ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction)

Qualification Specification

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Introduction

The aim of this qualification is to recognise the knowledge, skills and competence demonstrated by an individual in the workplace. Completion of one of the pathways provides the opportunity for individuals to demonstrate their competence in specialist concrete occupations.

The awarding organisation for this qualification is ProQual AB. This qualification is regulated by the Office of Qualifications and Examinations Regulation (Ofqual) and the Council for the Curriculum Examinations and Assessment (CCEA) Regulation. The Regulated Qualifications Framework (RQF) includes those qualifications regulated by Ofqual and CCEA Regulation.

Qualification Profile

Qualification title	**ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction)**
Ofqual qualification number	601/6795/6
Level	Level 2
Total qualification time	500 hours
Guided learning hours	167
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	1/8/15
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 the Mandatory/Optional unit requirements from one of the pathways.

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
A/503/1170	Conforming to general health, safety and welfare in the workplace	1	*641*
J/503/1169	Conforming to productive working practices in the workplace	2	*642*
F/503/1171	Moving, handling and storing resources in the Workplace	2	*643*
T/503/9560	Installing, maintaining and removing work area protection and safety equipment in the workplace *Unit Endorsements:* ***One*** *of the following endorsements required (i.e. own area of work):* *Sprayed concrete* *Concrete repair* *Decorative concrete* *Concrete drilling and sawing* *In situ flooring* *Substrate preparation and profiling*	2	*360v3*

Pathways:

Pathway 1 – Concrete Repair
Pathway 2 – Sprayed Concrete
Pathway 3 – Concrete Drilling
Pathway 4 – Concrete Drilling and Sawing
Pathway 5 – In Situ Flooring - Screed
Pathway 6 – In Situ Flooring - Resin
Pathway 7 – In Situ Flooring - Concrete Layer
Pathway 8 – In Situ Flooring – Concrete Finisher
Pathway 9 – In Situ Flooring – Concrete Plant Operator

Pathway 1 – Concrete Repair

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
L/600/6820	Surveying degraded concrete structures in the workplace *<u>Unit Endorsements</u>:* ***Two** of the following endorsements required:* *Visual* *Mechanical means* *Chemical* *Electro chemical*	2	*57v3*
Y/600/6822	Preparing substrate and applying materials to repair concrete in the workplace *<u>Unit Endorsements</u>:* ***Five** of the following endorsements required:* *Prepare substrates and reinforcement* *Apply primers, bonding agents and repair compounds* *Replace steel reinforcement* *Erect and dismantle formwork* *Protect and cure* *Record and report*	2	*58v3*

Pathway 2 – Sprayed Concrete

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
M/600/6826	Preparing substrate for sprayed concrete in the workplace	2	*123v3*
T/503/9915	Applying sprayed concrete in the workplace *Unit Endorsements:* ***Five** of the following endorsements required:* *Pre-wet surfaces for spraying* *Spray concrete to profile* *Produce samples for testing* *Cure and protect concrete* *Record and report on test* *Record and report on spraying* *Operate spraying nozzle* *Operate pump* *Clean pump* *Clear lines*	2	*124v4*

Pathway 3 – Concrete Drilling

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
Y/600/6836	Reshaping using hand sawing techniques in the workplace *<u>Unit Endorsements</u>:* *The following endorsement required:* ***Angle Grinder*** ***Plus one** of the following endorsements required:* *Power saw* *Ring saw* *Chasing machine* *Chainsaw* ***Plus form saw cuts in at least one** from:* *Concrete* *Masonry* *Stone* *Asphalt*	2	*220v2*
Y/600/6920	Forming drill holes or core in the structural fabric (diamond core bits) in the workplace *<u>Unit Endorsements</u>:* ***Two** of the following endorsements required:* *Hand held diamond core or drill* *Static drill rig diamond core* *Trailer rig diamond core* *Percussive drill*	2	*221v2*

Pathway 4 – Concrete Drilling and Sawing

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
Y/600/6836	Reshaping using hand sawing techniques in the workplace *Unit Endorsements:* *The following endorsement required:* ***Angle Grinder*** ***Plus one** of the following endorsements required:* *Power saw* *Ring saw* *Chasing machine* *Chainsaw* ***Plus form saw cuts in at least one** from:* *Concrete* *Masonry* *Stone* *Asphalt*	2	*220v2*
Y/600/6920	Forming drill holes or core in the structural fabric (diamond core bits) in the workplace *Unit Endorsements:* ***Two** of the following endorsements required:* *Hand held diamond core or drill* *Static drill rig diamond core* *Trailer rig diamond core* *Percussive drill*	2	*221v2*
D/600/6921	Forming saw cuts in structural fabric material in the workplace *Unit Endorsements:* *Push along floor saw* *Self-propelled floor saw* *Diamond-bladed track saw*	2	*222v2*

Pathway 5 – In Situ Flooring - Screed

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
K/600/6999	Preparing and inspecting substrates prior to laying screed floors in the workplace *Unit Endorsements:* ***Three** of the following endorsements required:* *Cementitious substrates* *Insulated areas* *Membranes* *Areas with heating systems* *Ducted areas*	2	*313v2*
D/600/7003	Laying screed floors in the workplace *Unit Endorsements:* ***One** of the following endorsements required:* *Cementitious screeds* *Flowable screeds*	2	*314v2*

Pathway 6 – In Situ Flooring - Resin

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
M/600/7006	Laying resin floors in the workplace *Unit Endorsements:* ***One** of the following endorsements required:* *Resin coatings: **plus two endorsements from** floor seals, floor coatings or high build floor coatings* *Resin self-smoothing: **plus two endorsements from** multi-layer flooring, flow applied flooring or heavy duty flowable flooring* *Resin screeds*	2	*315v2*
D/618/3212	Repairing, preparing and inspecting substrates prior to laying resin floors in the workplace	2	*751v1*

Pathway 7 – In Situ Flooring – Concrete Layer

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
T/600/7007	Preparing areas for concrete flooring in the workplace *Unit Endorsements:* ***Three** of the following endorsements required:* *Substrate preparation* *Timber formwork erection* *Proprietary formwork erection* *Reinforcement installation* *Membranes installation*	2	*316v2*
F/600/7009	Placement of in situ concrete flooring in the workplace *Unit Endorsements:* ***Three** of the following endorsements required:* *Chute* *Elephants trunk* *Skip* *Pump* *Mono rail* *Manual*	2	*317v2*

Pathway 8 – In Situ Flooring – Concrete Finisher

Mandatory Units			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
T/600/7007	Preparing areas for concrete flooring in the workplace *<u>Unit Endorsements:</u>* ***Three** of the following endorsements required:* *Substrate preparation* *Timber formwork erection* *Proprietary formwork erection* *Reinforcement installation* *Membranes installation*	2	*316v2*
F/600/7012	Applying surface finishes to concrete flooring in the workplace *<u>Unit Endorsements:</u>* ***Three** of the following endorsements required:* *Tamped* *Brushed* *Hand-float* *Pedestrian power float* *Ride-on power float*	2	*318v2*

Pathway 9 – In Situ Flooring – Concrete Plant Operator

Optional Units – ONE unit			
Unit Reference Number	**Unit Title**	**Unit Level**	***CITB references provided for information only***
J/601/1580	Preparing and operating ride-on topping spreaders to distribute materials in the workplace	2	*393Ev3*
T/650/4190	Preparing and operating ride-on laser screeders to level concrete in the workplace	2	*393Fv3*

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 19.

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 required credits for qualifications will be awarded:

- A certificate listing the unit achieved with its related credit value, 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 required number of credits 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:	A/503/1170

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*	
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: – 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 *The learner will be able to:*	**Assessment criteria** *The learner can:*
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: – 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 *The learner will be able to:*	**Assessment criteria** *The learner can:*
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.
	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	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated.
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	7

Title:	Conforming to productive working practices in the workplace
Unit Number:	J/503/1169

Learning outcomes *The learner will be able to:*	**Assessment criteria** *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: – 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: – job cards – worksheets – material/resource lists – time sheets.
	3.3	Explain the reasons for ensuring documentation is completed clearly and within given timescales.
4 Maintain good working relationships when conforming to productive working practices.	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.

Title:	Conforming to productive working practices in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
	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: – 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.

Title:	Conforming to Productive Working Practices in the Workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated.
Sector Subject Areas	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	10

Title:	Moving, handling and storing resources in the workplace
Unit Number:	F/503/1171

Learning outcomes *The learner will be able to:*	**Assessment criteria** *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.
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 *The learner will be able to:*		**Assessment criteria** *The learner can:*
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: – 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: – 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 *The learner will be able to:*	**Assessment criteria** *The learner can:*
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: – 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: – 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: – 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	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated.
Sector Subject Areas	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	17

Title:	Installing, maintaining and removing work area protection and safety equipment in the workplace
Unit Number:	T/503/9560

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 installing, maintaining and removing work area protection and safety equipment.	1.1	Interpret and extract relevant information from drawings, plans, risk assessments, method statements, specifications, schedules 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, plans, risk assessments, method statements, specifications, schedules, site inspection reports, manufacturers' information, verbal and written instructions, current regulations and official guidance associated with protecting work areas.
2 Know how to comply with relevant legislation and official guidance when establishing work area protection and safety.	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and 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 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 installing, maintaining and removing work area protection and safety equipment.	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 installing, maintaining and removing work area protection and safety equipment.

Title:	Installing, maintaining and removing work area protection and safety equipment in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 continued	3.2 Demonstrate compliance with given information and relevant legislation when installing, maintaining and removing work area protection and safety equipment in relation to at least two of 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 installing, maintaining and removing work area protection and safety equipment, 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 and other task-related activities.
4 Select the required quantity and quality of resources for the methods of work to install, maintain and remove work area protection and safety equipment.	4.1 Select resources associated with own work in relation to materials, components and fixings, and tools and equipment.
	4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: – safety and security equipment (cones, tapes, fences, barriers, hoarding, doors, gates) – protection and safety notices – signs and lighting – hand tools, power tools and equipment.
	4.3 Describe how to confirm that the resources and materials conform to the specification.

Title:	Installing, maintaining and removing work area protection and safety equipment in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
4 continued	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 and area associated with the method and procedure to install, maintain and remove work area protection and safety equipment.
5 Minimise the risk of damage to the work and surrounding area when installing, maintaining and removing work area protection and safety equipment.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
	5.2 Maintain a clear and tidy work space.
	5.3 Dispose of waste in accordance with current legislation.
	5.4 Describe how to protect work from damage and the purpose of protection in relation to 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 installing, maintaining and removing work area protection and safety equipment.	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 productivity targets and time scales – how times are estimated – organisational procedures for reporting circumstances which will affect the work programme.

Title:	Installing, maintaining and removing work area protection and safety equipment in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Comply with the given contract information to install, maintain and remove work area protection and safety equipment to the required specification.	7.1 Demonstrate the following work skills when installing, maintaining and removing work area protection and safety equipment: – measuring, setting out, positioning, assembling, constructing, securing, dismantling and removing.
	7.2 Use and maintain hand tools, power tools and ancillary equipment.
	7.3 Install, maintain and remove temporary protection and safety arrangements for the work area, to given working instructions, relating to protection equipment, barriers, fences and at least one of the following: – protection and safety notices – safety lighting.
	7.4 Report work undertaken
	7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – plan for the protection and the safety of the work and surrounding environment – conform to agreed specification – confirm the location of utility services and ensure they are protected – prepare and set out area protection equipment to required dimensions – install, check and maintain the protection and safety equipment – dismantle and remove protection and safety equipment – install safety notices – install lighting systems – monitor and check accuracy during progress and on completion of work – install, maintain and remove work area protection equipment in public areas – transport, load and off load work area protection equipment – recognise and determine when specialist skills and knowledge are required and report accordingly – use hand tools, power tools and equipment – work at height – use access equipment.

Title:	Installing, maintaining and removing work area protection and safety equipment in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 continued	7.6 Describe the needs of other occupations and how to communicate effectively within a team when installing, maintaining and removing work area protection and safety equipment in the workplace.
	7.7 Describe how to maintain the tools and equipment used when installing, maintaining and removing work area protection and safety equipment in the workplace.

Title:	Installing, maintaining and removing work area protection and safety equipment in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **One** of the following endorsements required (i.e. own area of work): Sprayed concrete Concrete repair Decorative concrete Concrete drilling and sawing In situ flooring Substrate preparation and profiling
Sector Subject Areas	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	55

Title:	Surveying degraded concrete structures in the workplace
Unit Number:	L/600/6820

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 surveying degraded concrete 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, unsafe work practices, unsafe environment, 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, current legislation schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, official guidance and current regulations associated with surveying degraded concrete structures.
2 Know how to comply with relevant legislation and official guidance when surveying degraded concrete structures.	2.1	Describe their responsibilities regarding duty of care legislation, potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and 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, vehicles and operative.
	2.3	Explain what the accident reporting procedures are and who is responsible for making reports.
	2.4	Describe the types of fire extinguishers available when surveying degraded concrete structures and describe how and when they are used.
3 Maintain safe and healthy working practices when surveying degraded concrete 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 surveying degraded concrete structures.

Title:	Surveying degraded concrete structures in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued	3.2 Demonstrate compliance with given information and relevant legislation when surveying degraded concrete 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 relating to operatives and other personnel
	3.3 Explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to surveying degraded concrete 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 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 survey degraded concrete structures.	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: – hammer, dust sampler, phenolphthalein (ph indicator), cover meter – half-cell (potential) testing equipment – hand tools, portable power tools and equipment.
	4.3 Describe how to confirm that the resources and materials conform to the specification.
	4.4 Describe how the resources should be used correctly and how problems associated with the resources are reported
	4.5 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.

Title:	Surveying degraded concrete structures in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*	
4 Continued	4.6	Describe any potential hazards, including those identified by Control of Substances Hazardous to Health (COSHH), associated with the resources and methods of work.
	4.7	Describe how to calculate quantity, length, area and wastage of materials associated with the method and procedure to survey degraded concrete structures.
5 Minimise the risk of damage to the work and surrounding area when surveying degraded concrete 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	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 surveying degraded concrete structures.	6.1	Demonstrate safe 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 survey degraded concrete structures to the required specification.	7.1	Demonstrate the following work skills when surveying degraded concrete structures: – identifying, measuring, marking out, protecting, preparing, testing, recording and reporting.
	7.2	Use and maintain hand tools, portable power tools and ancillary equipment
	7.3	Survey degraded concrete to identify and test for defects to given working instructions by at least three of the following methods: – visual – mechanical means – chemical means – electro chemical means – magnetic means.

Title:	Surveying degraded concrete structures in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.4 Record and report results when surveying degraded concrete structures.
	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 surveying quality requirements – position and prepare survey equipment – measure and mark out areas to be surveyed – visually determine defects in concrete – identify asbestos and products that may contain asbestos – use the equipment to collect samples, assess damage, cracking, carbon~~is~~ation, reinforcement corrosion, reinforcement cover – prepare and use chemicals to test concrete – survey degraded concrete to identify and test for defects by visual, mechanical, chemical, electro-chemical and magnetic means – recognise and determine when specific skills and knowledge are required and report accordingly – record and report survey results – understand the 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, 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 surveying degraded concrete structures.
	7.7 Describe how to maintain the tools and equipment used when surveying degraded concrete structures.

Title:	Surveying degraded concrete structures in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **Two** of the following endorsements required: Visual Mechanical means Chemical Electro chemical
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	90
Assessment hours	10

Title:	Preparing substrate and applying materials to repair concrete in the workplace
Unit Number:	Y/600/6822

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 preparing substrate and applying materials to repair concrete.	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, unsafe work practices, unsafe environment, 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, current legislation, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, official guidance and current regulations associated with preparing substrate and applying materials to repair concrete.
2 Know how to comply with relevant legislation and official guidance when preparing substrate and applying materials to repair concrete.	2.1	Describe their responsibilities regarding duty of care legislation, potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and 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, vehicles and operative.
	2.3	Explain what the accident reporting procedures are and who is responsible for making reports.
	2.4	Describe the types of fire extinguishers available when preparing substrate and applying materials to repair concrete and describe how and when they are used.
3 Maintain safe and healthy working practices when preparing substrate and applying materials to repair concrete.	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 preparing substrate and applying materials to repair concrete.

Title:	Preparing substrate and applying materials to repair concrete in the workplace

Learning outcomes *The learner will be able to:*		**Assessment criteria** *The learner can:*
3 Continued	3.2	Demonstrate compliance with given information and relevant legislation when preparing substrate and applying materials to repair concrete in relation to the following: – safe use of access equipment – safe use, storage and handling of materials, tools and equipment – specific risks to health relating to operatives and other personnel.
	3.3	Explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to preparing substrate and applying materials to repair concrete, 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 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 prepare substrate and apply materials to repair concrete.	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-blended bagged materials, formwork, repair compounds, aggregates, cements, additives, reinforcement, primers, bonding agents and membranes – saws, drills, mixers and sprayers – hand tools, portable power tools and equipment.
	4.3	Describe how to confirm that the resources and materials conform to the specification
	4.4	Describe how the resources should be used correctly and how problems associated with the resources are reported.
	4.5	Explain why the organisational procedures have been developed and how they are used for the selection of required resources.

Title:	Preparing substrate and applying materials to repair concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
4 Continued	4.6 Describe any potential hazards, including those identified by Control of Substances Hazardous to Health (COSHH), associated with the resources and methods of work.
	4.7 Describe how to calculate quantity, length, area volume and wastage of materials associated with the method and procedure to prepare substrate and apply materials to repair concrete.
5 Minimise the risk of damage to the work and surrounding area when preparing substrate and applying materials to repair concrete.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
	5.2 Maintain a clear and tidy work space.
	5.3 Dispose of waste in accordance with current legislation.
	5.4 Describe how to protect work from damage and the purpose of protection in relation to 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 preparing substrate and applying materials to repair concrete.	6.1 Demonstrate safe 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 prepare substrate and apply materials to repair concrete to the required specification.	7.1 Demonstrate the following work skills when preparing substrate and applying materials to repair concrete: – measuring, marking out, locating, protecting, breaking out, cleaning, replacing, erecting, mixing, applying, finishing and curing.
	7.2 Use and maintain hand tools, portable power tools and ancillary equipment
	7.3 Repair degraded concrete to given working instructions using five of the following: – prepare substrates and reinforcement using mechanical means – apply primers, bonding agents and repair compounds – replace steel reinforcement – erect and dismantle formwork – protect and cure repaired area – record and report repairs carried out.

Title:	Preparing substrate and applying materials to repair concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.4 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 preparation and application quality requirements – locate services and protect adjacent areas – break out defective concrete – clean concrete and steel – measure, record and act on environmental conditions – replace steel reinforcement – apply corrosion protection – erect and dismantle formwork – apply primers and bonding agents – mix and apply repair compounds – mix and apply fairing and levelling mortars – monitor and control exposure to vibration – finish repaired areas – protect and cure – recognise and determine when specific skills and knowledge are required and report accordingly – understand the 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 – complete records and prepare reports – use hand tools, portable power tools and equipment – work at height – use access equipment.
	7.5 Describe the needs of other occupations and how to effectively communicate within a team when preparing substrate and applying materials to repair concrete.
	7.6 Describe how to maintain the tools and equipment used when preparing substrate and applying materials to repair concrete.

Title:	Preparing substrate and applying materials to repair concrete in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **Five** of the following endorsements required: Prepare substrates and reinforcement Apply primers, bonding agents and repair components Replace steel reinforcement Erect and dismantle formwork Protect and cure Record and report
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	90
Assessment hours	10

Title:	Preparing substrate for sprayed concrete in the workplace
Unit Number:	M/600/6826

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 preparing substrate for sprayed concrete.	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, unsafe work practices, unsafe environment, 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, current legislation, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, official guidance and current regulations associated with preparing substrate for sprayed concrete.
2 Know how to comply with relevant legislation and official guidance when preparing substrate for sprayed concrete.	2.1	Describe their responsibilities regarding duty of care legislation, potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and 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, vehicles and operative.
	2.3	Explain what the accident reporting procedures are and who is responsible for making reports.
	2.4	Describe the types of fire extinguishers available when preparing substrate for sprayed concrete and describe how and when they are used.
3 Maintain safe and healthy working practices when preparing substrate for sprayed concrete.	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 preparing substrate for sprayed concrete.

Title:	Preparing substrate for sprayed concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 continued	3.2 Demonstrate compliance with given information and relevant legislation when preparing substrate for sprayed concrete in relation to the following: – safe use of access equipment – safe use,-storage and handling of materials, tools and equipment – specific risks to health relating to operatives and other personnel.
	3.3 Explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to preparing substrate for sprayed concrete, 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 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 prepare substrate for sprayed concrete.	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: – temporary supports, screens, barriers, reinforcement, tying wire, pins, formwork – hand tools, portable power or pneumatic tools and equipment – jet washing 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.

Title:	Preparing substrate for sprayed concrete in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
4 continued	4.6 Describe any potential hazards, including those identified by Control of Substances Hazardous to Health (COSHH), associated with the resources and methods of work.
	4.7 Describe how to calculate quantity, length, area and wastage of materials associated with the method and procedure to prepare substrate for sprayed concrete.
5 Minimise the risk of damage to the work and surrounding area when preparing substrate for sprayed concrete.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
	5.2 Maintain a clear and tidy work space.
	5.3 Dispose of waste in accordance with current legislation.
	5.4 Describe how to protect work from damage and the purpose of protection in relation to 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 preparing substrate for sprayed concrete.	6.1 Demonstrate safe 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 prepare substrate for sprayed concrete to the required specification.	7.1 Demonstrate the following work skills when preparing substrate for sprayed concrete: – measuring, marking out, locating, protecting, supporting, breaking out, cleaning, profiling, tying, erecting, recording and reporting.
	7.2 Use and maintain hand tools, portable power tools and ancillary equipment

Title:	Preparing substrate for sprayed concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 continued	7.3 Prepare substrates prior to receiving sprayed concrete to given working instructions relating to seven of the following: – locate and protect services – break out loose and de-bonded materials using mechanical means – roughen smooth surfaces using mechanical means – clear and clean – surface profile levels – tie and secure reinforcement bar and/or mesh – fit guide wires – fit depth pins – erect formwork – record and report work carried out.
	7.4 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 preparation quality requirements – locate and protect services (water, gas, electric and waste) – break out, profile, square cut, clean and prepare using mechanical means – prepare substrates using ultra high pressure water jetting and abrasive blasting – confirm substrate is ready to receive sprayed concrete – position and secure reinforcement – erect and dismantle formwork – install guide wires and depth pins – record and report – recognise and determine when specific skills and knowledge are required and report accordingly – understand the 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, portable power tools and equipment – work at height – use access equipment.
	7.5 Describe the needs of other occupations and how to effectively communicate within a team when preparing substrate for sprayed concrete.
	7.6 Describe how to maintain the tools and equipment used when preparing substrate for sprayed concrete.

Title:	Preparing substrate for sprayed concrete in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated.
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	90
Assessment hours	10

Title:	Applying sprayed concrete in the workplace	
Unit Number:	T/503/9915	
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 applying sprayed concrete.		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, unsafe work practices, unsafe environment, 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, current legislation, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, official guidance and current regulations associated with applying sprayed concrete.
2 Know how to comply with relevant legislation and official guidance when applying sprayed concrete.		2.1 Describe their responsibilities regarding duty of care legislation, potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and 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, vehicles and operative.
		2.3 Explain what the accident reporting procedures are and who is responsible for making reports.
		2.4 Describe the types of fire extinguishers available when applying sprayed concrete and describe how and when they are used.
3 Maintain safe and healthy working practices when applying sprayed concrete.		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 applying sprayed concrete.

Title:	Applying sprayed concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 continued	3.2 Demonstrate compliance with given information and relevant legislation when applying sprayed concrete in relation to the following: – safe use of access equipment – safe use, storage and handling of materials, tools and equipment – specific risks to health relating to operatives and other personnel.
	3.3 Explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to applying sprayed concrete, 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 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 apply sprayed concrete.	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-blended bagged materials, sand, aggregate, cements, water, additives, admixtures, structural concrete, curing membranes – working platforms – hand tools, portable power or pneumatic tools, spraying and testing equipment and ancillaries.
	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.

Title:	Applying sprayed concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
4 continued	4.6 Describe any potential hazards, including those identified by Control of Substances Hazardous to Health (COSHH), associated with the resources and methods of work.
	4.7 Describe how to calculate quantity, length, area, volume and wastage of materials associated with the method and procedure to apply sprayed concrete.
5 Minimise the risk of damage to the work and surrounding area when applying sprayed concrete.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
	5.2 Maintain a clear and tidy work space.
	5.3 Dispose of waste in accordance with current legislation.
	5.4 Describe how to protect work from damage and the purpose of protection in relation to 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 applying sprayed concrete.	6.1 Demonstrate safe 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 apply sprayed concrete to the required specification.	7.1 Demonstrate the following work skills when applying sprayed concrete: – measuring, marking out, assembling, checking, preparing, finishing, curing, protecting, testing, recording and reporting.
	7.2 Use and maintain concrete spraying machinery and compressor, hand tools, portable power tools and ancillary equipment

Title:	Applying sprayed concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 continued	7.3 Apply sprayed concrete by wet and/or dry methods to given working instructions for five of the following: – pre-wet surfaces for spraying – spray concrete to profile – produce samples for testing – cure and protect concrete – record and report on test – record and report on spraying – operate spraying nozzle – operate pump – clean pump – clear lines.
	7.4 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 application quality requirements – assemble and check spray equipment (wet and/or dry application) – prepare substrates including wetting, depth guides and protection measures – include and accommodate cathodic protection materials – maintain protection against overspray and rebounding materials – set up spray and pumping equipment – operate robotic spraying equipment – operate hand-held spraying equipment – spray in layers to agreed profile and depth – apply specified finish – cure and protect concrete – provide samples for testing concrete (compression, tension, consistency and workability) – record and report – recognise and determine when specific skills and knowledge are required and report accordingly – operate spraying machines, compressors and pumps – maintain spraying machines, nozzles, hoses, compressors and pumps during operations – understand the 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, portable power and pneumatic tools and equipment – work at height – use access equipment.

Title:	Applying sprayed concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 continued	7.5 Describe the needs of other occupations and how to effectively communicate within a team when applying sprayed concrete.
	7.6 Describe how to maintain the tools and equipment used when applying sprayed concrete.

Title:	Applying sprayed concrete in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **Five** of the following endorsements required: Pre-wet surfaces for spraying Spray concrete to profile Produce samples for testing Cure and protect concrete Record and report on test Record and report on spraying Operate spraying nozzle Operate pump Clean pump Clear lines
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	90
Assessment hours	10

Title:	Reshaping using hand sawing techniques in the workplace
Unit Number:	Y/600/6836

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 reshaping using hand sawing techniques.	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations.
2 Know how to comply with relevant legislation and official guidance when reshaping using hand sawing techniques.	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when reshaping using hand sawing techniques.	3.1	Use health and safety control equipment and comply with the methods of work safely to carry out the activity in accordance with current legislation and organisational requirements when reshaping using hand sawing techniques.
	3.2	Demonstrate compliance with given information and relevant legislation when reshaping using hand sawing techniques in relation to two of the following: – safe use of access equipment – safe use and storage of materials, tools and equipment – specific risks to health – provision of lighting and ventilation.

Title:	Reshaping using hand sawing techniques in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to reshaping using hand sawing techniques, 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 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 reshape using hand sawing techniques.	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: – consumables, including blades – angle grinders, power saws, ring saws, chainsaws – hand tools, portable power tools and ancillary 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, volume and area associated with the method/procedure to reshape using hand sawing techniques.

Title:	Reshaping using hand sawing techniques in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Minimise the risk of damage to the work and surrounding area when reshaping using hand sawing techniques.	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 reshaping using hand sawing techniques.	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 reshape using hand sawing techniques to the required specification.	7.1 Demonstrate the following work skills when reshaping using hand sawing techniques: – measuring, chasing, checking, confirming, setting up, securing, aligning, connecting, cutting, reporting and recording.
	7.2 Use and maintain hand tools, portable power tools, ancillary equipment, angle grinder and one from the following – power saw – ring saw – chasing machine – chainsaw
	7.3 Form saw cuts in one of the following to given working instructions, relating to vertical and/or horizontal surfaces: – concrete – masonry – stone – asphalt.
	7.4 Measure and record work details on completion of forming saw cuts.

Title:	Reshaping using hand sawing techniques in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – complete pre-start and post stop checks – set up and operate: angle grinders, power saws, ring saws, chainsaws and chasing machines – locate and protect services (water, gas, electric, waste) – apply coolant and lubricants – form openings and cut to line, depth and size – deal with voids – monitor and control exposure to vibration – report, record and maintain records – recognise and determine when specific skills and knowledge are required and report accordingly – use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked) – work at height – use access equipment.
	7.6 Describe the needs of other occupations and how to effectively communicate within a team when reshaping using hand sawing techniques.
	7.7 Describe how to maintain the tools and equipment used when reshaping using hand sawing techniques.

Title:	Reshaping using hand sawing techniques in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment . Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> The following endorsement required: **Angle Grinder** **Plus one** of the following endorsements required: Power saw Ring saw Chasing machine Chainsaw **Plus form saw cuts in at least one** from: Concrete Masonry Stone Asphalt
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	70

Title:	Forming drill holes or core in the structural fabric (diamond core bits) in the workplace
Unit Number:	Y/6009/6920

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 forming drill holes or core in the structural fabric	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations.
2 Know how to comply with relevant legislation and official guidance when forming drill holes or core in the structural fabric	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when forming drill holes or core in the structural fabric	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 forming drill holes or core in the structural fabric
	3.2	Demonstrate compliance with given information and relevant legislation when forming drill holes or core in the structural fabric in relation to two of the following: – safe use of access equipment – safe use and storage of materials, tools and equipment – specific risks to health – provision of lighting and ventilation.

Title:	Forming drill holes or core in the structural fabric (diamond core bits) in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to forming drill holes or core in the structural fabric 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 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 form drill holes or core in the structural fabric	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: – hand drill diamond core and drills, bits, power units, connectors, fixings and accessories – percussive drills – static drill rig diamond core – trailer rig diamond – recording and measuring equipment – hand tools, portable power tools and ancillary 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.

Title:	Forming drill holes or core in the structural fabric (diamond core bits) in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
4 Continued.	4.5 Describe any potential hazards associated with the resources and methods of work.
	4.6 Describe how to calculate quantity, length ~~and~~ area and volume associated with the method/procedure to form drill holes or core in the structural fabric.
5 Minimise the risk of damage to the work and surrounding area when forming drill holes or core in the structural fabric	5.1 Protect the work and its surrounding area from damage.
	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 forming drill holes or core in the structural fabric.	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 form drill holes or core in the structural fabric to the required specification.	7.1 Demonstrate the following work skills when forming drill holes or core in the structural fabric: – measuring, marking out, setting up, connecting, drilling or coring.
	7.2 Use and maintain hand tools, portable power tools and ancillary equipment.

Title:	Forming drill holes or core in the structural fabric (diamond core bits) in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.3 Form drill holes or take cores using two of the following to given working instructions relating to vertical and horizontal surfaces: – hand held diamond core or drill – static drill rig diamond core – trailer rig diamond core – percussive drill.
	7.4 Measure and record work details on completion of forming holes or taking cores.
	7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – complete pre-start and post stop checks – set up, and operate drilling and coring plant and equipment – identify the characteristics of percussive and diamond drilling – locate and protect services (water, gas, electric and waste) – form drill holes, including angles, depth, diameter, recesses, stitch drilling and coring – apply coolant and lubricants – deal with voids – monitor and control exposure to vibration – maintain records – recognise and determine when specific skills and knowledge are required and report accordingly – use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked) – work at height – use access equipment.
	7.8 Describe the needs of other occupations and how to effectively communicate within a team when forming drill holes or core in the structural fabric.
	7.9 Describe how to maintain the tools and equipment used when forming drill holes or core in the structural fabric.

Title:	Forming drill holes or core in the structural fabric (diamond core bits) in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **Two** of the following endorsements required: Hand held diamond core or drill Static drill rig diamond core Trailer rig diamond core Percussive drill
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	60

Title:	Forming saw cuts in structural fabric material in the workplace
Unit Number:	D/600/6921

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 forming saw cuts in structural fabric material.	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations governing buildings.
2 Know how to comply with relevant legislation and official guidance when forming saw cuts in structural fabric material.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when forming saw cuts in structural fabric material.	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 forming saw cuts in structural fabric material.
	3.2 Demonstrate compliance with given information and relevant legislation when forming saw cuts in structural fabric material in relation to two of the following: – safe use of access equipment – safe use and storage of materials, tools and equipment – specific risks to health – provision of lighting and ventilation.

Title:	Forming saw cuts in structural fabric material in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued.	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to forming saw cuts in structural fabric material, 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 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 form saw cuts in structural fabric material.	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: – consumables, including blades – accessories – push along floor saw – self-propelled floor saw – diamond-bladed track saw – hand tools, 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 volume associated with the method/procedure to form saw cuts in structural fabric material.

Title:	Forming saw cuts in structural fabric material in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Minimise the risk of damage to the work and surrounding area when forming saw cuts in structural fabric material.	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 forming saw cuts in structural fabric material.	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 form saw cuts in structural fabric material to the required specification.	7.1 Demonstrate the following work skills when forming saw cuts in structural fabric material: – measuring, chasing, checking, setting up, securing, aligning, connecting and cutting.
	7.2 Use and maintain hand tools, portable power tools and ancillary equipment
	7.3 Form saw cuts to given working instructions using one of the following: – push along floor saw – self-propelled floor saw – diamond-bladed track saw.
	7.4 Measure and record work details on completion of forming saw cuts.

Title:	Forming saw cuts in structural fabric material in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – complete pre-start and post stop checks on saws – set up and operate: push along floor saw, self-propelled floor saw and diamond-bladed track saw – locate and protect services (water, gas, electric and waste) – form openings and cut to line, depth and size – deal with voids – monitor and control exposure to vibration – report, record and maintain records – recognise and determine when specific skills and knowledge are required and report accordingly – use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked) – work at height – use access equipment.
	7.6 Describe the needs of other occupations and how to effectively communicate within a team when forming saw cuts in structural fabric material.
	7.7 Describe how to maintain the tools and equipment used when forming saw cuts in structural fabric material.

Title:	Forming saw cuts in structural fabric material in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **One** of the following endorsements required: Push along floor saw Self-propelled floor saw Diamond-bladed track saw
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	63

Title:	Preparing and inspecting substrates prior to laying screed floors in the workplace
Unit Number:	K/600/6999

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 preparing and inspecting substrates prior to laying screed floors.	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations and official guidance.
2 Know how to comply with relevant legislation and official guidance when preparing and inspecting substrates prior to laying screed floors.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when preparing and inspecting substrates prior to laying screed floors.	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 preparing and inspecting substrates prior to laying screed floors.
	3.2 Demonstrate compliance with given information and relevant legislation when preparing and inspecting substrates prior to laying screed floors in relation to: – safe handling of materials – safe use and storage of materials, tools and equipment – specific risks to health.

Title:	Preparing and inspecting substrates prior to laying screed floors in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*	
3 Continued	3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to preparing and inspecting substrates prior to laying screed floors, 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 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 prepare and inspect substrates prior to laying screed floors.	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: – primers/bonding agents, repair compounds, reinforcement and damp proof membrane (DPM) – lines, pegs, levels and location marking equipment – joints – insulation – hand tools, portable power tools, plant, machinery and ancillary 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, volume, length, area and wastage associated with the method/procedure to prepare and inspect substrates prior to laying screed floors.

Title:	Preparing and inspecting substrates prior to laying screed floors in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*	
5 Minimise the risk of damage to the work and surrounding area when preparing and inspecting substrates prior to laying screed floors.	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 preparing and inspecting substrates prior to laying screed floors.	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 prepare and inspect substrates prior to laying screed floors to the required specification.	7.1	Demonstrate the following work skills when preparing and inspecting substrates prior to laying screed floors: – assessing, measuring, marking out, cleaning, breaking out, preparing, forming, compacting, chasing, priming, mixing, laying, spreading, levelling, repairing, curing protecting and inspecting..
	7.2	Use and maintain hand tools, portable power tools, plant or machinery and ancillary equipment
	7.3	Prepare and inspect three of the following substrates to given working instructions prior to laying screed floors: – cementitious substrates – insulated areas – membranes – areas with heating systems – ducted areas.

Title:	Preparing and inspecting substrates prior to laying screed floors in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – assess condition of existing substrates – locate and protect services (water, gas, electric and waste) – prepare and protect service penetrations – break out defective areas – prepare substrates prior to laying screed including: cementitious, insulated areas, membranes, areas with heating systems and areas with ducting – prepare substrates by hand and mechanical methods – work around, in close proximity with, plant and machinery – direct and guide plant and machinery – remove contaminants – work to lines, levels, falls and gradients – locate and form joints and edges, expansion, contraction and crack inducement – mix repair compounds – install insulation – consider and check ambient conditions – protect and cure repaired areas – test surfaces by tensile strength tests, rebound hammer, pull off method – meet the agreed quality criteria – monitor and control exposure to vibration – record and report – recognise and determine when specific skills and knowledge are required and report accordingly – use hand tools, portable power tools and dust extraction equipment.
	7.5 Describe the needs of other occupations and how to effectively communicate within a team when preparing and inspecting substrates prior to laying screed floors.
	7.6 Describe how to maintain the tools, plant, machinery and equipment used when preparing and inspecting substrates prior to laying screed floors.

Title:	Preparing and inspecting substrates prior to laying screed floors in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **Three** of the following endorsements required: Cementitious substrates Insulated areas Membranes Areas with heating systems Ducted areas
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	43

Title:	Laying screed floors in the workplace
Unit Number:	D/600/7003

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 laying screed floors.	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations.
2 Know how to comply with relevant legislation and official guidance when laying screed floors.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when laying screed floors.	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 laying screed floors.
	3.2 Demonstrate compliance with given information and relevant legislation when laying screed floors in relation to: – safe handling of materials – safe use and storage of materials, tools and equipment – specific risks to health.

Title:	Laying screed floors in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued.	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to laying screed floors, 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 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 lay screed floors.	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: – battens, reinforcement and drainage accessories – movement and construction joints – bonding agents, sand, cement, additives, aggregates, colouring agents, membranes – flowable screeds – hand tools, portable power tools and ancillary 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, volume and wastage associated with the method/procedure to lay screed floors.

Title:	Laying screed floors in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Minimise the risk of damage to the work and surrounding area when laying screed floors.	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 laying screed floors.	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 lay screed floors to the required specification.	7.1 Demonstrate the following work skills when laying screed floors: – measuring, marking out, locating, securing, forming, fixing, mixing, transporting, laying, testing, compacting, protecting and curing.
	7.2 Use and maintain hand tools, portable power tools and ancillary equipment
	7.3 Lay screeds to floors and stairs to given working instructions using sand and cementitious screeds or flowable screeds.

Title:	Laying screed floors in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued.	7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – set out for line and level – locate and protect cast-in services (heating, water, gas, electric and waste) – prepare and protect service penetrations – position and secure reinforcement, spacers and fixings – form drainage inlets, drainage channels and outlets – form joints, movement (expansion), anti-crack applicable to bay sizes – inspect prepared substrate to include cleanliness, testing and application of primers and damp proof membranes (DPM) – check and monitor ambient conditions – mix screeds using paddle, spiral and forced action mixer – transport screed material using mechanical (pumps, bulk bags by lifting equipment) and by hand (shovelled, barrowed) – working with and around plant and machinery – test screed mix for consistency – prepare samples for testing – lay and compact screed (vibrating screed beam and rollers) to floors, doors and around fixings to specified thickness, level and finish – monitor and control exposure to vibration – protect and cure screed – recognise and determine when specific skills and knowledge are required and report accordingly – meet agreed quality criteria – record and report – use hand tools, portable power tools and ancillary equipment.
	7.8 Describe the needs of other occupations and how to effectively communicate within a team when laying screed floors.
	7.9 Describe how to maintain the tools and equipment used when laying screed floors.

Title:	Laying screed floors in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **One** of the following endorsements required: Cementitious screeds Flowable screeds
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	60

Title:	Laying resin floors in the workplace
Unit Number:	M/600/7006

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 laying resin floors.	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations.
2 Know how to comply with relevant legislation and official guidance when laying resin floors.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when laying resin floors.	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 laying resin floors.
	3.2 Demonstrate compliance with given information and relevant legislation when laying resin floors in relation to: – safe handling of materials – safe use and storage of materials, tools and equipment – specific risks to health.

Title:	Laying resin floors in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued.	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to laying resin floors, 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 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 lay resin floors.	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: – primers, seals, damp-proof membranes (DPM) – construction and movement joints – resin screed, resin self-smoothing, flow applied and resin coatings, multi-layer high build and heavy duty – hand tools, portable power tools and ancillary 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 lay resin floors.

Title:	Laying resin floors in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Minimise the risk of damage to the work and surrounding area when laying resin floors.	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 laying resin floors.	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 lay resin floors to the required specification.	7.1 Demonstrate the following work skills when laying resin floors: – measuring, marking out, forming, preparing, mixing, applying, finishing, curing and protecting.
	7.2 Use and maintain hand tools, portable power tools, paddle, spiral, and forced action mixer and ancillary equipment
	7.3 Lay resins floors to given working instructions using one of the following: – resin coatings: to include any two from floor seals, floor coatings or high build floor coatings – resin self-smoothing: to include any two from multi-layer flooring, flow applied flooring or heavy duty flowable flooring – resin screeds: to include resin screeds and heavy duty screed flooring

Title:	Laying resin floors in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – set out floor to receive resins – position and secure construction and movement joints – inspect prepared substrates to include applied primers and damp proof membranes (DPM) – mix and apply resin floor finishes for coatings, self-smoothing and screeds, to specified finish – lay resin around service penetrations – protect and cure finished floor – consider and check ambient conditions – recognise and determine when specific skills and knowledge are required and report accordingly – meet agreed quality criteria – record and report – use hand tools, portable power tools and equipment.
	7.5 Describe the needs of other occupations and how to effectively communicate within a team when laying resin floors.
	7.6 Describe how to maintain the tools and equipment used when laying resin floors.

Title:	Laying resin floors in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **One** of the following endorsements required: <u>Resin coatings</u>: **plus two** endorsements from floor seals, floor coatings or high build floor coatings <u>Resin self-smoothing</u>: **plus two** endorsements from multi-layer flooring, flow applied flooring or heavy duty flowable flooring <u>Resin screeds</u>
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	53

Title:	Repairing, preparing and inspecting substrates prior to laying resin floors in the workplace
Unit Number:	D/618/3212

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 repairing, preparing and inspecting substrates prior to laying resin floors.	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, current regulations and official guidance.
2 Know how to comply with relevant legislation and official guidance when repairing, preparing and inspecting substrates prior to laying resin floors	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when repairing, preparing and inspecting substrates prior to laying resin floors.	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 repairing, preparing and inspecting substrates prior to laying resin floors.
	3.2 Demonstrate compliance with given information and relevant legislation when repairing, preparing and inspecting substrates prior to laying resin floors in relation to: – safe handling of materials – safe use and storage of materials, tools and equipment – specific risks to health.

Title:	Repairing, preparing and inspecting substrates prior to laying resin floors in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued.	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to repairing, preparing and inspecting substrates prior to laying resin floors, 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 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 repair, prepare and inspect substrates prior to laying resin floors.	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: – primers/bonding agents, repair compounds, reinforcement and damp proof membrane (DPM), curing agents – joints – hand tools, portable power tools, plant, machinery and ancillary 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, volume and wastage associated with the method/procedure to repair, prepare and inspect substrates prior to laying resin floors.

Title:	Repairing, preparing and inspecting substrates prior to laying resin floors in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Minimise the risk of damage to the work and surrounding area when repairing, preparing and inspecting substrates prior to laying resin floors.	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 repairing, preparing and inspecting substrates prior to laying resin floors.	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 repair, prepare and inspect substrates prior to laying resin floors to the required specification.	7.1 Demonstrate the following work skills when repairing, preparing and inspecting substrates prior to laying resin floors: – assessing, measuring, marking out, cleaning, breaking out, removing, preparing, forming, chasing, priming, mixing, laying, compacting, levelling, repairing, curing, protecting and inspecting.
	7.2 Use and maintain hand tools, portable power tools, plant, machinery and ancillary equipment
	7.3 Repair, prepare, using planers and surface grinders, and inspect substrates to given working instructions prior to laying resin floors.

Title:	Repairing, preparing and inspecting substrates prior to laying resin floors in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – assess condition of existing substrates – locate and protect services (water, gas, electric and waste) – prepare and protect service penetrations – prepare substrates, new concrete, old concrete, fine concrete screed and overlays on existing surfaces prior to laying resin – break out defective areas – work around, in close proximity with, plant and machinery – direct and guide plant and machinery – install, form and protect perimeter prior to repair – remove laitance and dust – remove contamination – abrade surfaces by grinding, planing and shot blasting – prepare edges – monitor and control exposure to vibration – work to lines, levels, falls and gradients – consider and check ambient conditions – mix, apply, protect and cure repaired areas – locate and prepare for the formation of movement, expansion, induced, toe-in, transition and floor-to-wall joints – test surfaces for adhesion by pull off method – test surfaces for moisture using a moisture meter – meet the agreed quality criteria – recognise and determine when specialist skills and knowledge are required and report accordingly – record and report – use hand tools, portable power tools and dust extraction equipment.
	7.5 Describe the needs of other occupations and how to effectively communicate within a team when repairing, preparing and inspecting substrates prior to laying resin floors.
	7.6 Describe how to maintain the tools and equipment used when repairing, preparing and inspecting substrates prior to laying resin floors.

Title:	Repairing, preparing and inspecting substrates prior to laying resin floors in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated.
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	43

Title:	Preparing areas for concrete flooring in the workplace
Unit Number:	T/600/7007

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 preparing areas for concrete flooring.	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations.
2 Know how to comply with relevant legislation and official guidance when preparing areas for concrete flooring.	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when preparing areas for concrete flooring.	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 preparing areas for concrete flooring.
	3.2	Demonstrate compliance with given information and relevant legislation when preparing areas for concrete flooring in relation to: – safe handling of materials – safe use and storage of materials, tools and equipment – specific risks to health.

Title:	Preparing areas for concrete flooring in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued.	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to preparing areas for concrete flooring, 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 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 prepare areas for concrete flooring.	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: – formwork, reinforcement, dowels, membranes, joint formers – concrete ancillaries (spacers, tying wires) – fill materials and blinding (sand and concrete) – hand tools, portable power tools, plant, machinery and ancillary 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, volume and wastage associated with the method/procedure to prepare areas for concrete flooring.

Title:	Preparing areas for concrete flooring in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Minimise the risk of damage to the work and surrounding area when preparing areas for concrete flooring.	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 preparing areas for concrete flooring.	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 prepare areas for concrete flooring to the required specification.	7.1 Demonstrate the following work skills when preparing areas for concrete flooring: – measuring, marking out, trimming, inspecting, compacting, positioning, aligning, levelling, fixing, cutting, installing, locating, securing and protecting.
	7.2 Use and maintain hand tools, portable power tools, plant or machinery and ancillary equipment
	7.3 Prepare areas to lay concrete floors to given working instructions relating to three of the following: – substrate preparation – timber formwork erection – proprietary formwork erection – reinforcement installation – membranes installation.

Title:	Preparing areas for concrete flooring in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued.	7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – prepare ground bearing and suspended floor areas – locate and protect services (water, gas, electric and waste) including overhead utilities – protect existing structures – work around, in close proximity with, plant and machinery – direct and guide plant and machinery – inspect and test formation – determine finish floor levels – spread, trim and compact sub-base to line and level – measure and confirm sub-base levels – inspect and test area to be prepared – position and fix timber and proprietary formwork ~~and~~ to line and level including; joint systems, isolation details, box-outs and thresholds – form falls and gradients – cut joint, install and seal membranes – preparation of existing construction joints – locate and secure joints ~~/~~ and void formers – cut, locate and secure reinforcement and dowels and debonding sleeves – meet agreed quality criteria – protect prepared area – record and report – recognise and determine when specific skills and knowledge are required and report accordingly – use hand tools, portable power tools, machinery and equipment – work at height.
	7.5 Describe the needs of other occupations and how to effectively communicate within a team when preparing areas for concrete flooring.
	7.6 Describe how to maintain the tools and equipment used when preparing areas for concrete flooring.

Title:	Preparing areas for concrete flooring in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **Three** of the following endorsements required: Substrate preparation Timber formwork erection Proprietary formwork erection Reinforcement installation Membranes installation
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50

Title:	Placement of in situ concrete flooring in the workplace	
Unit Number:	F/600/7009	
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 placing in situ concrete flooring.		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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations.
2 Know how to comply with relevant legislation and official guidance when placing in situ concrete flooring.		2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when placing in situ concrete flooring.		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 placing in situ concrete flooring.
		3.2 Demonstrate compliance with given information and relevant legislation when placing in situ concrete flooring in relation to: – safe handling of materials – safe use and storage of materials, tools and equipment – specific risks to health.

Title:	Placing in situ concrete flooring in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued.	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to placing in situ concrete flooring, 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 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 place in situ concrete flooring.	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: – structural concrete, construction joint materials, formwork, membranes, reinforcement and embedments – testing equipment – hand tools, portable power tools, plant, machinery and ancillary 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, volume and wastage associated with the method/procedure to place in situ concrete flooring.

Title:	Placing in situ concrete flooring in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Minimise the risk of damage to the work and surrounding area when placing in situ concrete flooring.	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 placing in situ concrete flooring.	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 place in situ concrete flooring to the required specification.	7.1 Demonstrate the following work skills when placing in situ concrete flooring: – measuring, marking out, inspecting, receiving, handling, placing, spreading, levelling, vibrating, compacting, testing and protecting.
	7.2 Use and maintain hand tools, portable power tools, plant or machinery and ancillary equipment.
	7.3 Place and lay concrete for floors to given working instructions using three of the following placement methods: – chute – elephant's trunk – skip – pump – mono-rail – manually.

Title:	Placing in situ concrete flooring in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – inspect the prepared area prior to placement – check line, level and suitability of formwork retaining structures and other temporary work for the concrete pour – inspect joints, installed reinforcements and embedments, under floor heating, ducting, pipework, holding down bolts – check and monitor ambient conditions – receive, handle and test concrete – test integrated reinforcement, fibre, plastic, metal – place concrete for floors by chute, elephant's trunk, skip, pump, mono-rail and manually – level, vibrate and compact concrete – screed concrete to finished level – cure and protect concrete – record and report – recognise and determine when specific skills and knowledge are required and report accordingly – use hand tools, portable power tools and equipment – work at height – use access equipment.
	7.5 Describe the needs of other occupations and how to effectively communicate within a team when placing in situ concrete flooring.
	7.6 Describe how to maintain the tools and equipment used when placing in situ concrete flooring.

Title:	Placing in situ concrete flooring in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **Three** of the following endorsements required: Chute Elephants trunk Skip Pump Mono rail Manual
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	47

Title:	Applying surface finishes to concrete flooring in the workplace
Unit Number:	F/600/7012

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 applying surface finishes to concrete flooring.	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: – drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations.
2 Know how to comply with relevant legislation and official guidance when applying surface finishes to concrete flooring.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: – in the workplace, below ground level, in confined spaces, 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 reports.
3 Maintain safe and healthy working practices when applying surface finishes to concrete flooring.	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 applying surface finishes to concrete flooring.
	3.2 Demonstrate compliance with given information and relevant legislation when applying surface finishes to concrete flooring in relation to: – safe handling of materials – safe use and storage of materials, tools and equipment – specific risks to health.

Title:	Applying surface finishes to concrete flooring in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
3 Continued.	3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to applying surface finishes to concrete flooring, 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 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 apply surface finishes to concrete flooring.	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: – structural concrete – consumables, curing agents, blades – pedestrian and ride-on power floats, tamping bars, rollers and vibrating screed beams – hand tools, 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, volume and wastage associated with the method/procedure to apply surface finishes to concrete flooring.

Title:	Applying surface finishes to concrete flooring in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Minimise the risk of damage to the work and surrounding area when applying surface finishes to concrete flooring.	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 applying surface finishes to concrete flooring.	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 apply surface finishes to concrete flooring to the required specification.	7.1 Demonstrate the following work skills when applying surface finishes to concrete flooring: – measuring, finishing, curing and protecting.
	7.2 Use and maintain hand tools, portable power tools, plant or machinery and ancillary equipment
	7.3 Apply-finishes to concrete flooring to given working instructions by three of the following: – tamped – brushed – hand-float – pedestrian power float – ride-on power float.

Title:	Applying surface finishes to concrete flooring in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
7 Continued	7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – set up, carry out pre-start and post stop checks and operate pedestrian power float or ride-on power float or other finishing equipment (tamping bars, rollers and vibrating screed beams) – identify and report defects – achieve surface finishes to concrete, tamped, brushed, hand-float, pedestrian power float, ride-on power float – cure and protect – record and report – recognise and determine when specific skills and knowledge are required and report accordingly – use hand tools, portable power tools, plant and machinery and ancillary equipment. – work at height – use of access equipment.
	7.5 Describe the needs of other occupations and how to effectively communicate within a team when applying surface finishes to concrete flooring.
	7.6 Describe how to maintain the tools and equipment used when applying surface finishes to concrete flooring.

Title:	Applying surface finishes to concrete flooring in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated. This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. <u>ProQual Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction):</u> **Three** of the following endorsements required: Tamped Brushed Hand-float Pedestrian power float Ride-on power float
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	47

Title:	Preparing and operating ride-on topping spreaders to distribute materials in the workplace
Unit Number:	J/601/1580

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
1 Interpret the given information relating to the preparation and use of ride-on topping spreaders to carry out distribution operations.	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: – drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of ride-on topping spreaders for distribution work.
2 Organise with others the sequence and operation in which distribution operations using ride-on topping spreaders are to be carried out.	2.1 Organise the work according to given information or instructions.
	2.2 Describe how to communicate ideas between team members.
	2.3 Organise and communicate with team members and other associated occupations.
	2.4 Describe how to organise resources prior to and during distribution operations using ride-on topping spreaders.
3 Know how to comply with relevant legislation and official guidance when carrying out distribution operations using ride-on topping spreaders.	3.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.
	3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.
	3.3 Explain what the accident reporting procedures are and who is responsible for making reports.

Title:	Preparing and operating ride-on topping spreaders to distribute materials in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
4 Maintain safe and healthy working practices when preparing for and carrying out distribution operations using ride-on topping spreaders.	4.1 Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during distribution operations.
	4.2 Demonstrate compliance with given information and relevant legislation when carrying out distribution operations using ride-on topping spreaders in relation to two or more of the following: – safe use and storage of plant or machinery – safe use and storage of tools and equipment – specific risks to health.
	4.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to ride-on topping spreader use, 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).
	4.4 Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
	4.5 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.
5 Request and select the required quantity and quality of resources to prepare for and carry out distribution operations using ride-on topping spreaders.	5.1 Request and select resources associated with ride-on topping spreaders in relation to consumables, materials, tools, ancillary equipment and/or accessories.
	5.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: – consumables, lubricants and fuels – attachments, distribution aids – hand tools, ancillary equipment and accessories.
	5.3 Describe how the resources should be used correctly and how problems associated with the resources are reported.

Title:	Preparing and operating ride-on topping spreaders to distribute materials in the workplace

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Continued	5.4 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.
	5.5 Describe any potential hazards associated with the resources and methods of work.
	5.6 Describe how to identify weight, quantity, length and area associated with the method/procedures to carry out distribution operations using ride-on topping spreaders.
6 Minimise the risk of damage to the work and surrounding area when preparing to and distributing materials.	6.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
	6.2 Prevent damage and maintain a clean work space.
	6.3 Dispose of waste in accordance with current legislation.
	6.4 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
	6.5 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.
7 Complete the work within the allocated time when preparing to and distributing materials.	7.1 Demonstrate completion of the work within the allocated time.
	7.2 Describe the purpose of the work programme and describe 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.

Title:	Preparing and operating ride-on topping spreaders to distribute materials in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
8 Comply with the given contract information to distribute materials using ride-on topping spreaders to the required specification.	8.1 Demonstrate the following work skills when preparing for and distributing materials using ride-on topping spreaders: – checking, adjusting, communicating, manoeuvring, positioning, distributing and compacting.
	8.2 Use and maintain hand tools, ancillary equipment and/or accessories.
	8.3 Prepare to, position, set up and operate ride-on topping spreaders to distribute a variety of materials, in a variety of locations, to given working instructions.
	8.4 Shut down and secure ride-on topping spreader.
	8.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: – identify the characteristics of the ride-on topping spreader used for distribution operations – carry out function checks for the distribution work – identify the area for the distribution work – prepare, set up and adjust for operational requirements – carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area – confirm material characteristics – distribute materials in laying patterns – identify geological, environmental and material changes and report – check to avoid damage to structures and utilities service apparatus – recognise and determine when specific skills and knowledge are required and report accordingly – complete laying and distribution work – be on the public highway – shut down and secure ride-on topping spreader – use hand tools, ancillary equipment and accessories.
	8.7 Describe the needs of other occupations and how to effectively communicate within a team when preparing to and carrying out distribution operations.
	8.8 Describe how to maintain the plant and machinery, hand tools and ancillary equipment used to distribute materials.

Title:	Preparing and operating ride-on topping spreaders to distribute materials in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated.
Sector subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	100

Title:	Preparing and operating ride-on laser screeders to level concrete in the workplace
Unit Number:	T/650/4190

Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*	
1 Interpret the given information relating to the preparation and use of ride-on laser screeders to carry out concrete levelling operations.	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: – drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of ride-on laser screeders for concrete levelling operations.
2 Organise with others the sequence and operation in which concrete levelling operations using ride-on laser screeders are to be carried out.	2.1	Organise the work according to given information or instructions.
	2.2	Describe how to communicate ideas between team members.
	2.3	Organise and communicate with team members and other associated occupations.
	2.4	Describe how to organise resources prior to and during concrete levelling operations using ride-on laser screeders.
3 Know how to comply with relevant legislation and official guidance when carrying out concrete levelling operations using ride-on laser screeders.	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.
	3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.
	3.3	Explain what the accident reporting procedures are and who is responsible for making reports.

Title:	Preparing and operating ride-on laser screeders to level concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
4 Maintain safe and healthy working practices when preparing for and carrying out concrete levelling operations using ride-on laser screeders.	4.1 Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during concrete levelling operations.
	4.2 Demonstrate compliance with given information and relevant legislation when carrying out concrete levelling operations using ride-on laser screeders in relation to two or more of the following: – safe use and storage of plant or machinery – safe use and storage of tools and equipment – specific risks to health.
	4.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to ride-on laser screeder use, 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).
	4.4 Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
	4.5 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.
5 Request and select the required quantity and quality of resources to prepare for and carry out concrete levelling operations using ride-on laser screeders.	5.1 Request and select resources associated with ride-on laser screeders in relation to consumables, materials, tools, ancillary equipment and/or accessories.
	5.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: – consumables, lubricants and fuels – attachments and laying aids – hand tools, ancillary equipment and accessories.
	5.3 Describe how the resources should be used correctly and how problems associated with the resources are reported.

Title:	Preparing and operating ride-on laser screeders to level concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
5 Continued	5.4 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.
	5.5 Describe any potential hazards associated with the resources and methods of work.
	5.6 Describe how to identify weight, quantity, length and area associated with the method/procedures to carry out concrete levelling operations using ride-on laser screeders.
6 Minimise the risk of damage to the work and surrounding area when preparing to and levelling concrete.	6.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
	6.2 Prevent damage and maintain a clean work space.
	6.3 Dispose of waste in accordance with current legislation.
	6.4 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
	6.5 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.
7 Complete the work within the allocated time when preparing to and levelling concrete.	7.1 Demonstrate completion of the work within the allocated time.
	7.2 Describe the purpose of the work programme and describe 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.

Title:	Preparing and operating ride-on laser screeders to level concrete in the workplace
Learning outcomes *The learner will be able to:*	**Assessment criteria** *The learner can:*
8 Comply with the given contract information to level concrete using ride-on laser screeders to the required specification.	8.1 Demonstrate the following work skills when preparing for and levelling concrete using ride-on laser screeders: – checking, adjusting, communicating, manoeuvring, positioning and levelling.
	8.2 Use and maintain hand tools, ancillary equipment and/or accessories.
	8.3 Prepare to, position, set up and operate ride-on laser screeders to level concrete, in a variety of locations, to given working instructions.
	8.4 Shut down and secure ride-on laser screeders.
	8.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: – identify the characteristics of the ride-on laser screeder used for concrete levelling operations – carry out function checks for the concrete levelling work – identify the area for the concrete levelling work – prepare, set up and adjust for operational requirements – carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area – confirm material characteristics – level concrete in patterns – identify geological, environmental and material changes and report – check to avoid damage to structures and utilities service apparatus – recognise and determine when specific skills and knowledge are required and report accordingly – complete concrete levelling work – be on the public highway – shut down and secure ride-on laser screeder – use hand tools, ancillary equipment and accessories.
	8.6 Describe the needs of other occupations and how to effectively communicate within a team when preparing to and carrying out concrete levelling operations.
	8.7 Describe how to maintain the plant and machinery, hand tools and ancillary equipment used to level concrete.

Title:	Preparing and operating ride-on laser screeders to level concrete in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. Workplace evidence of skills cannot be simulated.
Sector subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	133

enquiries@proqualab.com

Tel: +44 (0)1430 423822

ProQual AB Limited, ProQual House, Unit 1, Innovation Drive, Newport, HU15 2GX
Company Registration Number: 07464445