

# **Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction) (QCF)**

## **Specification**

NVQ qualification

First registration May 2015

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# Purpose of this specification

This specification sets out:

- the objectives of the qualification
- any other qualification that a learner must have completed before taking the qualification
- any prior knowledge, skills or understanding which the learner is required to have before taking the qualification
- the combination of units that a learner must have completed before the qualification will be awarded and any pathways
- any other requirements that a learner must have satisfied before they will be assessed or before the qualification will be awarded
- the knowledge, skills and understanding that will be assessed as part of the qualification
- the method of any assessment and any associated requirements relating to it
- the criteria against which a learner's level of attainment will be measured (such as assessment criteria)
- assessment requirements and/or evidence requirements required as specified by the relevant Sector Skills Council/Standards Setting Body
- assessment requirements/strategy as published by the relevant Sector Skills Council/Standards Setting Body
- the Apprenticeship Framework in which the qualification is included, where appropriate.

# 1 Introducing Pearson Edexcel NVQ qualifications

## What are NVQ qualifications?

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National Vocational Qualifications (NVQs) are work-based qualifications that give learners the opportunity to develop and demonstrate their competence in the area of work or job role to which the qualification relates.

NVQs are based on the National Occupational Standards (NOS) for the appropriate sector. NOS define what employees, or potential employees, must be able to do and know, and how well they should undertake work tasks and work roles. At Level 2 and above, these qualifications are recognised as the competence component of Apprenticeship Frameworks. Qualifications at Level 1 can be used in Traineeships, which are stepping stones to Apprenticeship qualifications. NVQs qualifications can also be delivered as stand-alone for those who wish to take a work-based qualification.

NVQs qualifications are outcomes-based with no fixed learning programme - allowing flexible delivery that meets the individual learner's needs. They are suitable for those in employment or those who are studying at college and have a part-time job or access to a substantial work placement so that they are able to demonstrate the competencies that are required for work.

Most learners will work towards their qualification in the workplace or in settings that replicate the working environment as specified in the assessment requirements/strategy for the sector. Colleges, training centres and/or employers can offer these qualifications provided they have access to appropriate physical and human resources.

There are three sizes of NVQs in the QCF:

- Award (1 to 12 credits)
- Certificate (13 to 36 credits)
- Diploma (37 credits and above).

Every unit and qualification in the QCF has a credit value.

The credit value of a unit specifies the number of credits that will be awarded to a learner who has met the learning outcomes of the unit.

The credit value of a unit is based on:

- one credit for those learning outcomes achievable in 10 hours of learning
- learning time – defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria.



## 2 Qualification summary and key information

Qualification title	Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction) (QCF)
QCF Qualification Number (QN)	601/6020/2
Qualification framework	Qualifications and Credit Framework (QCF)
Regulation start date	10/04/2015
Operational start date	01/05/2015
Approved age ranges	16-18 19+ Please note that sector-specific requirements or regulations may prevent learners of a particular age from embarking on this qualification. Please refer to the assessment requirements/strategy.
Credit value	39.
Assessment	Portfolio of Evidence (internal assessment).
Guided learning hours	130-260
Grading information	The qualification and units are graded pass/fail.

Qualification title	Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction) (QCF)
Entry requirements	<p>No prior knowledge, understanding, skills or qualifications are required before learners register for this qualification, however it is likely that they will be seeking work or may already be employed within the construction and the built environment sector.</p> <p>Centres must follow the Pearson Access and Recruitment policy (see <i>Section 7, Access and Recruitment</i>).</p>
Funding	<p>Details on funding approval will be available in the future on the Learning Aims Reference Service (LARS) database, which replaces the Learning Aim Reference Application (LARA). In the interim, the LARS Lite database is available to check funding approval.</p> <p>Alternatively, the Skills Funding Agency's simplified funding catalogues can be used to check funding approval.</p> <p>Further information and guidance is available on the website: <a href="http://www.gov.uk">www.gov.uk</a></p>

Centres will need to use the QCF Qualification Number (QN) when they seek public funding for their learners. As well as a QN, each unit within a qualification has a QCF unit reference number (URN).

The qualification title, unit titles and QN will appear on each learner's final certificate. Centres should tell learners this when recruiting them and registering them with Pearson. There is more information about certification in our *UK Information Manual*, available on our website at: [www.edexcel.com](http://www.edexcel.com)

## 3 Qualification rationale

### Qualification objectives

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The Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction) (QCF) is for learners who work in, or who want to work in the construction sector.

It gives learners the opportunity to:

- develop and demonstrate competence as a specialist concreter, working with concrete across one or more areas, including concrete repair, sprayed concrete, decorative concrete, concrete drilling, concrete sawing, in-situ flooring and substrate preparation and profiling.
- develop technical skills and knowledge and understanding related to the specified job roles in construction.
- have existing skills recognised
- achieve a nationally-recognised Level 2 qualification
- develop their own personal growth and engagement in learning.

### Relationship with previous qualifications

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This qualification is a direct replacement for the Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction) (QCF) (600/9373/0). CITB, the Sector Skills Council (SSC) for Construction, in consultation with the industry, have changed the National Occupational Standards (NOS) so it is important that Pearson updates qualifications accordingly to ensure knowledge and skills continue to be relevant for learners and meet the requirements of the job role.

### Apprenticeships

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CITB includes the Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction) (QCF) as the competencies component for the Intermediate Apprenticeship in Construction Civil Engineering (England), in the Specialist Concrete Occupations pathway.

## **Progression opportunities**

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Learners who achieve the Pearson Edexcel Level 2 NVQ Diploma can progress to a job role as a specialist concreter in their chosen area, such as concrete repair, sprayed concrete, decorative concrete, concrete drilling, concrete sawing, in-situ flooring or substrate preparation and profiling.

It is expected that most learners will already be working as construction operatives in one of the above specialist pathways for concrete occupations. As part of an apprenticeship, it will help to provide recognition and career progression for new entrants, and can lead to employment for those not employed.

Learners may also progress to supervisory qualifications, such as the Pearson Edexcel Level 3 NVQ diploma in Occupational Work Supervision (Construction) (QCF), or the Pearson Edexcel Level 4 NVQ Diploma in Site Supervision (Construction) (QCF), if their job role requires greater responsibility.

## **Industry support and recognition**

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This qualification is supported by CITB, the Sector Skills Council for construction and the built environment.

## **Relationship with National Occupational Standards**

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This qualification is based on the National Occupational Standards (NOS) in Specialist Concrete Occupations, which were set and designed by CITB, the Sector Skills Council for the sector.

## 4 Qualification structure

### Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Construction) (QCF)

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The learner will need to meet the requirements outlined in the table below before the qualification can be awarded.

Learners must complete the four mandatory units in Group A and the required number of credits for one of the twelve pathways. Learners may choose to complete additional optional units, however these will not count towards the minimum credit value for the qualification.

Minimum number of credits that must be achieved	39
Minimum number of credits that must be achieved at level 2 or above	37
Number of mandatory credits from Group A that must be achieved	20
Minimum number of credits that must be achieved from a selected pathway	19

Unit	Unit reference number	Group A - Mandatory units for all pathways	Level	Credit	Guided learning hours
1	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	2	10	33
2	A/503/1170	Conforming to General Health, Safety and Welfare in the Workplace	1	2	7
3	J/503/1169	Conforming to Productive Working Practices in the Workplace	2	3	10
4	F/503/1171	Moving, Handling and Storing Resources in the Workplace	2	5	17

### Pathway 1: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Concrete Repair)

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	50
Number of mandatory credits that must be achieved	30

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
5	R/506/3834	Surveying Degraded Concrete Structures in the Workplace	2	16	53
6	Y/506/3835	Preparing Substrate and Applying Materials to Repair Concrete in the Workplace	2	14	47
Unit	Unit reference number	Additional units (not compulsory)	Level	Credit	Guided learning hours
		Credits from this group will not count towards the minimum credit value required for the qualification			
26	D/506/3836	Applying Coatings as Structure Protection in the Workplace	2	13	43

### Pathway 2: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Sprayed Concrete)

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	48
Number of mandatory credits that must be achieved	28

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
7	H/506/3837	Preparing Substrate for Sprayed Concrete in the Workplace	2	12	40
8	K/506/3838	Applying Sprayed Concrete in the Workplace	2	16	53

**Pathway 3: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Decorative Concrete)**

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	66
Number of mandatory credits that must be achieved	46

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
9	M/506/3839	Preparing Backgrounds Prior to Laying Decorative Concrete in the Workplace	2	12	40
10	K/506/3841	Placing Concrete and Producing a Decorative Finish in the Workplace	2	18	60
11	M/503/9623	Installing Street Ironwork in the Workplace	2	9	30
12	J/506/4673	Setting Out Secondary Dimensional Work Control in the Workplace	2	7	23

#### Pathway 4: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Concrete Drilling)

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	59
Number of mandatory credits that must be achieved	39

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
13	M/506/3842	Reshaping Using Hand Sawing Techniques in the Workplace	2	21	70
14	T/506/3843	Forming Drill Holes or Core in the Structural Fabric (Diamond Core Bits) in the Workplace	2	18	60
Unit	Unit reference number	Additional units (not compulsory) Credits from this group will not count towards the minimum credit value required for the qualification	Level	Credit	Guided learning hours
27	F/506/3845	Carrying Out Concrete Bursting Operations in the Workplace	2	16	53
28	Y/506/3849	Carrying Out Concrete Crushing and Breaking Operations in the Workplace	2	14	47
29	L/506/3850	Carrying Out Wire Sawing of Concrete in the Workplace	2	16	53
30	D/600/8281	Erecting and Dismantling Access/Working Platforms in the Workplace	2	8	27
31	T/600/7220	Applying Sealants Mechanically in the Workplace	3	12	40

Centres should be aware that within the Level 2 qualification in this specification, learners may be required to meet the demands of unit(s) at Level 3. Centres are advised to consider the support, guidance and opportunities they give to learners to meet the demands of the higher level unit(s) during delivery and assessment of the qualification.



## Pathway 5: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Concrete Sawing)

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	60
Number of mandatory credits that must be achieved	40

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
13	M/506/3842	Reshaping Using Hand Sawing Techniques in the Workplace	2	21	70
15	A/506/3844	Forming Saw Cuts in Structural Fabric Material in the Workplace	2	19	63
Unit	Unit reference number	Additional units (not compulsory)	Level	Credit	Guided learning hours
		Credits from this group will not count towards the minimum credit value required for the qualification			
27	F/506/3845	Carrying Out Concrete Bursting Operations in the Workplace	2	16	53
28	Y/506/3849	Carrying Out Concrete Crushing and Breaking Operations in the Workplace	2	14	47
29	L/506/3850	Carrying Out Wire Sawing of Concrete in the Workplace	2	16	53
30	D/600/8281	Erecting and Dismantling Access/Working Platforms in the Workplace	2	8	27
31	T/600/7220	Applying Sealants Mechanically in the Workplace	3	12	40

Centres should be aware that within the Level 2 qualification in this specification, learners may be required to meet the demands of unit(s) at Level 3. Centres are advised to consider the support, guidance and opportunities they give to learners to meet the demands of the higher level unit(s) during delivery and assessment of the qualification.

## Pathway 6: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Concrete Drilling)

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	78
Number of mandatory credits that must be achieved	58

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
13	M/506/3842	Reshaping Using Hand Sawing Techniques in the Workplace	2	21	70
14	T/506/3843	Forming Drill Holes or Core in the Structural Fabric (Diamond Core Bits) in the Workplace	2	18	60
15	A/506/3844	Forming Saw Cuts in Structural Fabric Material in the Workplace	2	19	63
Unit	Unit reference number	Additional units (not compulsory)	Level	Credit	Guided learning hours
		Credits from this group will not count towards the minimum credit value required for the qualification			
27	F/506/3845	Carrying Out Concrete Bursting Operations in the Workplace	2	16	53
28	Y/506/3849	Carrying Out Concrete Crushing and Breaking Operations in the Workplace	2	14	47
29	L/506/3850	Carrying Out Wire Sawing of Concrete in the Workplace	2	16	53
30	D/600/8281	Erecting and Dismantling Access/Working Platforms in the Workplace	2	8	27
31	T/600/7220	Applying Sealants Mechanically in the Workplace	3	12	40

Centres should be aware that within the Level 2 qualification in this specification, learners may be required to meet the demands of unit(s) at Level 3. Centres are advised to consider the support, guidance and opportunities they give to learners to meet the demands of the higher level unit(s) during delivery and assessment of the qualification.

**Pathway 7: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (In Situ Flooring – Screed)**

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	51
Number of mandatory credits that must be achieved	31

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
16	R/506/3851	Preparing and Inspecting Substrates Prior to Laying Screed Floors in the Workplace	2	13	43
17	D/506/3853	Laying Screed Floors in the Workplace	2	18	60
Unit	Unit reference number	Additional units (not compulsory)	Level	Credit	Guided learning hours
		Credits from this group will not count towards the minimum credit value required for the qualification			
15	A/506/3844	Forming Saw Cuts in Structural Fabric Material in the Workplace	2	19	63

**Pathway 8: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (In Situ Flooring – Resin)**

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	49
Number of mandatory credits that must be achieved	29

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
18	K/506/3855	Laying Resin Floors in the Workplace	2	16	53
19	A/506/3861	Repairing, Preparing and Inspecting Substrates Prior to Laying Resin Floors in the Workplace	2	13	43
Unit	Unit reference number	Additional units (not compulsory)	Level	Credit	Guided learning hours
		Credits from this group will not count towards the minimum credit value required for the qualification			
15	A/506/3844	Forming Saw Cuts in Structural Fabric Material in the Workplace	2	19	63

**Pathway 9: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (In Situ Flooring – Concrete Layer)**

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	49
Number of mandatory credits that must be achieved	29

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
20	T/506/3857	Preparing Areas for Concrete Flooring in the Workplace	2	15	50
21	A/506/3858	Placement of In Situ Concrete Flooring in the Workplace	2	14	47
Unit	Unit reference number	Additional units (not compulsory)	Level	Credit	Guided learning hours
		Credits from this group will not count towards the minimum credit value required for the qualification			
15	A/506/3844	Forming Saw Cuts in Structural Fabric Material in the Workplace	2	19	63

## Pathway 10: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete

### Occupations (In Situ Flooring – Concrete Finisher)

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	49
Number of mandatory credits that must be achieved	29

Unit	Unit reference number	Mandatory units	Level	Credit	Guided learning hours
20	T/506/3857	Preparing Areas for Concrete Flooring in the Workplace	2	15	50
22	F/506/3859	Applying Surface Finishes to Concrete Flooring in the Workplace	2	14	47
Unit	Unit reference number	Additional units (not compulsory)  Credits from this group will not count towards the minimum credit value required for the qualification	Level	Credit	Guided learning hours
15	A/506/3844	Forming Saw Cuts in Structural Fabric Material in the Workplace	2	19	63

**Pathway 11: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (In Situ Flooring – Concrete Plant Operator)**

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	50
Minimum number of optional credits that must be achieved	30

Unit	Unit reference number	Optional units Learners must complete one unit from this group	Level	Credit	Guided learning hours
23	M/506/4652	Preparing and Operating Ride-on Topping Spreaders to Distribute Materials in the Workplace	2	30	100
24	R/506/4658	Preparing and Operating Ride-on Laser Screeders to Level Concrete in the Workplace	2	40	133
Unit	Unit reference number	Additional units (not compulsory) Credits from this group will not count towards the minimum credit value required for the qualification	Level	Credit	Guided learning hours
15	A/506/3844	Forming Saw Cuts in Structural Fabric Material in the Workplace	2	19	63

**Pathway 12: Pearson Edexcel Level 2 NVQ Diploma in Specialist Concrete Occupations (Substrate Preparation and Profiling)**

Minimum number of credits that must be achieved for this pathway, including the mandatory units from Group A	39
Number of mandatory credits that must be achieved	19

Unit	Unit reference number	Mandatory unit	Level	Credit	Guided learning hours
25	L/506/5145	Operating Plant or Machinery to Prepare, Profile and Finish Substrates for Specified Materials in the Workplace	2	19	63



## Unit endorsements

Unit	Unit reference number	Unit title	Endorsement
1	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	<p>One of the following endorsements required, (i.e. own area of work):</p> <ul style="list-style-type: none"> <li>• sprayed concrete</li> <li>• concrete repair</li> <li>• decorative concrete</li> <li>• concrete drilling and sawing</li> <li>• in situ flooring</li> <li>• substrate preparation and profiling</li> </ul>
5	R/506/3834	Surveying Degraded Concrete Structures in the Workplace	<p>Two of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• visual</li> <li>• mechanical means</li> <li>• chemical</li> <li>• electrochemical</li> </ul>
6	Y/506/3835	Preparing Substrate and Applying Materials to Repair Concrete in the Workplace	<p>Five of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• prepare substrates and reinforcement</li> <li>• apply primers, bonding agents and repair compounds</li> <li>• replace steel reinforcement</li> <li>• erect and dismantle formwork</li> <li>• protect and cure</li> <li>• record and report</li> </ul>

Unit	Unit reference number	Unit title	Endorsement
7	H/506/3837	Preparing Substrate for Sprayed Concrete in the Workplace	<p>Seven of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• locate and protect services</li> <li>• break out loose and debonded materials</li> <li>• roughen smooth surfaces</li> <li>• clear and clean</li> <li>• surface profile levels</li> <li>• tie and secure reinforcement bar and/or mesh</li> <li>• fit guide wires</li> <li>• fit depth pins</li> <li>• erect formwork</li> <li>• record and report the work carried out</li> </ul>
8	K/506/3838	Applying Sprayed Concrete in the Workplace	<p>Five of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• pre-wet surfaces for spraying</li> <li>• spray concrete to profile</li> <li>• produce samples for testing</li> <li>• cure and protect concrete</li> <li>• record and report on test</li> <li>• record and report on spraying</li> <li>• operate spraying nozzle</li> <li>• operate pump</li> <li>• clean pump</li> <li>• clear lines</li> </ul>
10	K/506/3841	Placing Concrete and Producing a Decorative Finish in the Workplace	<p>One of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• imprinted</li> <li>• exposed aggregate</li> </ul>
12	J/506/4673	Setting Out Secondary Dimensional Work Control in the Workplace	<p>The following endorsement required, (i.e. own area of work):</p> <ul style="list-style-type: none"> <li>• decorative concrete</li> </ul>

Unit	Unit reference number	Unit title	Endorsement
13	M/506/3842	Reshaping Using Hand Sawing Techniques in the Workplace	<p>The following endorsement required:</p> <ul style="list-style-type: none"> <li>• angle grinder</li> </ul> <p>plus one of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• power saw</li> <li>• ring saw</li> <li>• chasing machine</li> <li>• chainsaw</li> </ul> <p>plus form saw cuts in at least one from:</p> <ul style="list-style-type: none"> <li>• concrete</li> <li>• masonry</li> <li>• stone</li> <li>• asphalt</li> </ul>
14	T/506/3843	Forming Drill Holes or Core in the Structural Fabric (Diamond Core Bits) in the Workplace	<p>Two of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• hand-held diamond core or drill</li> <li>• static drill rig diamond core</li> <li>• trailer rig diamond core</li> <li>• percussive drill</li> </ul>
15	A/506/3844	Forming Saw Cuts in Structural Fabric Material in the Workplace	<p>One of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• push along floor saw</li> <li>• self-propelled floor saw</li> <li>• diamond-bladed track saw</li> </ul>
16	R/506/3851	Preparing and Inspecting Substrates Prior to Laying Screed Floors in the Workplace	<p>Three of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• cementitious substrates</li> <li>• insulated areas</li> <li>• membranes</li> <li>• areas with heating systems</li> <li>• ducted areas</li> </ul>

Unit	Unit reference number	Unit title	Endorsement
17	D/506/3853	Laying Screed Floors in the Workplace	<p>One of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• cementitious screeds</li> <li>• flowable screeds</li> </ul>
18	K/506/3855	Laying Resin Floors in the Workplace	<p>One of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• resin coatings, plus two endorsements from floor seals, floor coatings or high build floor coatings</li> <li>• resin self-smoothing, plus two endorsements from: multi-layer flooring, flow applied flooring or heavy duty flowable flooring</li> <li>• resin screeds</li> </ul>
20	T/506/3857	Preparing Areas for Concrete Flooring in the Workplace	<p>Three of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• substrate preparation</li> <li>• timber formwork erection</li> <li>• proprietary formwork erection</li> <li>• reinforcement installation</li> <li>• membranes installation</li> </ul>
21	A/506/3858	Placement of In Situ Concrete Flooring in the Workplace	<p>Three of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• chute</li> <li>• elephant's trunk</li> <li>• skip</li> <li>• pump</li> <li>• monorail</li> <li>• manual</li> </ul>

Unit	Unit reference number	Unit title	Endorsement
22	F/506/3859	Applying Surface Finishes to Concrete Flooring in the Workplace	<p>Three of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• tamped</li> <li>• brushed</li> <li>• hand-float</li> <li>• pedestrian power float</li> <li>• ride-on power float</li> </ul>
25	L/506/5145	Operating Plant or Machinery to Prepare, Profile and Finish Substrates for Specified Materials in the Workplace	<p>Four of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• grinder</li> <li>• planing machine</li> <li>• sander</li> <li>• polisher</li> <li>• scabblers</li> <li>• tile stripper</li> <li>• captive/enclosed shotblast machine</li> <li>• vacuum machine</li> <li>• filtration systems</li> </ul>
28	Y/506/3849	Carrying Out Concrete Crushing and Breaking Operations in the Workplace	<p>One of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• portable hand crusher</li> <li>• remote/radio control crusher and breaker</li> <li>• umbilical cord control crusher and breaker</li> </ul>

Unit	Unit reference number	Unit title	Endorsement
30	D/600/8281	Erecting and Dismantling Access/Working Platforms in the Workplace	<p>The following endorsement required, (i.e. own area of work):</p> <ul style="list-style-type: none"> <li>• concrete drilling and sawing</li> </ul> <p>plus two of the following endorsements required:</p> <ul style="list-style-type: none"> <li>• ladders/crawler boards</li> <li>• stepladders/platform steps</li> <li>• proprietary towers</li> <li>• trestle platforms</li> <li>• mobile scaffold towers</li> <li>• proprietary staging/podiums.</li> </ul>

## 5 Programme delivery

Centres are free to offer these qualifications using any mode of delivery (for example full-time, part-time, evening only, distance learning) that meets learners' needs. Learners must be in employment or working with a training provider on a programme so that they can develop and demonstrate the occupational competence required.

Whichever mode of delivery is used, centres must make sure that learners have access to specified resources and to the sector specialists delivering and assessing the units. Centres must adhere to the Pearson policies that apply to the different modes of delivery. Our policy on *Collaborative arrangements for the delivery of vocational qualifications* can be found on our website: [www.edexcel.com/policies](http://www.edexcel.com/policies)

There are various approaches to delivering a successful competence-based qualification. The section below outlines elements of good practice that centres can adopt in relation to learner recruitment, preparation and support, training and assessment delivery, and employer engagement.

### Elements of good practice

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#### Learner recruitment, preparation and support

Good practice in relation to learner recruitment, preparation and support includes:

- providing initial advice and guidance, including work tasters, to potential learners to give them an insight into the relevant industry and the learning programme
- using a range of appropriate and rigorous selection methods to ensure that learners are matched to the programme best suited to their needs
- carrying out a thorough induction for learners to ensure that they completely understand the programme and what is expected of them. The induction should include, for example, the requirements of the programme, an initial assessment of current competency levels, assessment of individual learning styles, identification of training needs, an individual learning plan, details of training delivery and the assessment process. It is good practice to involve the employer in the induction process. This helps employers to understand what will be taking place during the programme and enables them to start building a relationship with the centre to support the effective delivery of the programme
- keeping in regular contact with the learner to keep them engaged and motivated, and ensuring that there are open lines of communication between the learner, the assessor, the employer and teaching staff.

## Training and assessment delivery

Good practice in relation to training and assessment delivery includes:

- offering flexible delivery and assessment to meet the needs of the employer and learner, through the use of a range of approaches, for example virtual learning environments (VLEs), online lectures, video, printable online resources, virtual visits, webcams for distance training, e-portfolios
- planning opportunities for the development and practising of skills on the job. On-the-job training presents an excellent opportunity to develop the learner's routine expertise, resourcefulness, craftspersonship and business-like attitude. It is therefore important that there is intentional structuring of practice and guidance to supplement the learning and development provided through engagement in everyday work activities. Learners need to have structured time to learn and practice their skills separate from their everyday work activities. Teaching and learning methods, such as coaching, mentoring, shadowing, reflective practice, collaboration and consultation, could be used in this structured on-the-job learning
- integrating the delivery and assessment of Personal, Learning and Thinking Skills (PLTS) and Employment Rights and Responsibilities (ERR) if the programme is being delivered as a part of an Apprenticeship. It is important that learners understand the relevance of these skills in the workplace and are aware of when and how they will be developing them.
- developing an holistic approach to assessment by matching evidence to different assessment criteria, learning outcomes and units as appropriate, thereby reducing the assessment burden on learners and assessors. It is good practice to draw up an assessment plan that aligns the units with the learning process and the acquisition of knowledge and skills, and that indicates how and when the units will be assessed
- discussing and agreeing with the learner and employer suitable times, dates and work areas where assessment will take place. Learners and employers should be given regular and relevant feedback on performance and progress.



## Employer engagement

Good practice in relation to employer engagement includes:

- communicating with employers at the start of the programme to understand their business context and requirements so that the programme can be tailored to meet their needs
- working with the employer to ensure that learners are allocated a mentor in the workplace to assist them in the day-to-day working environment and to act as a contact for the assessor/tutor
- helping the employer to better understand their role in the delivery of the programme. It is important that employers understand that sufficient and relevant work must be given to learners in order to provide a culture of learning and to ensure that they are given every opportunity to participate in aspects of continuous professional development (CPD).

## 6 Centre resource requirements

As part of the approval process, centres must make sure that the resource requirements below are in place before offering the qualification.

- Centres must have the appropriate physical resources to support delivery and assessment of the qualification. For example, a workplace in line with industry standards, or a Realistic Working Environment (RWE), where permitted, as specified in the assessment requirements/strategy for the sector, equipment, IT, learning materials, teaching rooms.
- Where RWE is permitted, it must offer the same conditions as the normal, day-to-day working environment, with a similar range of demands, pressures and requirements for cost-effective working.
- Centres must meet any specific human and physical resource requirements outlined in the assessment requirements/strategy in *Annexe A*. Staff assessing learners must meet the occupational competence requirements within the overarching assessment requirements/strategy for the sector.
- There must be systems in place to ensure continuing professional development for staff delivering the qualification.
- Centres must have appropriate health and safety policies, procedures and practices in place for the delivery and assessment of the qualification.
- Centres must deliver the qualification in accordance with current equality legislation. For further details on Pearson's commitment to the Equality Act 2010, please see *Section 7, Access and recruitment*. For full details on the Equality Act 2010, please go to [www.legislation.gov.uk](http://www.legislation.gov.uk)

## 7 Access and recruitment

Our policy on access to our qualifications is that:

- they should be available to everyone who is capable of reaching the required standards
- they should be free from barriers that restrict access and progression
- there should be equal opportunities for all wishing to access the qualifications.

Centres must ensure that their learner recruitment process is conducted with integrity. This includes ensuring that applicants have appropriate information and advice about the qualification to ensure that it will meet their needs.

Centres should review applicants' prior qualifications and/or experience, considering whether this profile shows that they have the potential to achieve the qualification.

### **Prior knowledge, skills and understanding**

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No prior knowledge, understanding, skills or qualifications are required before learners register for this qualification.

### **Access to qualifications for learners with disabilities or specific needs**

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Equality and fairness are central to our work. Pearson's Equality Policy requires all learners to have equal opportunity to access our qualifications and assessments and that our qualifications are awarded in a way that is fair to every learner.

We are committed to making sure that:

- learners with a protected characteristic (as defined by the Equality Act 2010) are not, when they are undertaking one of our qualifications, disadvantaged in comparison to learners who do not share that characteristic
- all learners achieve the recognition they deserve from undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers.

For learners with disabilities and specific needs, the assessment of their potential to achieve the qualification must identify, where appropriate, the support that will be made available to them during delivery and assessment of the qualification. Please see the information regarding reasonable adjustments and special consideration in *Section 8, Assessment*.

## 8 Assessment

To achieve a pass for the full qualification, the learner must achieve all the units required in the stated qualification structure.

### Language of assessment

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Assessment of the internally assessed units may be in English, Welsh or Irish. If assessment is to be carried out in either Welsh or Irish then centres must inform Pearson at the point of learner registration.

A learner taking the qualification may be assessed in British or Irish Sign Language where it is permitted for the purpose of reasonable adjustment.

Further information on the use of language in qualifications is available in our policy document *Use of languages in qualifications policy*, available on our website at: [www.edexcel.com](http://www.edexcel.com)

Further information on access arrangements can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational qualifications*. Both documents are on our website.

### Internal assessment

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The units in this qualification are assessed through an internally and externally quality assured Portfolio of Evidence made up of evidence gathered during the course of the learner's work.

Each unit has specified learning outcomes and assessment criteria. To pass each unit the learner must:

- achieve **all** the specified learning outcomes
- satisfy **all** the assessment criteria by providing sufficient and valid evidence for each criterion
- prove that the evidence is their own.

The learner must have an assessment record that identifies the assessment criteria that have been met. The assessment record should be cross-referenced to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment. Suitable centre documentation should be used to form an assessment record.

It is important that the evidence provided to meet the assessment criteria for the unit and learning outcomes is:

<b>Valid</b>	relevant to the standards for which competence is claimed
<b>Authentic</b>	produced by the learner
<b>Current</b>	sufficiently recent to create confidence that the same skill, understanding or knowledge persist at the time of the claim
<b>Reliable</b>	indicates that the learner can consistently perform at this level
<b>Sufficient</b>	fully meets the requirements of the standards.

Learners can provide evidence of occupational competence from:

- **current practice** – where evidence is generated from a current job role.
- a **programme of development** – where evidence comes from assessment opportunities built into a learning programme. The evidence provided must meet the requirements of the Sector Skills Council's assessment requirements/strategy.
- the **Recognition of Prior Learning (RPL)** – where a learner can demonstrate that they can meet a unit's assessment criteria through knowledge, understanding or skills they already possess without undertaking a course of development. They must submit sufficient, reliable, authentic and valid evidence for assessment. Evidence submitted that is based on RPL should give the centre confidence that the same level of skill, understanding and knowledge exists at the time of claim as existed at the time the evidence was produced. RPL is acceptable for accrediting a unit, several units, or a whole qualification.

Further guidance is available in our policy document *Recognition of Prior Learning Policy and Process*, available on our website.

- a combination of these.

## Assessment requirements/strategy

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The assessment requirements/strategy for this qualification is included in *Annexe A*. It sets out the overarching assessment principles and the framework for assessing the units to ensure that the qualification remain valid and reliable. It has been developed by CITB in partnership with employers, training providers, awarding organisations and the regulatory authorities.

## Types of evidence

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To achieve a unit, the learner must gather evidence that shows that they have met the required standard specified in the assessment criteria, Pearson's quality assurance arrangements (please see *Section 10, Quality assurance of centres*) and the requirements of the assessment requirements/strategy given in *Annexe A*.

In line with the assessment requirements/strategy, evidence for internally assessed units can take a variety of forms as indicated below:

- direct observation of the learner's performance by their assessor (O)
- outcomes from oral or written questioning (Q&A)
- products of the learner's work (P)
- personal statements and/or reflective accounts (RA)
- outcomes from simulation (S)
- professional discussion (PD)
- authentic statements/witness testimony (WT)
- expert witness testimony (EWT)
- evidence of Recognition of Prior Learning (RPL).

Learners can use the abbreviations in their portfolios for cross-referencing purposes.

Learners can also use one piece of evidence to prove their knowledge, skills and understanding across different assessment criteria and/or across different units. It is not necessary for learners to have each assessment criterion assessed separately. They should be encouraged to reference evidence to the relevant assessment criteria. However, the evidence provided for each unit must be clearly reference the unit being assessed. Evidence must be available to the assessor, the internal verifier and the Pearson standards verifier.

Any specific evidence requirements for a unit are given in the *Assessment* section of the unit.

Further guidance on the requirements for centre quality assurance and internal verification processes is available on our website at: [www.edexcel.com](http://www.edexcel.com). Please see *Section 12, Further information and useful publications* for details.

## Appeals

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Centres must have a policy for dealing with appeals from learners. Appeals may relate to incorrect assessment decisions or unfairly conducted assessment. The first step in such a policy is a consideration of the evidence by a Lead Internal Verifier or other member of the programme team. The assessment plan should allow time for potential appeals after learners have been given assessment decisions.

Centres must document all learners' appeals and their resolutions. Further information on the appeals process can be found in the document *Enquiries and appeals about Pearson vocational qualifications policy*, which is available on our website.

## Dealing with malpractice

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Centres must have a policy for dealing with malpractice by learners. This policy must follow the *Pearson Assessment Malpractice Policy*, which is available on our website. Centres must report malpractice to Pearson, particularly if any units have been subject to quality assurance or certification.

## Reasonable adjustments to assessment

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Centres are able to make adjustments to assessments to take account of the needs of individual learners in line with the guidance given in the document *Pearson Supplementary Guidance for Reasonable Adjustment and Special Consideration in Vocational Internally Assessed Units*. In most instances, adjustments can be achieved by following the guidance; for example allowing the use of assistive technology or adjusting the format of the evidence. We can advise you if you are uncertain as to whether an adjustment is fair and reasonable. Any reasonable adjustment must reflect the normal learning or working practice of a learner in a centre or working within the occupational area.

Further information on access arrangements can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational qualifications*.

Both documents are on our website.

## Special consideration

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Centres must operate special consideration in line with the guidance given in the document *Pearson Supplementary Guidance for Reasonable Adjustment and Special Consideration in Vocational Internally Assessed Units*. Special consideration may not be applicable in instances where:

- assessment requires the demonstration of practical competence
- criteria have to be met fully
- units/qualifications confer licence to practice.

Centres cannot apply their own special consideration; applications for special consideration must be made to Pearson and can be made only on a case-by-case basis. A separate application must be made for each learner and certification claims must not be made until the outcome of the application has been received.

Further information on special consideration can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational qualifications*.

Both of the documents mentioned above are on our website.

## Credit transfer

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Credit transfer describes the process of using a credit or credits awarded in the context of a different qualification or awarded by a different awarding organisation towards the achievement requirements of another qualification. All awarding organisations recognise the credits awarded by all other awarding organisations that operate within the QCF.

If learners achieve credits with other awarding organisations, they do not need to retake any assessment for the same units. The centre must keep evidence of unit achievement. Further information on credit transfer can be found in the document *Credit accumulation and transfer policy (England)*, which is available on our website.



## 9 Centre recognition and approval

### Centre recognition

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Centres that have not previously offered Edexcel vocational qualifications need to apply for and be granted centre recognition and approval as part of the process for approval to offer individual qualifications.

Existing centres will be given 'automatic approval' for a new qualification if they are already approved for a qualification that is being replaced by a new qualification and the conditions for automatic approval are met.

Guidance on seeking approval to deliver Edexcel vocational qualifications is available on our website.

### Approvals agreement

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All centres are required to enter into an approval agreement, which is a formal commitment by the head or principal of a centre, to meet all the requirements of the specification and any associated codes, conditions or regulations. Pearson will act to protect the integrity of the awarding of qualifications. If centres do not comply with the agreement, this could result in the suspension of certification or withdrawal of approval.

## 10 Quality assurance of centres

Quality assurance is at the heart of vocational qualifications. Centres are required to declare their commitment to ensuring quality and to giving learners appropriate opportunities that lead to valid and accurate assessment outcomes.

Centres must follow quality assurance requirements for standardisation of assessors and internal verifiers and the monitoring and recording of assessment processes. Pearson uses external quality assurance procedures to check that all centres are working to national standards. It gives us the opportunity to identify and provide support to safeguard certification and quality standards. It also allows us to recognise and support good practice.

Centres offering competence-based qualifications will usually receive two standards verification visits per year (a total of two days per year). The exact frequency and duration of standards verifier visits will reflect the centre's performance, taking account of the:

- number of assessment sites
- number and throughput of learners
- number and turnover of assessors
- number and turnover of internal verifiers.

For centres offering a full Pearson BTEC Apprenticeship (i.e. all elements of the Apprenticeship are delivered with Pearson through registration of learners on a BTEC Apprenticeship framework) a single standards verifier will normally be allocated to verify all elements of the BTEC Apprenticeship programme. Centres should make use of our one-click learner registration to access this facility. If a centre is also offering stand-alone NVQs/Competence-based qualifications in the same sector as a full BTEC Apprenticeship, the same standards verifier should be allocated. If a centre is also offering stand-alone BTEC qualifications in the same sector as a full BTEC Apprenticeship, a different quality assurance model applies.

In order for certification to be released, confirmation is required that the National Occupational Standards (NOS) for assessment and verification, and for the specific occupational sector are being met consistently.

For further details, please go to the *NVQ Quality Assurance Centre Handbook*, the *BTEC Apprenticeships Quality Assurance Handbook* and the *Pearson Edexcel NVQs, SVQs and competence-based qualifications – Delivery Requirements and Quality Assurance Guidance* on our website.

# 11 Unit format

Each unit has the following sections.

## Unit title

The unit title is on the QCF and this form of words will appear on the learner's Notification of Performance (NOP).

## Unit reference number

Each unit is assigned a unit reference number that appears with the unit title on the Register of Regulated Qualifications.

## QCF level

All units and qualifications within the QCF have a level assigned to them. There are nine levels of achievement, from Entry to Level 8. The QCF Level Descriptors inform the allocation of the level.

## Credit value

All units have a credit value. When a learner achieves a unit, they gain the specified number of credits. The minimum credit value is 1 and credits can be awarded in whole numbers only.

## Guided learning hours

Guided learning hours are the times when a tutor, trainer or facilitator is present to give specific guidance towards the learning aim for a programme. This definition includes workplace guidance to support the development of practical job-related skills, tutorials and supervised study in, for example, open learning centres and learning workshops. It also includes the time spent by staff assessing learners' achievements, for example in the assessment of competence for competency-based qualifications.

## Unit summary

This summarises the purpose of the unit and the learning the unit offers.

## Unit assessment requirements/evidence requirements

The SSC/B set the assessment/evidence requirements. Learners must provide evidence according to each of the requirements stated in this section.

## **Learning outcomes**

The learning outcomes set out what a learner will know, understand or be able to do as the result of a process of learning.

## **Assessment criteria**

Descriptions of the requirements a learner is expected to meet to demonstrate that a learning outcome has been achieved.

# **Unit 1:**

## **Establishing Work Area Protection and Safety in the Workplace**

**Unit reference number:** T/503/9560

**QCF level:** 2

**Credit value:** 10

**Guided learning hours:** 33

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in establishing work area protection and safety in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 following endorsement:

- own occupational area of work

plus against one of the following:

- modular pavement
- laying kerbs and channels
- drainage construction
- structural concrete
- non-structural concrete
- general construction
- excavation and reinstatement
- general building operations
- flexible pavement construction
- vehicle fencing
- incident support unit operations
- bituminous paving
- concrete paving
- slurry/microsurfacing (machine)
- slurry/microsurfacing (manual)
- surface dressing (machine)
- high friction surfacing (machine)
- high friction surfacing (manual)
- planing (machine)
- road recycling (machine)
- soil stabilisation (machine)
- surface retexturing (machine)
- pavement marking (machine)
- pavement marking (manual operations)
- pavement marking (road studs).

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when establishing work area protection and safety	1.1	Interpret and extract relevant information from drawings, plans, risk assessments, method statements, specifications, schedules, site inspections and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, plans, risk assessments, method statements, specifications, schedules, site inspection reports, manufacturers' information, regulations and official guidance associated with protecting work areas</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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 and health hazards, whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when establishing work area protection and safety	3.1	Use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when establishing work area protection and safety			
		3.2	Comply with information relating to specific risks to health when establishing work area protection and safety			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to establishing work area protection and safety, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to establish work area protection and safety	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: <ul style="list-style-type: none"> <li>• safety and security barriers</li> <li>• protection and safety notices</li> <li>• temporary structures</li> <li>• signs and lighting</li> <li>• hand and/or powered tools and equipment</li> </ul>			
		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 and area associated with the method/procedure to establish work area protection and safety			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when establishing work area protection and safety	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 establishing work area protection and safety	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to establish work area protection and safety to the required specification	7.1	Demonstrate the following work skills when establishing work area protection and safety: <ul style="list-style-type: none"> <li>measuring, setting out, positioning, assembling, constructing, securing and dismantling</li> </ul>			
		7.2	Install, maintain and remove temporary protection and safety arrangements for the work area, to given working instructions, relating to barriers/temporary structures and one of the following: <ul style="list-style-type: none"> <li>protection and safety notices</li> <li>safety lighting</li> </ul>			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when establishing work area protection and safety			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul style="list-style-type: none"> <li>• plan for the protection and the safety of the work and surrounding environment</li> <li>• install, check and maintain the protection and safety equipment</li> <li>• dismantle and remove protection and safety equipment</li> <li>• install safety notices</li> <li>• install lighting systems</li> <li>• use hand tools, power tools and equipment</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			
		7.6 Describe the needs of other occupations and how to effectively communicate within a team when establishing work area protection and safety			
		7.7 Describe how to maintain the tools and equipment used when establishing work area protection and safety			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

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Assessor signature: \_\_\_\_\_

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Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## **Unit 2:**

# **Conforming to General Health, Safety and Welfare in the Workplace**

**Unit reference number:** A/503/1170

**QCF level:** 1

**Credit value:** 2

**Guided learning hours:** 7

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in conforming to general health, safety and welfare in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Comply with all workplace health, safety and welfare legislation requirements	1.1	Comply with all workplace health, safety and welfare legislation requirements			
		1.2	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements			
		1.3	Comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment			
		1.4	State why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use and the general work environment in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		1.5	State how the health and safety control equipment relevant to the work should be used in accordance with the given instructions			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		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			
		2.4	List the current Health and Safety Executive top five health risks			
		2.5	State how changing circumstances within the workplace could cause hazards			
		2.6	State the methods used for reporting changed circumstances, hazards and incidents in the workplace			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Comply with organisational policies and procedures to contribute to health, safety and welfare	3.1	Interpret and comply with given instructions to maintain safe systems of work and quality working practices			
		3.2	Contribute to discussions by offering/providing feedback relating to health, safety and welfare			
		3.3	Contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures			
		3.4	Safely store health and safety control equipment in accordance with given instructions			
		3.5	Dispose of waste and/or consumable items in accordance with legislation			
		3.6	State the organisational policies and procedures for health, safety and welfare in relation to: <ul style="list-style-type: none"> <li>• dealing with accidents and emergencies associated with the work and environment</li> <li>• methods of receiving or sourcing information</li> <li>• reporting</li> <li>• stopping work</li> <li>• evacuation</li> <li>• fire risks and safe exit procedures</li> <li>• consultation and feedback</li> </ul>			
		3.7	State the appropriate types of fire extinguishers relevant to the work			
		3.8	State how and when the different types of fire extinguishers are used in accordance with legislation and official guidance			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area	4.1	Demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare			
		4.2	State how personal behaviour demonstrates responsibility for general workplace health, safety and welfare in relation to: <ul style="list-style-type: none"> <li>• recognising when to stop work in the face of serious and imminent danger to self and/or others</li> <li>• contributing to discussions and providing feedback</li> <li>• reporting changed circumstances and incidents in the workplace</li> <li>• complying with the environmental requirements of the workplace</li> </ul>			
		4.3	Give examples of how the behaviour and actions of individuals could affect others within the workplace			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Comply with and support all organisational security arrangements and approved procedures	5.1	Provide appropriate support for security arrangements in accordance with approved procedures: <ul style="list-style-type: none"> <li>• during the working day</li> <li>• on completion of the day's work</li> <li>• for unauthorised personnel (other operatives and the general public)</li> <li>• for theft</li> </ul>			
		5.2	State how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

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Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_  
(if sampled)

Date: \_\_\_\_\_

## **Unit 3:**

# **Conforming to Productive Work Practices in the Workplace**

**Unit reference number:** J/503/1169

**QCF level:** 2

**Credit value:** 3

**Guided learning hours:** 10

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in conforming to productive practices in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Communicate with others to establish productive work practices	1.1	Communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively			
		1.2	Describe the different methods of communicating with line management, colleagues and customers			
		1.3	Describe how to use different methods of communication to ensure that the work carried out is productive			
2	Follow organisational procedures to plan the sequence of work	2.1	Interpret relevant information from organisational procedures in order to plan the sequence of work			
		2.2	Plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively			
		2.3	Describe how organisational procedures are applied to ensure work is planned and carried out productively in relation to: <ul style="list-style-type: none"> <li>• using resources for own and others' work requirements</li> <li>• allocating appropriate work to employees</li> <li>• organising the work sequence</li> <li>• reducing carbon emissions</li> </ul>			
		2.4	Describe how to contribute to zero/low carbon work outcomes within the built environment			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain relevant records in accordance with the organisational procedures	3.1	Complete relevant documentation according to the occupation as required by the organisation			
		3.2	Describe how to complete and maintain documentation in accordance with organisational procedures in relation to: <ul style="list-style-type: none"> <li>• job cards</li> <li>• worksheets</li> <li>• material/resource lists</li> <li>• time sheets</li> </ul>			
		3.3	Explain the reasons for ensuring documentation is completed clearly and within given timescales			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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			
		4.2	Apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others			
		4.3	Describe how to maintain good working relationships in relation to: <ul style="list-style-type: none"> <li>• individuals</li> <li>• customer and operative</li> <li>• operative and line management</li> <li>• own and others' occupations</li> </ul>			
		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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

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Assessor signature: \_\_\_\_\_

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Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## **Unit 4: Moving, Handling and Storing Resources in the Workplace**

**Unit reference number: F/503/1171**

**QCF level: 2**

**Credit value: 5**

**Guided learning hours: 17**

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in moving, handling and storing resources in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.



## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when moving, handling and/or storing resources	2.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		2.3	Explain what the accident reporting procedures are and who is responsible for making the reports			
		2.4	State the appropriate types of fire extinguishers relevant to the work			
		2.5	Describe how and when the different types of fire extinguishers, relevant to the given occupation, are used in accordance with legislation and official guidance			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when moving, handling and/or storing resources	3.1	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when moving, handling and/or storing resources			
		3.2	Use lifting aids safely as appropriate to the work			
		3.3	Protect the environment in accordance with safe working practices as appropriate to the work			
		3.4	<p>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:</p> <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to move, handle and/or store occupational resources	4.1	Select the relevant resources to be moved, handled and/or stored, associated with own work			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the occupational resources in relation to: <ul style="list-style-type: none"> <li>lifting and handling aids</li> <li>container(s)</li> <li>fixing, holding and securing systems</li> </ul>			
		4.3	Describe how the resources should be handled and how any problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Prevent the risk of damage to occupational resources and surrounding environment when moving, handling and/or storing resources	5.1	Protect occupational resources and their surrounding area from damage in accordance with safe working practices and organisational procedures			
		5.2	Dispose of waste and packaging in accordance with legislation			
		5.3	Maintain a clean work space when moving, handling or storing resources			
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work within the allocated time when moving, handling and/or storing resources	6.1	Demonstrate completion of the work within the allocated time			
		6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given occupational resource information to move, handle and/or store resources to the required guidance	7.1	Demonstrate the following work skills when moving, handling and/or storing occupational resources: <ul style="list-style-type: none"> <li>• moving, positioning, storing, securing and/or using lifting aids and kinetic lifting techniques</li> </ul>			
		7.2	Move, handle and/or store occupational resources to meet product information and organisational requirements relating to three of the following: <ul style="list-style-type: none"> <li>• sheet material</li> <li>• loose material</li> <li>• bagged or wrapped material</li> <li>• fragile material</li> <li>• tools and equipment</li> <li>• components</li> <li>• liquids</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

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Assessor signature: \_\_\_\_\_

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Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 5:

# Surveying Degraded Concrete Structures in the Workplace

**Unit reference number:** R/506/3834

**QCF level:** 2

**Credit value:** 16

**Guided learning hours:** 53

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### Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in surveying degraded concrete structures in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.



## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>• drawings</li> <li>• specifications</li> <li>• schedules</li> <li>• method statements</li> <li>• risk assessments</li> <li>• work instructions</li> <li>• electronic data</li> <li>• manufacturers' information</li> <li>• current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when surveying degraded concrete structures	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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			
		3.2	Demonstrate compliance with given information and relevant legislation when surveying degraded concrete structures in relation to three of the following: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, 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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>• hammer</li> <li>• dust sampler</li> <li>• phenolphthalein (ph indicator)</li> <li>• cover meter</li> <li>• half-cell testing equipment</li> <li>• hand tools, portable power tools and equipment</li> </ul>			
		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, and area associated with the method/procedure to survey degraded concrete structures			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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	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 surveying degraded concrete structures	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, marking out, protecting, preparing, testing, recording and reporting</li> </ul>			
		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 two of the following methods: <ul style="list-style-type: none"> <li>visual</li> <li>mechanical means</li> <li>chemical means</li> <li>electrochemical means</li> </ul>			
		7.4	Record and report results when surveying degraded concrete structures			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• position and prepare survey equipment</li> <li>• measure and mark out areas to be surveyed</li> <li>• visually determine defects in concrete</li> <li>• identify asbestos and products that may contain asbestos</li> <li>• use the equipment to sample dust, and detect decay, damage, cracking, carbonisation, reinforcement corrosion, reinforcement cover, prepare and use chemicals to test concrete</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• record and report survey results</li> <li>• use hand tools, portable power tools and equipment</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		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		

Learner name: \_\_\_\_\_

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Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)



## Unit 6: Preparing Substrate and Applying Materials to Repair Concrete in the Workplace

Unit reference number: Y/506/3835

**QCF level:** 2

**Credit value:** 14

**Guided learning hours: 47**

## Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing substrate and applying materials to repair concrete in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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 potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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			
		3.2	Demonstrate compliance with given information and relevant legislation when preparing substrate and applying materials to repair concrete in relation to three of the following: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, 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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>formwork, repair compounds, aggregates, cements, additives, reinforcement, primers, bonding agents and membranes</li> <li>saws, drills, mixers and sprayers</li> <li>hand tools, portable power tools and equipment</li> </ul>			
		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 substrate and apply materials to repair concrete			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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	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 substrate and applying materials to repair concrete	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, marking out, locating, protecting, breaking out, cleaning, replacing, erecting, mixing, applying, finishing and curing</li> </ul>			
		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: <ul style="list-style-type: none"> <li>prepare substrates and reinforcement</li> <li>apply primers, bonding agents and repair compounds</li> <li>replace steel reinforcement</li> <li>erect and dismantle formwork</li> <li>protect and cure repaired area</li> <li>record and report repairs carried out</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• locate services and protect adjacent areas</li> <li>• break out defective concrete</li> <li>• clean concrete and steel</li> <li>• measure, record and act on environmental conditions</li> <li>• replace steel reinforcement</li> <li>• apply corrosion protection</li> <li>• erect and dismantle formwork</li> <li>• apply primers and bonding agents</li> <li>• mix and apply repair compounds</li> <li>• monitor and control exposure to vibration</li> <li>• finish repaired areas</li> <li>• protect and cure</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• complete records and prepare reports</li> <li>• use hand tools, portable power tools and equipment</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 7:

## Preparing Substrate for Sprayed Concrete in the Workplace

**Unit reference number:** H/506/3837

**QCF level:** 2

**Credit value:** 12

**Guided learning hours:** 40

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### Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing substrate for sprayed concrete in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when preparing substrate for sprayed concrete	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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			
		3.2	Demonstrate compliance with given information and relevant legislation when preparing substrate for sprayed concrete in relation to three of the following: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, 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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>temporary supports, screens, barriers, reinforcement, tying wire, pins, formwork</li> <li>hand tools, portable power tools and equipment</li> <li>jet washing and grit blasting equipment</li> </ul>			
		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 prepare substrate for sprayed concrete			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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	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 substrate for sprayed concrete	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, marking out, locating, protecting, supporting, breaking out, cleaning, profiling, tying, erecting, recording and reporting</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools and ancillary equipment			
		7.3	Prepare substrates prior to receiving sprayed concrete to given working instructions relating to seven of the following: <ul style="list-style-type: none"> <li>locate and protect services</li> <li>break out loose and de-bonded materials</li> <li>roughen smooth surfaces</li> <li>clear and clean</li> <li>surface profile levels</li> <li>tie and secure reinforcement bar and/or mesh</li> <li>fit guide wires</li> <li>fit depth pins</li> <li>erect formwork</li> <li>record and report work carried out</li> </ul>			



Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• break out, profile, square cut, clean and prepare,</li> <li>• identify when substrate needs to be supported</li> <li>• confirm substrate is ready to receive sprayed concrete</li> <li>• position and secure reinforcement</li> <li>• apply corrosion protection</li> <li>• erect and dismantle formwork</li> <li>• install guide wires and depth pins</li> <li>• record and report</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

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Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 8:**

## **Applying Sprayed Concrete in the Workplace**

**Unit reference number:** K/506/3838

**QCF level:** 2

**Credit value:** 16

**Guided learning hours:** 53

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in applying sprayed concrete in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when applying sprayed concrete	1.1	Interpret and extract relevant information from drawings, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when applying sprayed concrete	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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			
		3.2	Demonstrate compliance with given information and relevant legislation when applying sprayed concrete in relation to three of the following: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, 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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• sand, aggregate, cements, water, additives, admixtures, structural concrete, curing membranes</li> <li>• working platforms</li> <li>• hand tools, portable power tools, spraying and testing equipment and ancillaries</li> </ul>			
		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 sprayed concrete			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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	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 sprayed concrete	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, marking out, assembling, checking, preparing, finishing, curing, protecting, testing, recording and reporting</li> </ul>			
		7.2	Use and maintain concrete spraying machinery and compressor, hand tools, portable power tools and ancillary equipment			
		7.3	Apply sprayed concrete by wet and/or dry methods to given working instructions for five of the following: <ul style="list-style-type: none"> <li>pre-wet surfaces for spraying</li> <li>spray concrete to profile</li> <li>produce samples for testing</li> <li>cure and protect concrete</li> <li>record and report on test</li> <li>record and report on spraying</li> <li>operate spraying nozzle</li> <li>operate pump</li> <li>clean pump</li> <li>clear lines</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• assemble and check spray equipment (wet and/or dry application)</li> <li>• prepare substrates including wetting, depth guides and protection measures</li> <li>• maintain protection against overspray and rebounding materials</li> <li>• set up spray and pumping equipment</li> <li>• operate robotic spraying equipment</li> <li>• operate hand-held spraying equipment</li> <li>• spray in layers to agreed profile and depth</li> <li>• apply specified finish</li> <li>• cure and protect concrete</li> <li>• provide samples for testing concrete (compression, tension, consistency and workability)</li> <li>• record and report</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• operate spraying machines, compressors and pumps</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<ul style="list-style-type: none"> <li>maintain spraying machines, nozzles, hoses, compressors and pumps during operations</li> <li>use hand tools, portable power tools and equipment</li> <li>work at height</li> <li>use access equipment</li> </ul>			
		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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_  
(if sampled)

Date: \_\_\_\_\_

## Unit 9: Preparing Backgrounds Prior to Laying Decorative Concrete in the Workplace

Unit reference number: **M/506/3839**

**QCF level:** 2

**Credit value:** 12

**Guided learning hours: 40**

## Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing backgrounds prior to laying decorative concrete in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when preparing backgrounds prior to laying decorative concrete	1.1	Interpret and extract relevant information from drawings, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations governing buildings</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when preparing backgrounds prior to laying decorative concrete	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when preparing backgrounds prior to laying decorative 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 backgrounds prior to laying decorative concrete			
		3.2	Demonstrate compliance with given information and relevant legislation when preparing backgrounds prior to laying decorative concrete in relation to: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to preparing backgrounds prior to laying decorative concrete, and the types, purpose and limitations of each type, the work situation and general work environment in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to prepare backgrounds prior to laying decorative 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: <ul style="list-style-type: none"> <li>• protection materials</li> <li>• blinding</li> <li>• sub-bases</li> <li>• drainage materials</li> <li>• edge restraint/shutters</li> <li>• fibre reinforcement</li> <li>• fixings</li> <li>• hand tools, portable power tools and equipment</li> </ul>			
		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 backgrounds prior to laying decorative concrete			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when preparing backgrounds prior to laying decorative concrete	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 backgrounds prior to laying decorative concrete	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to prepare backgrounds prior to laying decorative concrete to the required specification	7.1	Demonstrate the following work skills when preparing backgrounds prior to laying decorative concrete: <ul style="list-style-type: none"> <li>measuring, marking out, locating, protecting, preparing, formatting, draining, placing, installing and securing</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools and ancillary equipment			
		7.3	Prepare backgrounds for decorative concrete to given working instructions: <ul style="list-style-type: none"> <li>earthworks, prepare, lay and compact substrates</li> <li>site preparation, lines, levels and gradients</li> <li>drainage installation</li> <li>edge restraint</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• locate and protect services (water, gas, electric and waste), including overhead utilities</li> <li>• protect existing structures</li> <li>• work around, in close proximity, with, plant and machinery</li> <li>• direct and guide plant and machinery</li> <li>• excavate to line, level and prepare formation</li> <li>• install drainage including soak-aways</li> <li>• level, spread and compact sub-bases</li> <li>• install and remove edge restraint/shutters</li> <li>• secure reinforcement</li> <li>• prepare vertical surfaces (steps and risers)</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment</li> <li>• work at height</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.5	Describe the needs of other occupations and how to effectively communicate within a team when preparing backgrounds prior to laying decorative concrete		
		7.6	Describe how to maintain the tools and equipment used when preparing backgrounds prior to laying decorative concrete		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 10:

## Placing Concrete and Producing a Decorative Finish in the Workplace

**Unit reference number:** K/506/3841

**QCF level:** 2

**Credit value:** 18

**Guided learning hours:** 60

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### Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in placing concrete and producing a decorative finish in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when placing concrete and producing a decorative finish	1.1	Interpret and extract relevant information from drawings, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations governing buildings</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when placing concrete and producing a decorative finish	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when placing concrete and producing a decorative finish	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 concrete and producing a decorative finish			
		3.2	Demonstrate compliance with given information and relevant legislation when placing concrete and producing a decorative finish in relation to: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to placing concrete and producing a decorative finish, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to place concrete and produce a decorative finish	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>• concrete</li> <li>• retarders, sealers, hardeners, resins (polymers, colours), cleaning agents, repair compounds, release agents</li> <li>• diluted acid</li> <li>• integral colouring agents</li> <li>• aggregate</li> <li>• stencils, mats and/or skins</li> <li>• hand tools, portable power tools and equipment</li> </ul>			
		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 concrete and produce a decorative finish			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when placing concrete and producing a decorative finish	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 concrete and producing a decorative finish	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to place concrete and produce a decorative finish to the required specification	7.1	Demonstrate the following work skills when placing concrete and producing a decorative finish: <ul style="list-style-type: none"> <li>measuring, marking out, handling, placing, testing, compacting, screeding, applying, finishing, jointing, sealing, protecting and curing</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools and ancillary equipment			
		7.3	Place concrete to levels and falls, test and produce specialist surface finishes to given working instructions, for one of the following: <ul style="list-style-type: none"> <li>imprinted</li> <li>exposed aggregate</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• receive, handle, place, test and float concrete to falls and levels</li> <li>• form steps</li> <li>• place concrete for imprinting: apply colour, float and edge, apply release agents, prepare edge, align and position mats and print</li> <li>• place concrete for exposed aggregate: apply trowelled finish, seed aggregate, tamp, apply retarder, jet wash/hose off laitance, apply acid wash</li> <li>• recognise process timings</li> <li>• work to and meet agreed quality criteria</li> <li>• repair defects, cut joints, seal</li> <li>• protect and cure</li> <li>• apply acid etching</li> <li>• carry out remedials</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment</li> <li>• work at height</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.5	Describe the needs of other occupations and how to effectively communicate within a team when placing concrete and producing a decorative finish		
		7.6	Describe how to maintain the tools and equipment used when placing concrete and producing a decorative finish		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 11: Installing Street Ironwork in the Workplace**

**Unit reference number: M/503/9623**

**QCF level: 2**

**Credit value: 9**

**Guided learning hours: 30**

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## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing street ironwork in the workplace within the relevant sector of industry.

## **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 following endorsement:

- own occupational area of work

plus against one of the following:

- new
- reinstatement.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when installing street ironwork	1.1	Interpret and extract relevant information from drawings, 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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, risk assessments, method statements, manufacturers' information and regulations for street ironwork fixtures</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when installing street ironwork	2.1	Describe their responsibilities regarding potential accidents and health hazards whilst working: <ul style="list-style-type: none"> <li>in the workplace, below ground level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when installing street ironwork	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when installing street ironwork			
		3.2	Comply with information relating to specific risks to health when installing street ironwork			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to installing street ironwork, and the types, purpose and limitations of each type, the work situation and general work environment in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to install street ironwork	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: <ul style="list-style-type: none"> <li>• sand, cement, mortar, patent epoxy resin-based materials</li> <li>• access covers and frames, gully grates and frames</li> <li>• hand and/or powered tools and equipment</li> </ul>			
		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 and size associated with the method/procedure to install street ironwork			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when installing street ironwork	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 installing street ironwork	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to install street ironwork to the required specification	7.1	Demonstrate the following work skills when installing street ironwork: <ul style="list-style-type: none"> <li>measuring, marking out, positioning, fitting, levelling, aligning and securing</li> </ul>			
		7.2	Install street ironwork to new and/or reinstatement situations to given working instructions relating to the following: <ul style="list-style-type: none"> <li>access covers and frames</li> <li>gully grates and frames</li> </ul>			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when installing street ironwork			
		7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul style="list-style-type: none"> <li>locate the area/position where the street ironwork is to be installed</li> <li>confirm the street ironwork, fixing and bedding requirements</li> <li>position, fit, align and secure the street ironwork</li> <li>protect ironwork during curing</li> <li>use hand tools, power tools and equipment</li> <li>use ancillary equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when installing street ironwork		
		7.7	Describe how to maintain the tools and equipment used when installing street ironwork		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 12:**

## **Setting Out Secondary Dimensional Work Control in the Workplace**

**Unit reference number:** J/506/4673

**QCF level:** 2

**Credit value:** 7

**Guided learning hours:** 23

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in setting out secondary dimensional work control in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to setting out dimensional control of the work	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and reference points			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, reference points and current regulations governing buildings and construction work</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance to set out dimensional control of the work	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when setting out dimensional control of the work	3.1	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 setting out dimensional control of the work			
		3.2	Demonstrate compliance with given information and relevant legislation when setting out dimensional control of the work in relation to two or more of the following: <ul style="list-style-type: none"> <li>• safe use of access equipment/working platforms</li> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to setting out dimensional control of the work, and the types, purpose and limitations of each type, the work situation and general work environment in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources to set out dimensional control of the work	4.1	Select resources associated with the work in relation to measuring tools and instruments, marking materials/components, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> <li>• measuring tools and instruments</li> <li>• marking equipment</li> <li>• level and alignment tools</li> </ul>			
		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 identify quantity of resources associated with the method/procedure to set out for secondary dimensional work control			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when setting out dimensional control of the work	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		5.2	Prevent damage and maintain a clean work area			
		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 setting out dimensional control of the work	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to set out dimensional control of the work to the required specification	7.1	Demonstrate the following work skills when setting out dimensional control of the work: <ul style="list-style-type: none"> <li>transferring, transposing, levelling, measuring, marking, positioning, fixing and securing</li> </ul>			
		7.2	Use and maintain hand tools, measuring and marking equipment			
		7.3	Set out secondary dimensional control for the work to given working instructions for three or more of the following: <ul style="list-style-type: none"> <li>line</li> <li>level</li> <li>depth</li> <li>area</li> <li>height</li> <li>angle</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> <li>• measure and set out secondary dimensional control for the work</li> <li>• measure, align and level to dimensional control requirements</li> <li>• transfer and set out lines, angles and levels to dimensional control requirements</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, measuring and marking equipment</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			
		7.5 Describe how to calculate height, depth, angle, length and area associated with the method/procedure to set out secondary dimensional work control			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when setting out dimensional control of the work		
		7.7	Describe how to maintain the hand tools (measuring, marking and ancillary), and equipment used to set out dimensional control of the work		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 13: Reshaping Using Hand Sawing Techniques in the Workplace**

**Unit reference number: M/506/3842**

**QCF level: 2**

**Credit value: 21**

**Guided learning hours: 70**

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## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in reshaping using hand sawing techniques in the workplace within the relevant sector of industry.

## **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations</li> </ul>			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> <li>• provision of lighting and ventilation</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• consumables, including blades</li> <li>• angle grinders, power saws, ring saws, chainsaws</li> <li>• hand tools, portable power tools and ancillary equipment</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, chasing, checking, confirming, setting up, securing, aligning, connecting, cutting, reporting and recording</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools, ancillary equipment, angle grinder and one from the following: <ul style="list-style-type: none"> <li>power saw</li> <li>ring saw</li> <li>chasing machine</li> <li>chainsaw</li> </ul>			
		7.3	Form saw cuts in one of the following to given working instructions, relating to vertical and/or horizontal surfaces: <ul style="list-style-type: none"> <li>concrete</li> <li>masonry</li> <li>stone</li> <li>asphalt</li> </ul>			
		7.4	Measure and record work details on completion of forming saw cuts			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• complete pre-start and post stop checks</li> <li>• set up and operate: angle grinders, power saws, ring saws, chainsaws and chasing machines</li> <li>• locate and protect services (water, gas, electric, waste)</li> <li>• apply coolant and lubricants</li> <li>• form openings and cut to line, depth and size</li> <li>• deal with voids</li> <li>• monitor and control exposure to vibration</li> <li>• report, record and maintain records</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked)</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		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		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 14: Forming Drill Holes or Core in the Structural Fabric (Diamond Core Bits) in the Workplace

Unit reference number: T/506/3843

**QCF level:** 2

**Credit value: 18**

**Guided learning hours: 60**

## Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in forming drill holes or core in the structural fabric (diamond core bits) in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.



## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> <li>• provision of lighting and ventilation</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• hand drill diamond core and drills, bits, power units, connectors, fixings and accessories</li> <li>• percussive drills</li> <li>• static drill rig diamond core</li> <li>• trailer rig diamond core</li> <li>• recording and measuring equipment</li> <li>• hand tools, portable power tools and ancillary equipment</li> </ul>			
		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 drill holes or core in the structural fabric			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, marking out, setting up, connecting, drilling or coring</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools and ancillary equipment			
		7.3	Form drill holes or take cores using two of the following to given working instructions relating to vertical and horizontal surfaces: <ul style="list-style-type: none"> <li>hand held diamond core or drill</li> <li>static drill rig diamond core</li> <li>trailer rig diamond core</li> <li>percussive drill</li> </ul>			
		7.4	Measure and record work details on completion of forming holes or taking cores			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• complete pre-start and post stop checks</li> <li>• set up, and operate drilling and coring plant and equipment</li> <li>• identify the characteristics of percussive and diamond drilling</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• form drill holes, including angles, depth, diameter, recesses, stitch drilling and coring</li> <li>• apply coolant and lubricants</li> <li>• deal with voids</li> <li>• monitor and control exposure to vibration</li> <li>• maintain records</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked)</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when forming drill holes or core in the structural fabric		
		7.7	Describe how to maintain the tools and equipment used when forming drill holes or core in the structural fabric		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

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Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)



## Unit 15: Forming Saw Cuts in Structural Fabric Material in the Workplace

Unit reference number: **A/506/3844**

**QCF level:** 2

**Credit value: 19**

**Guided learning hours: 63**

## Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in forming saw cuts in structural fabric material in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations governing buildings</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> <li>• provision of lighting and ventilation</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• consumables, including blades</li> <li>• accessories</li> <li>• push along floor saw</li> <li>• self-propelled floor saw</li> <li>• diamond-bladed track saw</li> <li>• hand tools, portable power tools and equipment</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, chasing, checking, setting up, securing, aligning, connecting and cutting</li> </ul>			
		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: <ul style="list-style-type: none"> <li>push along floor saw</li> <li>self-propelled floor saw</li> <li>diamond-bladed track saw</li> </ul>			
		7.4	Measure and record work details on completion of forming saw cuts			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• complete pre-start and post stop checks on saws</li> <li>• set up and operate: push along floor saw, self-propelled floor saw and diamond-bladed track saw</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• form openings and cut to line, depth and size</li> <li>• deal with voids</li> <li>• monitor and control exposure to vibration</li> <li>• report, record and maintain records</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked)</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			



Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		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		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 16:**

## **Preparing and Inspecting Substrates Prior to Laying Screed Floors in the Workplace**

**Unit reference number:** R/506/3851

**QCF level:** 2

**Credit value:** 13

**Guided learning hours:** 43

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and inspecting substrates prior to laying screed floors in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations and official guidance</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• primers/bonding agents, repair compounds, reinforcement and damp proof membrane (DPM)</li> <li>• lines, pegs, levels and location marking equipment</li> <li>• joints</li> <li>• insulation</li> <li>• hand tools, portable power tools, plant, machinery and ancillary equipment</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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			
	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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>assessing, measuring, marking out, cleaning, breaking out, preparing, forming, compacting, chasing, priming, mixing, laying, spreading, levelling, repairing, curing, protecting and inspecting</li> </ul>			
		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: <ul style="list-style-type: none"> <li>cementitious substrates</li> <li>insulated areas</li> <li>membranes</li> <li>areas with heating systems</li> <li>ducted areas</li> </ul>			



Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• assess condition of existing substrates</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• prepare and protect service penetrations</li> <li>• break out defective areas</li> <li>• prepare substrates prior to laying screed including: cementitious, insulated areas, membranes, areas with heating systems and areas with ducting</li> <li>• prepare substrates by hand and mechanical methods</li> <li>• work around, in close proximity with, plant and machinery</li> <li>• direct and guide plant and machinery</li> <li>• remove contaminants</li> <li>• work to lines, levels, falls and gradients</li> <li>• locate and form joints and edges, expansion, contraction and crack inducement</li> <li>• mix repair compounds</li> <li>• install insulation</li> <li>• consider and check ambient conditions</li> <li>• protect and cure repaired areas</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<ul style="list-style-type: none"> <li>• test surfaces by tensile strength tests, rebound hammer, pull off method</li> <li>• meet the agreed quality criteria</li> <li>• monitor and control exposure to vibration</li> <li>• record and report</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and dust extraction equipment</li> </ul>			
		7.6 Describe the needs of other occupations and how to effectively communicate within a team when preparing and inspecting substrates prior to laying screed floors			
		7.7 Describe how to maintain the tools, plant, machinery and equipment used when preparing and inspecting substrates prior to laying screed floors			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_  
(if sampled)

Date: \_\_\_\_\_

# **Unit 17:**

## **Laying Screed Floors in the Workplace**

**Unit reference number:** D/506/3853

**QCF level:** 2

**Credit value:** 18

**Guided learning hours:** 60

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in laying screed floors in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• battens, reinforcement and drainage accessories</li> <li>• movement and construction joints</li> <li>• bonding agents, sand, cement, additives, aggregates, colouring agents, membranes</li> <li>• flowable screeds</li> <li>• hand tools, portable power tools and ancillary equipment</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, marking out, locating, securing, forming, fixing, mixing, transporting, laying, testing, compacting, protecting and curing</li> </ul>			
		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			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• set out for line and level</li> <li>• locate and protect cast-in services (heating, water, gas, electric and waste)</li> <li>• prepare and protect service penetrations</li> <li>• position and secure reinforcement, spacers and fixings</li> <li>• form drainage inlets, drainage channels and outlets</li> <li>• form joints, movement (expansion), anti-crack applicable to bay sizes</li> <li>• inspect prepared substrate to include cleanliness, testing and application of primers and damp proof membranes (DPM)</li> <li>• check and monitor ambient conditions</li> <li>• mix screeds using paddle, spiral and forced action mixer</li> <li>• transport screed material using mechanical (pumps, bulk bags by lifting equipment) and by hand (shovelled, barrowed)</li> <li>• working with and around plant and machinery</li> <li>• test screed mix for consistency</li> <li>• prepare samples for testing</li> <li>• lay and compact screed (vibrating screed beam and rollers) to floors, doors and around fixings to specified thickness, level and finish</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<ul style="list-style-type: none"> <li>• monitor and control exposure to vibration</li> <li>• protect and cure screed</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• meet agreed quality criteria</li> <li>• record and report</li> <li>• use hand tools, portable power tools and ancillary equipment</li> </ul>			
		7.5 Describe the needs of other occupations and how to effectively communicate within a team when laying screed floors			
		7.6 Describe how to maintain the tools and equipment used when laying screed floors			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 18:**

## **Laying Resin Floors in the Workplace**

**Unit reference number:** K/506/3855

**QCF level:** 2

**Credit value:** 16

**Guided learning hours:** 53

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in laying resin floors in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>primers, seals, damp-proof membranes (DPM)</li> <li>construction and movement joints</li> <li>resin screed, resin self-smoothing, flow applied and resin coatings, multi-layer high build and heavy duty</li> <li>hand tools, portable power tools and ancillary equipment</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Interpret the given information relating to the work and resources when laying resin floors	7.1	Demonstrate the following work skills when laying resin floors: <ul style="list-style-type: none"> <li>measuring, marking out, forming, preparing, mixing, applying, finishing, curing and protecting</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools, paddle, spiral, and forced action mixer and ancillary equipment			
		7.3	Lay resin floors to given working instructions using one of the following: <ul style="list-style-type: none"> <li>resin coatings: to include any two from floor seals, floor coatings or high build floor coatings</li> <li>resin self-smoothing: to include any two from multi-layer flooring, flow applied flooring or heavy duty flowable flooring</li> <li>resin screeds: to include resin screeds and heavy duty screed flooring</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• set out floor to receive resins</li> <li>• position and secure construction and movement joints</li> <li>• inspect prepared substrates to include applied primers and damp proof membranes (DPM)</li> <li>• mix and apply resin floor finishes for coatings, self-smoothing and screeds, to specified finish</li> <li>• lay resin around service penetrations</li> <li>• protect and cure finished floor</li> <li>• consider and check ambient conditions</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• meet agreed quality criteria</li> <li>• record and report</li> <li>• use hand tools, portable power tools and equipment</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 19:**

## **Repairing, Preparing and Inspecting Substrates Prior to Laying Resin Floors in the Workplace**

**Unit reference number:** A/506/3861

**QCF level:** 2

**Credit value:** 13

**Guided learning hours:** 43

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in repairing, preparing and inspecting substrates prior to laying resin floors in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, current regulations and official guidance</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>primers/bonding agents, repair compounds, reinforcement and damp proof membrane (DPM), curing agents</li> <li>joints</li> <li>hand tools, portable power tools, plant, machinery and ancillary equipment</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>assessing, measuring, marking out, cleaning, breaking out, removing, preparing, forming, chasing, priming, mixing, laying, compacting, levelling, repairing, curing, protecting and inspecting</li> </ul>			
		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			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• assess condition of existing substrates</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• prepare and protect service penetrations</li> <li>• prepare substrates, new concrete, old concrete, fine concrete screed and overlays on existing surfaces prior to laying resin</li> <li>• break out defective areas</li> <li>• work around, in close proximity with, plant and machinery</li> <li>• direct and guide plant and machinery</li> <li>• install, form and protect perimeter prior to repair</li> <li>• remove laitance and dust</li> <li>• remove contamination</li> <li>• abrade surfaces by grinding, planing and shot blasting</li> <li>• prepare edges</li> <li>• monitor and control exposure to vibration</li> <li>• work to lines, levels, falls and gradients</li> <li>• consider and check ambient conditions</li> <li>• mix, apply, protect and cure repaired areas</li> <li>• locate and prepare for the formation of movement, expansion, induced, toe-in, transition and floor-to-wall joints</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<ul style="list-style-type: none"> <li>• test surfaces for adhesion by pull off method</li> <li>• test surfaces for moisture using a moisture meter</li> <li>• meet the agreed quality criteria</li> <li>• recognise and determine when specialist skills and knowledge are required and report accordingly</li> <li>• record and report</li> <li>• use hand tools, portable power tools and dust extraction equipment</li> </ul>			
		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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 20:

## Preparing Areas for Concrete Flooring in the Workplace

**Unit reference number:** T/506/3857

**QCF level:** 2

**Credit value:** 15

**Guided learning hours:** 50

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### Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing areas for concrete flooring in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• formwork, reinforcement, dowels, membranes, joint formers</li> <li>• concrete ancillaries (spacers, tying wires)</li> <li>• fill materials and blinding (sand and concrete)</li> <li>• hand tools, portable power tools, plant, machinery and ancillary equipment</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, marking out, trimming, inspecting, compacting, positioning, aligning, levelling, fixing, cutting, installing, locating, securing and protecting</li> </ul>			
		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: <ul style="list-style-type: none"> <li>substrate preparation</li> <li>timber formwork erection</li> <li>proprietary formwork erection</li> <li>reinforcement installation</li> <li>membranes installation</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• prepare ground bearing and suspended floor areas</li> <li>• locate and protect services (water, gas, electric and waste) including overhead utilities</li> <li>• protect existing structures</li> <li>• work around, in close proximity with, plant and machinery</li> <li>• direct and guide plant and machinery</li> <li>• inspect and test formation</li> <li>• determine finish floor levels</li> <li>• spread, trim and compact sub-base to line and level</li> <li>• measure and confirm sub-base levels</li> <li>• inspect and test area to be prepared</li> <li>• position and fix timber and proprietary formwork to line and level including joint systems, isolation details, box-outs and thresholds</li> <li>• form falls and gradients</li> <li>• cut joint, install and seal membranes</li> <li>• preparation of existing construction joints</li> <li>• locate and secure joints and void formers</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<ul style="list-style-type: none"> <li>• cut, locate and secure reinforcement and dowels and debonding sleeves</li> <li>• meet agreed quality criteria</li> <li>• protect prepared area</li> <li>• record and report</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools, machinery and equipment work at height</li> </ul>			
	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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 21:

## Placement of In Situ Concrete Flooring in the Workplace

**Unit reference number:** A/506/3858

**QCF level:** 2

**Credit value:** 14

**Guided learning hours:** 47

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### Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in placement of in situ concrete flooring in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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,

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations</li> </ul>			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• structural concrete, construction joint materials, formwork, membranes, reinforcement and embedments</li> <li>• testing equipment</li> <li>• hand tools, portable power tools, plant, machinery and ancillary equipment</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, marking out, inspecting, receiving, handling, placing, spreading, levelling, vibrating, compacting, testing and protecting</li> </ul>			
		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: <ul style="list-style-type: none"> <li>chute</li> <li>elephant's trunk</li> <li>skip</li> <li>pump</li> <li>monorail</li> <li>manually</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• inspect the prepared area prior to placement</li> <li>• check line, level and suitability of formwork retaining structures and other temporary work for the concrete pour</li> <li>• inspect joints, installed reinforcements and embedments, underfloor heating, ducting, pipework, holding down bolts</li> <li>• check and monitor ambient conditions</li> <li>• receive, handle and test concrete</li> <li>• test integrated reinforcement, fibre, plastic, metal</li> <li>• place concrete for floors by chute, elephant's trunk, skip, pump, monorail and manually</li> <li>• level, vibrate and compact concrete</li> <li>• screed concrete to finished level</li> <li>• cure and protect concrete</li> <li>• record and report</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		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			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 22:

## Applying Surface Finishes to Concrete Flooring in the Workplace

**Unit reference number:** F/506/3859

**QCF level:** 2

**Credit value:** 14

**Guided learning hours:** 47

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### Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in applying surface finishes to concrete flooring in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.



## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• structural concrete</li> <li>• consumables, curing agents, blades</li> <li>• pedestrian and ride-on power floats, tamping bars, rollers and vibrating screed beams</li> <li>• hand tools, portable power tools and equipment</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>measuring, finishing, curing and protecting</li> </ul>			
		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: <ul style="list-style-type: none"> <li>tamped</li> <li>brushed</li> <li>hand-float</li> <li>pedestrian power float</li> <li>ride-on power float</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• 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)</li> <li>• identify and report defects</li> <li>• achieve surface finishes to concrete: tamped, brushed, hand-float, pedestrian power float, ride-on power float</li> <li>• cure and protect</li> <li>• record and report</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools, plant and machinery and ancillary equipment</li> <li>• work at height</li> <li>• use of access equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		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		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)



# **Unit 23:**

## **Preparing and Operating Ride-on Topping Spreaders to Distribute Materials in the Workplace**

**Unit reference number:** M/506/4652

**QCF level:** 2

**Credit value:** 30

**Guided learning hours:** 100

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating ride-on topping spreaders to distribute materials in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of ride-on topping spreaders for distribution work</li> </ul>			
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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe use and storage of plant or machinery</li> <li>• safe use and storage of tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• consumables, lubricants and fuels</li> <li>• attachments, distribution aids</li> <li>• hand tools, ancillary equipment and accessories</li> </ul>			
		5.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>checking, adjusting, communicating, manoeuvring, positioning, distributing and compacting</li> </ul>			
		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			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>8.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> <li>• identify the characteristics of the ride-on topping spreader used for distribution operations</li> <li>• carry out function checks for the distribution work</li> <li>• identify the area for the distribution work</li> <li>• prepare, set up and adjust for operational requirements</li> <li>• carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area</li> <li>• confirm material characteristics</li> <li>• distribute materials in laying patterns</li> <li>• identify geological, environmental and material changes and report</li> <li>• check to avoid damage to structures and utilities service apparatus</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• complete laying and distribution work</li> <li>• be on the public highway</li> <li>• shut down and secure ride-on topping spreader</li> <li>• use hand tools, ancillary equipment and accessories</li> </ul>			



Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		8.6	Describe the needs of other occupations and how to effectively communicate within a team when preparing to and carrying out distribution operations		
		8.7	Describe how to maintain the plant and machinery, hand tools and ancillary equipment used to distribute materials		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 24: Preparing and Operating Ride-on Laser Screeders to Level Concrete in the Workplace

Unit reference number: **R/506/4658**

**QCF level:** 2

**Credit value:** 40

**Guided learning hours: 133**

## Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating ride-on laser screeders to level concrete in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of ride-on laser screeders for concrete levelling operations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• safe use and storage of plant or machinery</li> <li>• safe use and storage of tools and equipment</li> <li>• specific risks to health</li> </ul>			
		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: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>• consumables, lubricants and fuels</li> <li>• attachments and laying aids</li> <li>• hand tools, ancillary equipment and accessories</li> </ul>			
		5.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> <li>checking, adjusting, communicating, manoeuvring, positioning and levelling</li> </ul>			
		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			



Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>8.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> <li>• identify the characteristics of the ride-on laser screeder used for concrete levelling operations</li> <li>• carry out function checks for the concrete levelling work</li> <li>• identify the area for the concrete levelling work</li> <li>• prepare, set up and adjust for operational requirements</li> <li>• carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area</li> <li>• confirm material characteristics</li> <li>• level concrete in patterns</li> <li>• identify geological, environmental and material changes and report</li> <li>• check to avoid damage to structures and utilities service apparatus</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• complete concrete levelling work</li> <li>• be on the public highway</li> <li>• shut down and secure ride-on laser screeder</li> <li>• use hand tools, ancillary equipment and accessories</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		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		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

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Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 25:**

## **Operating Plant or Machinery to Prepare, Profile and Finish Substrates for Specified Materials in the Workplace**

**Unit reference number:** L/506/5145

**QCF level:** 2

**Credit value:** 19

**Guided learning hours:** 63

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in operating plant or machinery to prepare, profile and finish substrates for specified materials in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when operating plant or machinery to prepare, profile and finish substrates for specified materials	1.1	Interpret and extract relevant information from drawings, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and official guidance associated with background surface preparation, profiling and finishing</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when operating plant or machinery to prepare, profile and finish substrates for specified materials	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when operating plant or machinery to prepare, profile and finish substrates for specified materials	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, profiling and finishing substrates			
		3.2	Demonstrate compliance with given information and relevant legislation when operating plant or machinery to prepare, profile and finish substrates for specified materials in relation to: <ul style="list-style-type: none"> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• safe operation and storage of plant and machinery</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to operating plant or machinery to prepare, profile and finish substrates for specified materials, and the types, purpose and limitations of each type, the work situation and general work environment in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to operate plant or machinery to prepare, profile and finish substrates for specified materials	4.1	Select resources associated with own work in relation to materials, components, fixings, tools, equipment, ancillaries and consumables			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>• consumables</li> <li>• hand tools, portable power tools, plant, machinery and ancillary equipment</li> </ul>			
		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 and area associated with the method/procedure to prepare, profile and finish substrates			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when operating plant or machinery to prepare, profile and finish substrates for specified materials	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 operating plant or machinery to prepare, profile and finish substrates for specified materials	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to operate plant or machinery to prepare, profile and finish substrates for specified materials to the required specification	7.1	Demonstrate the following work skills when operating plant or machinery to prepare, profile and finish substrates for specified materials: <ul style="list-style-type: none"> <li>measuring, marking out, locating, cleaning, breaking out, chasing, checking, setting up, selecting, operating and closing down</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools, plant or machinery and ancillary equipment			
		7.3	Prepare or profile or finish substrates to given working instructions by operating four of the following ride-on and/or pedestrian guided items of plant or machinery: <ul style="list-style-type: none"> <li>grinder</li> <li>planing machine</li> <li>sander</li> <li>polisher</li> <li>scabbler</li> <li>tile stripper</li> <li>captive or enclosed shotblast machine</li> <li>vacuum machine</li> <li>filtration systems</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• check and set up plant and machinery for operation</li> <li>• complete pre-start and post stop checks</li> <li>• assess condition of substrate</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• repair damaged and weak areas</li> <li>• chase out joints</li> <li>• profile surfaces by grinding (wet and dry), planing, blasting, sanding and stripping</li> <li>• remove vinyl, carpet, tiles, paint, adhesive, resin, screeds, wood and wood-based products and self-levelling compounds</li> <li>• cut grooves</li> <li>• prepare edges</li> <li>• remove contaminants</li> <li>• finish surfaces: retextured, anti-slip, smooth and reducing</li> <li>• clean and clear surfaces</li> <li>• polish surfaces</li> <li>• monitor and control exposure to vibration</li> <li>• record and report work details</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<ul style="list-style-type: none"> <li>recognise and determine when specialist skills and knowledge are required and report accordingly</li> <li>use hand tools, portable power tools, plant and machinery and ancillary equipment</li> <li>work at height</li> <li>use of access equipment</li> </ul>			
		7.5 Describe the needs of other occupations and how to effectively communicate within a team when operating plant or machinery to prepare profile and finish substrates for specified materials			
		7.6 Describe how to maintain the tools and equipment used when operating plant or machinery to prepare, profile and finish substrates for specified materials			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## Unit 26:

## Applying Coatings as Structure Protection in the Workplace

**Unit reference number:** D/506/3836

**QCF level:** 2

**Credit value:** 13

**Guided learning hours:** 43

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### Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in applying coatings as structure protection in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when applying coatings as structure protection	1.1	Interpret and extract relevant information from drawings, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations governing buildings</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when applying coatings as structure protection	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when applying coatings as structure protection	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 coatings as structure protection			
		3.2	Demonstrate compliance with given information and relevant legislation when applying coatings as structure protection in relation to three of the following: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe handling of materials</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to applying coatings as structure protection, and the types, purpose and limitations of each type, the work situation and general work environment in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to apply coatings as structure protection	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>• thinners, primers and coatings</li> <li>• hand tools, portable power tools, testing equipment and ancillary equipment</li> </ul>			
		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, coverage, length, area, volume and wastage associated with the method/procedure to apply coatings as structure protection			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when applying coatings as structure protection	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 coatings as structure protection	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to apply coatings as structure protection to the required specification	7.1	Demonstrate the following work skills when applying coatings as structure protection: <ul style="list-style-type: none"> <li>measuring, marking out, locating, preparing, mixing, applying, testing and curing</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools and ancillary equipment			
		7.3	Prepare substrates and apply coatings to given working instructions to: <ul style="list-style-type: none"> <li>clean and prepare surface to be coated</li> <li>check and confirm condition of substrate and environment</li> <li>mix and apply coatings</li> <li>test applied coatings</li> <li>cure and protect</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• locate, measure and mark out the area to be coated</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• select the materials to be applied</li> <li>• prepare the substrate</li> <li>• measure, record and act on environmental conditions</li> <li>• mix and apply coatings</li> <li>• test applied thickness</li> <li>• measure adhesion of the coating (pull off test)</li> <li>• cure and protect applied coatings</li> <li>• clean equipment</li> <li>• handle, store and dispose of hazardous waste</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		7.5	Describe the needs of other occupations and how to effectively communicate within a team when applying coatings as structure protection			
		7.6	Describe how to maintain the tools and equipment used when applying coatings as structure protection			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 27:**

## **Carrying Out Concrete Bursting Operations in the Workplace**

**Unit reference number:** F/506/3845

**QCF level:** 2

**Credit value:** 16

**Guided learning hours:** 53

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in carrying out concrete bursting operations in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when carrying out concrete bursting 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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when carrying out concrete bursting operations	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when carrying out concrete bursting operations	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 carrying out concrete bursting operations			
		3.2	Demonstrate compliance with given information and relevant legislation when carrying out concrete bursting operations in relation to two of the following: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> <li>• provision of lighting and ventilation</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to carrying out concrete bursting operations, and the types, purpose and limitations of each type, the work situation and general work environment in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to carry out concrete bursting operations	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>• consumables</li> <li>• diamond and rotary drilling rigs</li> <li>• drills, bursting equipment, bits, bolt croppers, connectors, power units, fixings and accessories</li> <li>• chemical bursting components</li> <li>• hand tools, portable power tools and ancillary equipment</li> </ul>			
		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 any volume associated with the method/procedure to carry out concrete bursting operations			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when carrying out concrete bursting operations	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 carrying out concrete bursting operations	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to carry out concrete bursting operations to the required specification	7.1	Demonstrate the following work skills when carrying out concrete bursting operations: <ul style="list-style-type: none"> <li>measuring, marking out, setting up, connecting, drilling and bursting</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools and ancillary equipment			
		7.3	Carry out bursting in reinforced concrete to given working instructions relating to vertical and/or horizontal surfaces			
		7.4	Sort and remove rubble and materials resulting from concrete bursting operations			
		7.5	Measure and record work details on completion of concrete bursting operations			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.6 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• complete pre-start and post stop checks on concrete bursting machines</li> <li>• set up, and operate drilling and bursting equipment (hydraulic, pneumatic and chemical)</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• secure work with isolation cuts (separation lines)</li> <li>• drill concrete</li> <li>• deal with voids</li> <li>• carry out bursting, including sequence and varying patterns (star bursting)</li> <li>• cut reinforcement</li> <li>• segregate and remove rubble and materials</li> <li>• maintain records</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked)</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.7	Describe the needs of other occupations and how to effectively communicate within a team when carrying out concrete bursting operations		
		7.8	Describe how to maintain the tools and equipment used when carrying out concrete bursting operations		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 28: Carrying Out Concrete Crushing and Breaking Operations in the Workplace**

**Unit reference number:** Y/506/3849

**QCF level:** 2

**Credit value:** 14

**Guided learning hours:** 47

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## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in carrying out concrete crushing and breaking operations in the workplace within the relevant sector of industry.

## **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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 Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when carrying out concrete crushing and breaking 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: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when carrying out concrete crushing and breaking operations	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when carrying out concrete crushing and breaking operations	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 carrying out concrete crushing and breaking operations			
		3.2	Demonstrate compliance with given information and relevant legislation when carrying out concrete crushing and breaking operations in relation to two of the following: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> <li>• provision of lighting and ventilation</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to carrying out concrete crushing and breaking operations, and the types, purpose and limitations of each type, the work situation and general work environment in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to carry out concrete crushing and breaking operations	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>jaws, breakers, bolt croppers, crushers and breakers, power source, control panels and fittings</li> <li>remote/radio control and umbilical cord control equipment</li> <li>hand tools, portable power tools and equipment</li> </ul>			
		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 carry out concrete crushing and breaking operations			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when carrying out concrete crushing and breaking operations	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 carrying out concrete crushing and breaking operations	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to carry out concrete crushing and breaking operations to the required specification	7.1	Demonstrate the following work skills when carrying out concrete crushing and breaking operations: <ul style="list-style-type: none"> <li>measuring, adjusting, manoeuvring, positioning, checking, identifying, setting up, fitting, cutting, crushing, breaking, removing and recording</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools and ancillary equipment			
		7.3	Carry out crushing and breaking of concrete structures to given working instructions using one of the following: <ul style="list-style-type: none"> <li>portable hand crusher</li> <li>remote/radio control crusher and breaker</li> <li>umbilical cord control crusher and breaker</li> </ul>			
		7.4	Sort and remove rubble and materials resulting from concrete crushing and breaking operations			
		7.5	Measure and record work details on completion of concrete crushing and breaking operations			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.6 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• complete pre-start and post-stop checks on crushing and breaking machinery</li> <li>• set up and operate crushing machinery and equipment</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• crush and break concrete</li> <li>• cut reinforcement</li> <li>• segregate and dispose of crushed and broken materials</li> <li>• deal with voids</li> <li>• maintain records</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked)</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.7	Describe the needs of other occupations and how to effectively communicate within a team when carrying out concrete crushing and breaking operations		
		7.8	Describe how to maintain the tools and equipment used when carrying out concrete crushing and breaking operations		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

## **Unit 29: Carrying Out Wire Sawing of Concrete in the Workplace**

**Unit reference number: L/506/3850**

**QCF level: 2**

**Credit value: 16**

**Guided learning hours: 53**

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### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in carrying out wire sawing of concrete in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- 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.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when carrying out wire sawing	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, method statements, risk assessments, work instructions, electronic data, manufacturers' information, and current regulations</li> </ul>			



Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when carrying out wire sawing	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> <li>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</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when carrying out wire sawing	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 carrying out wire sawing			
		3.2	Demonstrate compliance with given information and relevant legislation when carrying out wire sawing in relation to: <ul style="list-style-type: none"> <li>• safe use of access equipment</li> <li>• safe use and storage of materials, tools and equipment</li> <li>• specific risks to health</li> <li>• provision of lighting and ventilation</li> </ul>			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to carrying out wire sawing, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> <li>• collective protective measures</li> <li>• personal protective equipment (PPE)</li> <li>• respiratory protective equipment (RPE)</li> <li>• local exhaust ventilation (LEV)</li> </ul>			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to carry out wire sawing	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>drills, wire saws, bits, saw blades, power unit, connectors, fittings and accessories</li> <li>hand tools, portable power tools and ancillary equipment</li> </ul>			
		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 carry out wire sawing			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when carrying out wire sawing	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 carrying out wire sawing	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to carry out wire sawing to the required specification	7.1	Demonstrate the following work skills when carrying out wire sawing: <ul style="list-style-type: none"> <li>measuring, marking out, checking, identifying, setting up, connecting, sawing, disposing and recording</li> </ul>			
		7.2	Use and maintain hand tools, portable power tools and ancillary equipment			
		7.3	Carry out wire sawing of concrete/masonry structures using wire saw and drilling equipment to given working instructions			
		7.4	Sort and remove rubble resulting from wire sawing			
		7.5	Measure and record work details on completion of wire sawing			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.6 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>• complete pre-start and post-stop checks on wire sawing machines</li> <li>• isolate work area</li> <li>• set up, guard and use wire saw</li> <li>• locate and protect services (water, gas, electric and waste)</li> <li>• drill starter holes or saw starting positions</li> <li>• thread and tension wire (push or pull)</li> <li>• twist, join and crimp wires</li> <li>• cut in sequence using wire saw</li> <li>• apply lubricant and coolant</li> <li>• deal with voids</li> <li>• segregate and remove rubble and materials</li> <li>• maintain records</li> <li>• recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>• use hand tools, portable power tools and equipment using different power sources (three phase, cordless, mains, fuel driven and generator linked)</li> <li>• work at height</li> <li>• use access equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.7	Describe the needs of other occupations and how to effectively communicate within a team when carrying out wire sawing		
		7.8	Describe how to maintain the tools and equipment used when carrying out wire sawing		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)

# **Unit 30: Erecting and Dismantling Access/Working Platforms in the Workplace**

**Unit reference number: D/600/8281**

**QCF level: 2**

**Credit value: 8**

**Guided learning hours: 27**

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## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in erecting and dismantling access/working platforms in the workplace within the relevant sector of industry.

## **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.



Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of erecting and dismantling access/working platforms to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsements:

- own occupational area of work

plus two or more of the following:

- ladders/crawler boards
- stepladders/platform steps
- proprietary towers
- trestle platforms
- mobile scaffold towers
- proprietary staging/podiums.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when erecting and dismantling access/working platforms	1.1	Interpret and extract information from specifications, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>specifications, current legislation, method statements, risk assessments and manufacturers' information</li> </ul>			
2	Know how to comply with relevant legislation and official guidance when erecting and dismantling access/working platforms	2.1	Describe their responsibilities under current legislation and official guidance, whilst working: <ul style="list-style-type: none"> <li>in the workplace, at height, in confined areas, with tools and equipment, with movement/storage of materials and by manual handling</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		2.3	State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when erecting and dismantling access/working platforms	3.1	Use personal protective equipment (PPE) and access equipment safely to carry out the activity in accordance with legislation and organisational requirements when erecting and dismantling access/working platforms			
		3.2	Explain why, when and how personal protective equipment (PPE) should be used, relating to erecting and dismantling access/working platforms, and the types, purpose and limitations of each type			
		3.3	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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to erect and dismantle access/working platforms	4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>• ladders/crawler boards</li> <li>• stepladders/platform steps</li> <li>• trestles</li> <li>• proprietary staging/podiums</li> <li>• proprietary towers</li> <li>• mobile scaffold towers</li> <li>• protection equipment and notices</li> <li>• tools and ancillary equipment</li> </ul>			
		4.2	Select resources associated with own work in relation to materials, components, tools and equipment			
		4.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used			
		4.4	Outline potential hazards associated with the resources and method of work			
		4.5	Describe how to calculate quantity of equipment required associated with the method/procedure to erect and dismantle access equipment/working platforms			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when erecting and dismantling access/working platforms	5.1	Protect the work and its surrounding area from damage			
		5.2	Minimise damage and maintain a clean work space			
		5.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.4	Dispose of waste in accordance with legislation			
		5.5	State why the disposal of waste should be carried out in relation to the work			
6	Complete the work within the allocated time when erecting and dismantling access/working platforms	6.1	Demonstrate completion of the work within the allocated time			
		6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to erect and dismantle access/working platforms to the required specification	7.1	Demonstrate the following work skills when erecting and dismantling access/working platforms: <ul style="list-style-type: none"> <li>• moving, positioning/erecting, securing, checking, dismantling and removing</li> </ul>			
		7.2	Erect, dismantle and store two of the following access equipment to given access regulations: <ul style="list-style-type: none"> <li>• ladders/crawler boards</li> <li>• stepladders/platform steps</li> <li>• proprietary towers</li> <li>• trestle platforms</li> <li>• mobile scaffold towers</li> <li>• proprietary staging/podiums</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul style="list-style-type: none"> <li>• provide protection to the work area</li> <li>• establish a base for equipment</li> <li>• erect proprietary access equipment to manufacturer's instructions suitable for the work</li> <li>• erect non-proprietary access equipment suitable for the work</li> <li>• place protective screens and notices</li> <li>• check/monitor equipment during the period of use</li> <li>• dismantle and store access equipment</li> <li>• use tools and equipment</li> <li>• work at height</li> </ul>			
		7.4 Safely use and store materials, hand tools and ancillary equipment			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		7.5	State the needs of other occupations and how to communicate within a team when erecting and dismantling access/working platforms			
		7.6	Describe how to maintain the tools and equipment used when erecting and dismantling access/working platforms			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

(if sampled)



## Unit 31:

## Applying Sealants Mechanically in the Workplace

**Unit reference number:** T/600/7220

**QCF level:** 3

**Credit value:** 12

**Guided learning hours:** 40

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### Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in applying sealants mechanically in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of applying sealants mechanically to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- concrete slabs
- forecourts
- hardstandings.

## Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when applying sealants mechanically	1.1	Interpret and extract information from of drawings, specifications, schedules, job sheets, method statements and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statement			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> <li>drawings, specifications, schedules, job sheets, method statements and manufacturers' information</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when applying sealants mechanically	2.1	Describe their responsibilities under current legislation and official guidance, whilst working: <ul style="list-style-type: none"> <li>in the workplace, 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</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		2.3	State what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe working practices when applying sealants mechanically	3.1	Use personal protective equipment (PPE) and access equipment/working platforms safely to carry out the activity in accordance with legislation and organisational requirements when applying sealants mechanically			
		3.2	Explain why and when personal protective equipment (PPE) should be used, relating to applying sealants mechanically, and the types, purpose and limitations of each type			
		3.3	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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to apply sealants mechanically	4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>• tapes</li> <li>• packings</li> <li>• primers</li> <li>• single and multi-part sealants</li> <li>• mechanical application equipment</li> <li>• hand and/or powered tools and equipment</li> </ul>			
		4.2	Select resources associated with own work in relation to materials, components, tools, equipment, mechanical applicators and ancillary equipment			
		4.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used			
		4.4	Outline potential hazards associated with the resources and method of work			
		4.5	Describe how to calculate quantity, length and area associated with the method/procedure to apply sealants mechanically			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when applying sealants mechanically	5.1	Protect the work and its surrounding area from damage			
		5.2	Minimise damage and maintain a clean work space			
		5.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.4	Dispose of waste in accordance with legislation			
		5.5	State why the disposal of waste should be carried out in relation to the work			
6	Complete the work within the allocated time when applying sealants mechanically	6.1	Demonstrate completion of the work within the allocated time			
		6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to apply sealants mechanically to the required specification	7.1	Demonstrate the following work skills when applying sealants mechanically: <ul style="list-style-type: none"> <li>measuring, preparing, brushing, cleaning, backing, applying, finishing and protecting</li> </ul>			
		7.2	Prepare and apply sealants mechanically to contractor's working instructions relating to one of the following: <ul style="list-style-type: none"> <li>concrete slabs</li> <li>forecourts</li> <li>hardstandings</li> </ul>			
		7.3	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul style="list-style-type: none"> <li>seal concrete slabs, forecourts and hard-standings, walls and floor/ceiling junctions</li> <li>use hand tools, power tools, and equipment</li> <li>use mechanical application equipment</li> <li>work at height</li> <li>use access equipment</li> </ul>			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.4	Safely use and store hand tools, portable power tools, mechanical applicators and ancillary equipment		
		7.5	State the needs of other occupations and how to communicate within a team when applying sealants mechanically		
		7.6	Describe how to maintain the tools and equipment used when applying sealants mechanically		

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_  
(if sampled)

Date: \_\_\_\_\_

## 12 Further information and useful publications

To get in touch with us please visit our website at [qualifications.pearson.com](http://qualifications.pearson.com):

- for Pearson Edexcel and BTEC enquiries'  
<http://qualifications.pearson.com/en/support/contact-us>
- for Pearson Work Based Learning enquiries:  
<http://qualifications.pearson.com/en/support/support-for-you/work-based-learning.html>
- to learn more about our books, software and online resources for UK schools and colleges: <http://qualifications.pearson.com/en/support/support-for-you/work-based-learning.html>

Key publications:

- *Adjustments for candidates with disabilities and learning difficulties – Access and Arrangements and Reasonable Adjustments, General and Vocational qualifications* (Joint Council for Qualifications (JCQ))
- *Equality Policy* (Pearson)
- *Recognition of Prior Learning Policy and Process* (Pearson)
- *UK Information Manual* (Pearson)
- *UK Quality Vocational Assurance Handbook* (Pearson).

All of these publications are available on our website.

Further information and publications on the delivery and quality assurance of NVQ/Competence-based qualifications are available on our website.

Our publications catalogue lists all the material available to support our qualifications. To access the catalogue and order publications, please go to our website.



# 13 Professional development and training

## Professional development and training

Pearson supports UK and international customers with training related to our qualifications. This support is available through a choice of training options offered on our website.

The support we offer focuses on a range of issues, such as:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing learner-centred learning and teaching approaches
- building in effective and efficient quality assurance systems.

The national programme of training we offer is available on our website. You can request centre-based training through the website or you can contact one of our advisers in the Training from Pearson UK team via Customer Services to discuss your training needs.

## Training and support for the lifetime of the qualifications

**Training and networks:** our training programme ranges from free introductory events through sector-specific opportunities to detailed training on all aspects of delivery, assignments and assessment. We also host some regional network events to allow you to share your experiences, ideas and best practice with colleagues in your region.

**Regional support:** our team of Regional Quality Managers, based around the country, are responsible for providing quality assurance support and guidance to anyone managing and delivering NVQs/Competence-based qualifications. The Regional Quality Managers can support you at all stages of the standard verification process as well as in finding resolutions of actions and recommendations as required.

To get in touch with our dedicated support teams please visit our website.

**Online support:** find the answers to your questions by browsing over 100 FAQs on our website or by submitting a query using our Work Based Learning Ask the Expert Service. You can search the database of commonly asked questions relating to all aspects of our qualifications in the work-based learning market. If you are unable to find the information you need, send us your query and our qualification or administrative experts will get back to you. The Ask the Expert service is available on our website.

## Online forum

Pearson Work Based Learning Communities is an online forum where employers, further education colleges and workplace training providers can seek advice and clarification about any aspect of our qualifications and services, and share knowledge and information with others. The forums are sector specific and cover business administration, customer service, health and social care, hospitality and catering and retail. The online forum is available on our website.

## 14 Contact us

We have a dedicated Account Support team, across the UK, to give you more personalised support and advice. To contact your Account Specialist:

**Email:** wblcustomerservices@pearson.com

**Telephone:** 0844 576 0045

If you are new to Pearson and would like to become an approved centre, please contact us by:

**Email:** wbl@pearson.com

**Telephone:** 0844 576 0045

### Complaints and feedback

We are working hard to give you excellent service. However, if any element of our service falls below your expectations, we want to understand why, so that we can prevent it from happening again. We will do all that we can to put things right.

If you would like to register a complaint with us, please email [wblcomplaints@pearson.com](mailto:wblcomplaints@pearson.com).

We will formally acknowledge your complaint within two working days of receipt and provide a full response within seven working days.

# Annexe A: Consolidated Assessment Strategy for Construction and the Built Environment

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## **Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional. Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.**

### **Introduction**

This assessment strategy provides principles and guidance to awarding organisations so the assessment of units and qualifications with NVQ in the Qualifications and Credit Framework (QCF) title and SVQs is valid, effective and consistent, and has credibility across the Construction and Built Environment sector. This is a consolidated ConstructionSkills Assessment Strategy covering construction and the built environment – craft, supervisory, technical, managerial and professional NVQ and SVQ units and qualifications. This assessment strategy is one of the strands of the ConstructionSkills' Construction Qualification Strategy.

These principles are in addition to the requirements that awarding organisations must meet for the delivery of NVQ and SVQ units and qualifications as required by the qualification regulators' documentation.

This consolidated assessment strategy provides the overarching principles as systems may vary from one awarding organisation to another. Awarding organisations must consistently put these principles into practice.

*Appendix A* provides guidance to help awarding organisations incorporate relevant parts of these principle requirements in their documentation.

*Appendix B* provides a list of sub annexes relevant to specific NVQ or SVQ qualifications and units, these sub annexes contain additional information for awarding organisations where National Working Groups or Awarding Body Fora have identified the need for specific clarification. Clarification may be about the terminology of the content of the unit (ref. section 2.1), or specific occupational expertise requirements for assessors and verifiers (ref. section 4).

Awarding organisations must make this Strategy and the relevant annexes available to assessors, verifiers and candidates.

### **Principles**

#### **1 External quality control of assessment**

- 1.1 Awarding organisations must use risk management for external quality control of assessment. They must evaluate all external verification reports and other data relating to assessment centres. Awarding organisations must address any risks relating to quality control, considering the sector assessment strategy requirements for:
- workplace evidence
  - the use of simulation
  - the occupational competence of assessors and verifiers.

- 1.2 The monitoring and standardisation of assessment decisions must be achieved by robust and strong internal and external verification systems that meet the requirements of the qualification regulators' documentation.
- 1.3 Awarding organisations must be members of the sector's Built Environment Awarding Body Forum, of which the qualification regulators are members. Members will be expected to provide feedback on National Occupational Standards (NOS), NVQ or SVQ units and qualifications, including aspects informing incremental change.
- 1.4 The Forum will, in respect of this strategy:
- build on the good relationships with awarding organisations
  - provide opportunities to identify and address particular issues of external quality control
  - contribute to improving quality and consistency
  - support awarding organisations to monitor assessment centres' performance to identify areas and levels of risk
  - provide information and statistics about take-up and completion, as well as trends and developments that can be used by ConstructionSkills and awarding organisations to identify any problem areas and agree remedial action
  - discuss matters concerning quality assurance, as well as providing the opportunity to identify issues arising from implementation of NOS and related vocational qualifications
  - inform the continuous improvement of NOS, and awards derived from them
  - identify and share best practices to build a whole industry approach to pursue excellence in education and work-based learning and assessment process to achieve competence.
- 1.5 Awarding organisations and their partners, assessment centres, verifiers and assessors must maintain robust and transparent operational arrangements. They must preserve independence in assessment, certification and quality assurance processes. Awarding organisations must ensure clear separation of their NVQ/SVQ assessment responsibilities from their industry, training, membership, certification, accreditation and commercial interests and resolve any conflicts of interest.
- 1.6 Where e-assessment is used, it must meet the requirements of the qualification regulators' documentation.

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

- 2.1 Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This includes naturally occurring documentary evidence (hard copy and electronic), direct observation of activities and witness testimony as relevant. ConstructionSkills' National Working Groups will specify any exceptions to this position (see section 3).

- 2.2 Workplace evidence must be supported by the required evidence of knowledge and understanding. This evidence may be identified by:
- questioning the candidate
  - recognised industry education and training programme assessment or professional interview assessment that has been matched to NOS requirements
  - performance evidence
- 2.3 A holistic approach towards the collection of evidence should be encouraged. The focus should be on assessing activities generated by the whole work experience rather than focusing on specific tasks. This would show how evidence requirements could be met across the qualification to make the most efficient use of evidence. Annex A suggests standard evidence notes for awarding organisations.

### **3 How simulated working conditions may be used to assess competence**

- 3.1 Simulations (designed situations for producing artificially generated evidence) may only be used where candidates are prevented from gathering direct evidence from the workplace in the normal way because:
- there are hazards
  - it is difficult to distinguish individual performance in team situations
  - circumstances occur infrequently or long term results are involved
  - confidentiality is important
  - there are organisational constraints.
- 3.2 Any instances where simulation is considered to be acceptable as an alternative (to direct workplace evidence) means of generating evidence, will be determined by the relevant ConstructionSkills National Working Group and stated in the unit. Annex A suggests standard evidence notes for awarding organisations.
- 3.3 The ConstructionSkills National Working Group will determine and specify on the required realistic working environment and context to be adopted. This could include appropriate:
- tools, equipment and instruments
  - materials
  - types of contingencies
  - standards and quality specifications
  - real timescales
  - quantities of work
  - physical conditions
  - relationships with people
  - types of interaction
  - communication methods and media
  - information and data.

- 3.4 Where simulated evidence is stated as acceptable in the unit, the circumstances and requirements for the simulation needs to be confirmed by discussions between the candidate and the assessor, and which are then agreed by the internal and external verifiers.
- 3.5 Where other Standard Setting Bodies' units are imported into a ConstructionSkills suite, the evidence requirements of the originating body will be adopted and specified.

#### **4 Occupational expertise requirements for assessors and verifiers**

##### **4.1 Awarding organisations must ensure that assessors:**

- 4.1.1 have sufficient, verifiable, relevant current industry experience, knowledge and understanding of the occupational working area at, or above, the level being assessed. This must be of sufficient depth to be effective and reliable when judging candidates' competence. Assessors' experience, knowledge and understanding could be verified by a combination of:

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

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

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

- 4.1.3 only assess in their acknowledged area of occupational competence

- 4.1.4 have a sound, in-depth knowledge of, and uphold the integrity of, the sector's NOS and this Assessment Strategy (this document)

- 4.1.5 are prepared to participate in training activities for their continued professional development

- 4.1.6 hold, or are working towards, a qualification as listed within 'Assessing and Assuring Quality of Assessment', either in the Qualifications and Credit Framework (QCF), or the Scottish Credit and Qualifications Framework (SCQF):

- Level 3 Award in Assessing Competence in the Work Environment
- Level 3 Certificate in Assessing Vocational Achievement
- SVQ (SCQF level) Assessing Competence in the Work Environment
- SVQ (SCQF level) Assessing Vocational Achievement

or hold one of the following

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence

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

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

4.2 Awarding organisations must ensure that **internal verifiers**:

4.2.1 have sufficient, verifiable, relevant up to date experience, knowledge and understanding of the occupational working area at, or above, the level being verified. This must be of sufficient depth to be effective and reliable when verifying judgements about assessors' assessment processes and decisions. Internal verifiers' experience, knowledge and understanding could be verified by a combination of:

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

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

4.2.2 have expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are verifying. This could be verified by records of continuing professional development achievements

4.2.3 have a sound, in-depth knowledge of, and uphold the integrity of, the NOS and this Assessment Strategy (this document)

4.2.4 are prepared to participate in training activities for their continued professional development

4.2.5 hold, or are working towards, a qualification as listed in 'Assessing and Assuring Quality of Assessment', either in the Qualifications and Credit Framework (QCF), or the Scottish Credit and Qualifications Framework (SCQF):

- Level 4 Award in the Internal Quality Assurance of the Assessment Process and Practice
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Process and Practice
- SVQ(SCQF level) in the Internal Quality Assurance of the Assessment Process and Practice
- SVQ (SCQF level) in Leading the Internal Quality Assurance of Assessment Process and Practice

or hold one of the following

- VI Conduct internal quality assurance of the assessment process
- D34 Internal verify the assessment process

Holders of V1/D34 must quality assure to the reviewed National Occupational Standards (NOS) for Learning and Development.

It is strongly recommended that within the role of Internal Quality Assurance one of the following qualifications is held.

- Level 3 Award in Assessing Competence in the Work Environment
- Level 3 Certificate in Assessing Vocational Achievement



- SVQ (SCQF level) Assessing Competence in the Work Environment
- SVQ (SCQF level) Assessing Vocational Achievement

or one of the following

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence

4.3 Awarding organisations must ensure that **external verifiers**:

4.3.1 the occupational working area at, or above, the level being verified. This must be of sufficient depth to be effective and reliable when verifying judgements about internal verification and assessment processes and decisions. External verifiers' experience, knowledge and understanding could be verified by a combination of:

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

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

4.3.2 have sufficient expertise so they have an up to date experience, knowledge and understanding of the particular aspects of work they are verifying. This could be verified by records of continuing professional development achievements

4.3.3 have a sound, in-depth knowledge of, and uphold the integrity of, the NOS and this Assessment Strategy (this document)

4.3.4 are prepared to participate in training activities for their continued professional development

4.3.5 hold, or are working towards, a qualification as listed in 'Assessing and Assuring Quality of Assessment', either in the Qualifications and Credit Framework (QCF), or the Scottish Credit and Qualifications Framework (SCQF):

- Level 4 Award in the External Quality Assurance of the Assessment Process and Practice
- Level 4 Certificate in Leading the External Quality Assurance of Assessment
- SVQ (SCQF level) in the External Quality Assurance of the Assessment Process and Practice
- SVQ (SCQF) in Leading the External Quality Assurance of Assessment

or hold one of the following

- V2 Conduct external quality assurance of the assessment process
- D35 Externally verify the assessment process

Holders of V2/D35 must quality assure to the reviewed National Occupational Standards (NOS) for Learning and Development.

It is strongly recommended that within the role of External Quality Assurance one of the following qualifications is held at Level 3 and Level 4.

Level 3:

- Level 3 Award in Assessing Competence in the Work Environment
- Level 3 Certificate in Assessing Vocational Achievement
- SVQ (SCQF level) Assessing Competence in the Work Environment
- SVQ (SCQF level) Assessing Vocational Achievement

or one of the following

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence

Level 4:

- Level 4 Award in the Internal Quality Assurance of the Assessment Process and Practice
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Process and Practice
- SVQ(SCQF level) in the Internal Quality Assurance of the Assessment Process and Practice
- SVQ (SCQF level) in Leading the Internal Quality Assurance of Assessment Process and Practice
- VI Conduct internal quality assurance of the assessment process
- D34 Internal verify the assessment process

#### 4.4 Selection and appointment of assessors and verifiers

All applicants should be advised that they may be interviewed. Applicants' CVs should be profiled against the activities and range of the NVQ/SVQ(s) they will assess/verify to check that the applicant has the relevant current experience, knowledge and understanding of the occupational working area:

- at, or above, the level they will be assessing
- of sufficient depth to credibly verify judgements and assessments
- to uphold the integrity of the NOS and this Consolidated Assessment Strategy.

All assessors should have experience as well as, not in lieu of, qualifications. Where there seem to be gaps in a potentially suitable applicant's experience and knowledge, the applicant should be interviewed. Successful applicants' CVs, profiling, reasons for not needing to interview and interview records should be available for audit.

## Appendix B1

### **Additional Information to the Consolidated Assessment Strategy from the National Working Group for Controlling Lifting Operations**

#### **Part A: Clarification and guidance notes**

This additional information has been produced to ensure consistency in interpreting the occupational expertise requirements for assessors as described in paragraph 4.1 of the ConstructionSkills' Consolidated Assessment Strategy. This should help awarding organisations incorporate relevant parts of the assessment strategy principles' requirements in their documentation for the Controlling Lifting Operations units and qualifications with NVQ in the QCF title and SVQs.

#### **Additional requirements for assessors of planning and supervising lifting operations**

Assessors must be competent and have an up-to-date working knowledge of the occupation and sector. Assessors must have had active involvement in lifting operations and on each endorsement for which they wish to assess. The awarding body must ensure that all assessors are competent on each endorsement for which they intend to assess.

#### **Supplementary guidance**

In order to meet contractual and regulative requirements, many sectors of industry require lift planners and supervisors to possess certification from recognised industry approved bodies. The awarding body should ideally encourage all assessors to hold appropriate registration cards or certificates to support industry initiatives for a qualified workforce.

Where lifting experience was gained within the armed forces, applicants for assessor status should ideally gain external work experience within industry, or be able to demonstrate knowledge of relevant industry working practices outside the armed forces.

#### **Part B: Clarification on standards (NOS) content terminology**

Various sectors of industry, supported by the Health and Safety Executive, requested national occupational standards for the safety critical occupations of lift planner and lift supervisor. Standards from the suite of National Occupational Standards for Construction Site Supervision and Construction Site Management were identified by the National Working Group (NWG) as conveniently defining the job roles of planner and supervisor.

Certain standards (NOS), however, use terminology particular to, or make reference to, the construction sector, limiting the scope of the standards. Clarification of NOS terminology has been produced (Annex B1, page ii), by the NWG, for awarding organisations, which provides interpretation and meaning of selected words that are used in lifting operations within other industrial sectors. Provision of this clarification further avoids a proliferation of new standards.

Awarding organisations need to ensure that candidates, employers, assessment centres, assessors and those involved in the verification process for this qualification are informed of the clarification of NOS terminology for planning and supervising lifting operations.

## Clarification of NOS terminology for controlling lifting operations

<b>'construction operations'</b>	Includes lifting operations within other sectors of industry.
<b>'decision-makers'</b>	This refers to the client, customer or their representative, senior/contracts manager, project team, consultants or in VR 705 the lift planner.
<b>'ensure notice has been given to all the people who will be affected'</b>	This means as dictated by the lift plan.
<b>'lines' 'levels', 'angles'</b>	This includes load levels, ground levels, lines for placing loads and lifting accessory angles.
<b>'near neighbours'</b>	This can include other structures and a workforce in a different part of the project.
<b>'organise and control the site'</b>	The lifting activity and the immediate surrounding area.
<b>'position, align and/or level the work'</b>	This refers to items being moved and placed and the equipment used to attach and move the loads.
<b>'produce clear requests for plant, equipment or machinery'</b>	This means those specified by the lift plan.
<b>'place and maintain notices'</b>	This means ensuring that the correct notices (for the lifting activity) are in place prior to the commencement of the lifting activity, and checked throughout the duration of the activity.
<b>'plan how the work will be undertaken'</b>	This means as dictated by the lift plan.
<b>'programmes and schedules'</b>	This refers to either component parts of, or the complete lift plan.
<b>'project'</b>	A lifting operation that is taking place within an overall contract, project or work activity.
<b>'project plan'</b>	This refers to either component parts of, or the complete lift plan.
<b>'site'</b>	A lifting operation that is taking place within an overall contract, project or work activity.
<b>'site plan'</b>	This refers to either components part of, or the complete lift plan.
<b>'vehicular access'</b>	This can comprise of all forms of transport, including waterborne and airborne craft.

## Appendix B2

### **Additional Information to the Consolidated Assessment Strategy from the Awarding Body Forum for Plant Operations**

#### **Clarification and guidance notes**

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

This additional information has been produced to ensure consistency in aspects to be assessed through performance in the workplace as described in paragraph 2.1 of the ConstructionSkills' Consolidated Assessment Strategy. This should help awarding organisations incorporate the guidance into their assessment methodology for Plant Operations units and qualifications with NVQ in the QCF title and SVQ in the SCQF.

##### **Additional requirements for assessment in the workplace**

Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This direct evidence must be met using a combination of the following methods.

- direct observation by the assessor
- witness testimony by an expert witness related to the occupational area
- professional discussion.

Workplace evidence must be supported by the required evidence of knowledge and understanding gained from at least three month's work-based experience.

##### **Occupational expertise requirements for assessors**

This additional information has been produced to ensure consistency in interpreting the occupational expertise requirements for assessors as described in paragraph 4.1 of the ConstructionSkills' Consolidated Assessment Strategy. This should help awarding organisations incorporate relevant parts of the assessment strategy principles' requirements in their documentation for Plant Operations units and qualifications with NVQ in the QCF title and SVQs.

##### **Additional requirements for assessors of plant operations**

Assessors must be competent and have an up-to-date working knowledge of the occupation and sector. Assessors must have had active involvement in plant operations and on each endorsement for which they wish to assess. The awarding organisation must ensure that all assessors are competent on each endorsement for which they intend to assess in accordance with requirements of the qualification regulators' guidance for England, Northern Ireland, Scotland and Wales.

### **Supplementary guidance**

In order to meet contractual and regulative requirements, many sectors of industry require operators of plant and equipment to possess certification from recognised industry approved bodies. The awarding organisation should ideally encourage all assessors to hold appropriate registration cards or certificates to support industry initiatives for a qualified workforce.

Where plant operating experience was gained within the armed forces, applicants for assessor status should ideally gain external work experience within industry, or be able to demonstrate knowledge of relevant industry working practices outside the armed forces.

## Appendix C

### Guidance on the use of simulation

#### Introduction

National Occupational Standards (NOS) are developed by Sector Skills Councils (SSCs) and describe the level of occupational competence required of a particular job role. NOS are then used to build National and Scottish Vocational Qualifications (N/SVQs) that are competence based qualifications and demand assessment in a workplace environment.

Assessment of N/SVQs through simulation is indicated where the achievement of valid and reliable assessment calls for evidence of performance under workplace conditions, but where it will be difficult to assess through normal working practice. This will usually apply as a result of one or more of the following constraints:

- activities which are inherently hazardous and where mistakes made in carrying them out would pose unacceptable risks to the candidate, other people, animals or property (e.g. electricity and gas sectors, fire service etc.)
- the costs incurred would be unacceptably high if mistakes were made during an activity and a candidate would therefore be required to 'prove' competence before progressing onto the actual work (e.g. handling rare or precious objects)
- situations where the qualities and outcomes of the candidate's behaviour are almost impossible to distinguish from those of their peers or colleagues, making authenticity uncertain (e.g. in some teamwork contexts)
- activities or situations which are sufficiently rare (e.g. where processes, such as a 'shut-down', may only occur on an annual basis)
- when the collection and/or review of evidence of workplace performance would intrude unacceptably on personal privacy or confidentiality, or would significantly alter the nature of an interaction or relationship (e.g. in some health care settings)
- a requirement to work with new techniques and/or work practices which may not be available in all workplaces.

Where permitted, simulation can take one or a combination of the two following forms:

- the candidate is presented with an activity to perform using equipment and/or in a location which replicates that found in the workplace
- the candidate is presented with a situation to which they must respond; taking and playing the role they would expect to play in the workplace.

It is a SSC's responsibility to define the acceptability of evidence from simulation in the context of National Occupational Standards (NOS) and National and Scottish Vocational Qualifications (N/SVQs). The ConstructionSkills Consolidated Assessment Strategy provides this guidance.

## Guidance on the acceptable use and characteristics of simulation within N/SVQs during the current economic climate

Due to the current economic climate and its impact on construction industry apprentices, ConstructionSkills as the SSC for construction has agreed that there can be some flexibility around the use of simulation when assessing construction craft NVQs. This is set out as follows and applies up until the end of December 2011.

In situations where a displaced or employed apprentice (this does not apply to full-time learners) will not be able to demonstrate evidence in the workplace within an acceptable time span, Awarding Bodies can arrange with their centres to apply the following principles.

- 1 Units cannot be assessed using simulation alone – there must be some supporting work-based evidence.
- 2 A centre's strategy for simulation must be examined and approved by the external verifier.
- 3 The location and environment of simulation must be agreed with the internal verifier prior to taking place, and must be checked by the internal verifier.
- 4 The **nature of the contingency** and the **physical environment must be realistic** and candidates should not be given any indication as to exactly what contingencies they may come across.
- 5 All simulations must be planned, developed and documented by the centre in a way that ensures the simulation correctly reflects what the unit seeks to assess, and all simulations must follow these documented plans.
- 6 There should be a range of simulation to cover the same aspect of the unit so that the risk of candidates successfully colluding is reduced.
- 7 All simulation must reflect the urgency with which the activity would normally be carried out and the normal time needed to complete it, including the usual complexity of factors affecting the activity.
- 8 All simulation should involve the same personnel as would normally be included (e.g. bricklayer, supervisor, labourer etc.) and also similar realistic facilities.
- 9 Any instances of insufficient work-based evidence must be supported by adequate supplementary evidence which might include questioning; interviews with professional discussion; work projects; case studies; special assignments; self-testimony.

ConstructionSkills would strongly recommend that centres explore strategies with the candidate's employers for obtaining work-based evidence before considering the use of simulation. Examples might include using Group Training Associations, thereby carrying out real jobs within the college/training centre and/or involvement with community projects.

Group Training Association (GTA) is the government term for a training group which also shares apprentices. The GTA model is where a number of like minded employers come together to create a separate business entity, which sources appropriate training and delivers apprenticeships by providing work experience across the range of engaged businesses



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