, fixings, tools and equipment.
- 4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
- pre-cut and bent components, reinforcement steel, tie wire and spacers
 - hand and/or portable power tools and equipment.
- 4.3 Describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.4 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.5 Describe any potential hazards associated with the resources and methods of work.
- 4.6 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to fix steel in situ.
- 5 Minimise the risk of damage to the work and surrounding area when fixing steel in situ.
- 5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 Minimise damage and maintain a clean work space.
- 5.3 Dispose of waste in accordance with current legislation.

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

	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.	6.1 Demonstrate completion of the work within the allocated time.
	6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: – 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 the required specification.	7.1 Demonstrate the following work skills when fixing steel in situ: – sorting, measuring, marking out, fitting, positioning and securing.
	7.2	Install in situ, reinforcement steel or prefabricated sections of reinforcement steel to given working instructions in order to form four of the following concrete structures: – beams – bases – columns – slabs – staircases – walls.
	7.3	Safely use and handle materials, hand tools, portable power tools and ancillary equipment.
	7.4	Safely store the materials, tools and equipment used when fixing steel in situ.
	7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – extract details from steel fixing drawings (hardcopy, digital and building information modelling)

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

- complete work to agreed quality criteria
- identify grades of steel
- work to given tolerance
- fix steel in situ for horizontal and vertical elements
- relate shaped steel to bending schedules
- identify sequence of fixing
- identify integration and interface with embedded items

- 7.6 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
- prepare mesh and steel bar for in situ installation
 - prepare prefabricated steel sections for in situ installation
 - install mesh, steel bar, spacers, cover block and ties in situ
 - position chairs, cover blocks and spacers
 - secure reinforcement steel in situ
 - secure prefabricated sections of reinforcement steel in situ
 - incorporate reinforcement coupler and continuity systems
 - move and position steel
 - sort, store and protect steel and fixings
 - use hand tools, portable power tools and equipment
 - work at height
 - use access equipment.
- 7.7 Describe the needs of other occupations and how to effectively communicate within a team when fixing steel in situ.
- 7.8 Describe how to maintain the tools and equipment used when fixing steel in situ.

Unit M/504/9598 Prefabricating Reinforcement Steel Sections in the Workplace

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Interpret the given information relating to the work and resources when prefabricating reinforcement steel sections.	1.1 Interpret and extract relevant information from drawings, specifications, schedules, bending 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: – drawings, specifications, schedules, bending schedules, method statements, risk assessments, manufacturers' information, current regulations and official guidance associated with prefabricating reinforcement steel sections.
2 Know how to comply with relevant legislation and official guidance when prefabricating reinforcement steel sections.	2.1 Describe their responsibilities regarding potential accidents and health hazards, whilst working: – in the workplace, below ground level, at height, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when prefabricating reinforcement steel sections.	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 prefabricating reinforcement steel sections. 3.2 Comply with information relating to specific risks to health when prefabricating reinforcement steel sections.

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

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| 4 | Select the required quantity and quality of resources for the methods of work to prefabricate reinforcement steel sections. | 3.3 | Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to prefabricating reinforcement steel sections, 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 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 hazards. |
| | | 4.1 | Select resources associated with own work in relation to materials, components, fixings, 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">– pre-cut and bent components, reinforcement steel, tie wire and spacers– hand and/or portable power tools and equipment. |
| | | 4.3 | Describe how the resources should be used correctly and how problems associated with the resources are reported. |
| | | 4.4 | Explain why the organisational procedures have been developed and how they are used for the selection of required resources. |
| | | 4.5 | Describe any potential hazards associated with the resources and methods of work. |
| | | 4.6 | Describe how to calculate quantity, length, area and wastage associated with the method/procedure to prefabricate reinforcement steel sections. |

Learning Outcome - The learner will:**Assessment Criterion - The learner can:**

5	Minimise the risk of damage to the work and surrounding area when prefabricating reinforcement steel sections.	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
		5.2	Minimise damage and maintain a clean work space.
		5.3	Dispose of waste in accordance with current legislation.
		5.4	Describe how to protect work from damage and the purpose of protection in relation to 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 prefabricating reinforcement steel sections.	6.1	Demonstrate completion of the work within the allocated time.
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: – 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 prefabricate reinforcement steel sections to the required specification.	7.1	Demonstrate the following work skills when prefabricating reinforcement steel sections: – measuring, marking out, fitting, positioning, bracing and securing.
		7.2	Prefabricate reinforcement steel sections to given working instructions: – bases – columns – beams – slabs – walls.
		7.3	Incorporate two of the following into prefabricated steel sections:

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

- temporary construction bars
 - bracing
 - lifting points.
- 7.4 Safely use and handle materials, hand tools, portable power tools and ancillary equipment.
- 7.5 Safely store the materials, tools and equipment used when prefabricating reinforcement steel sections.
- 7.6 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
- prefabricate reinforcement from pre-cut and bent components to form sections for bases, columns, beams, slabs and walls
 - extract details from steel fixing and temporary works drawings (hardcopy, digital and building information modelling)
 - complete work to agreed quality criteria
 - identify grades of steel
 - work to given tolerance
 - follow construction sequence including temporary works design
- 7.7 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
- fix prefabricated reinforcement steel sections for horizontal and vertical elements
 - form associated wire ties
 - identify other fixings, clamps, U bolts
 - fix, secure and remove temporary construction bars
 - fix and secure bracing for section movement
 - fix and secure lifting points for section movement
 - incorporate embedment's into prefabricated steel sections
 - incorporate reinforcement coupler and continuity systems
 - move and position steel
 - sort, store and protect steel and fixings

Learning Outcome - The learner will:

Assessment Criterion - The learner can:

- use hand tools, portable power tools and equipment
- work at height
- use access equipment.

7.8 Describe the needs of other occupations and how to effectively communicate within a team when prefabricating reinforcement steel sections.

7.9 Describe how to maintain the tools and equipment used when prefabricating reinforcement steel sections.



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