

# Specification

Edexcel NVQ/competence-  
based qualifications

Edexcel Level 1 NVQ Certificate in Roadbuilding  
(Construction) (QCF)

Edexcel Level 2 NVQ Diploma in Roadbuilding  
(Construction) (QCF)

For first registration August 2010

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Our specialist suite of qualifications include NVQs, Apprenticeships, WorkSkills, Functional Skills, Foundation Learning, as well as our exclusive range of BTECs, from entry level right through to Higher National Diplomas.

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## Qualification titles covered by this specification

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This specification gives you the information you need to offer the Edexcel qualifications in Roadbuilding:

<b>Qualification title</b>	<b>Qualification Accreditation Number (QAN)</b>	<b>Accreditation start date</b>
Edexcel Level 1 NVQ Certificate in Roadbuilding (Construction) (QCF)	500/9414/2	01/08/2010
Edexcel Level 2 NVQ Diploma in Roadbuilding (Construction) (QCF)	500/9415/4	01/08/2010

These qualifications have been accredited within the Qualifications and Credit Framework (QCF) and are eligible for public funding as determined by the Department for Education (DfE) under Sections 96 and 97 of the Learning and Skills Act 2000.

The qualification titles listed above feature in the funding lists published annually by the DfE and the regularly updated website. They will also appear on the Learning Aims Database (LAD), where relevant.

You should use the QCF Qualifications Accreditation Number (QAN), when you wish to seek public funding for your learners. Each unit within a qualification will also have a unique QCF reference number, which is listed in this specification.

The QCF qualification title and unit reference numbers will appear on the learners' final certification document. Learners need to be made aware of this when they are recruited by the centre and registered with Edexcel.

# Key features of the Edexcel qualifications in Roadbuilding

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These qualifications:

- are nationally recognised
- are based on the ConstructionSkills National Occupational Standards (NOS). The NOS, assessment requirements/strategy and qualification structure(s) are owned by ConstructionSkills.

The Edexcel Level 2 NVQ Diploma in Roadbuilding (Construction) (QCF) has been approved as a component for the ConstructionSkills Apprenticeship framework.

## What is the purpose of these qualifications?

These qualifications are appropriate for employees in the construction and built environment sector working across a broad range of areas. They are designed to assess occupational competence in the workplace where learners are required to demonstrate skills and knowledge to a level required in the construction industry.

## Who are these qualifications for?

These qualifications are for all learners aged 16 and above who are capable of reaching the required standards.

Edexcel's policy is that the qualifications should:

- be free from any barriers that restrict access and progression
- ensure equality of opportunity for all wishing to access the qualifications.

## What are the benefits of these qualifications to the learner and employer?

These qualifications allow learners to demonstrate competence against National Occupational Standards which are based on the needs of the Construction industry as defined by ConstructionSkills, the Sector Skills Council. As such they contribute to the development of skilled labour in the sector. The Level 2 qualification may contribute towards the competence element of an Apprenticeship.

## What are the potential job roles for those working towards these qualifications?

- Construction Operative
- Highways Maintenance/Road Worker.

**What progression opportunities are available to learners who achieve these qualifications?**

These qualifications allow learners to demonstrate competence in roadbuilding at a level required by the Construction and Built Environment industry. Learners can progress across the level and size of the Construction and Built Environment competence and knowledge qualifications and into other occupational areas such as Team Leading and Management.

Further information is available in *Annexe A*.

Pre-publication

# What is the qualification structure for the Edexcel Level 1 NVQ Certificate in Roadbuilding (Construction) (QCF)?

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Individual units can be found in the *Units* section. The QCF level and credit value are given on the first page of each unit.

For the Edexcel Level 1 NVQ Certificate in Roadbuilding (Construction) learners must complete all units in Group A to obtain 25 credits.

## **Group A**

F/600/7138 - Conforming to general safety in the workplace

J/600/7139 - Conforming to efficient working practices in the workplace

H/600/7987 - Carrying out support work for roadbuilding operations in the workplace

# What is the qualification structure for the Edexcel Level 2 NVQ Diploma in Roadbuilding (Construction) (QCF)?

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Individual units can be found in the *Units* section. The QCF level and credit value are given on the first page of each unit.

The Level 2 NVQ Diploma in Roadbuilding - Bituminous Paving - machine (Construction) requires all units in Group A and Group B1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - Concrete Paving - machine (Construction) requires all units in Group A and Group C1 and units from Group AO to give a minimum total of 70 credits.

The Level 2 NVQ Diploma in Roadbuilding - Slurry/Micro Surfacing - machine (Construction) requires all units in Group A and Group D1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - Slurry/Micro Surfacing - manual (Construction) requires all units in Group A and Group E1 and units from Group AO to give a minimum total of 83 credits.

The Level 2 NVQ Diploma in Roadbuilding - Surface Dressing - machine (Construction) requires all units in Group A and Group F1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - High Friction Surfacing - machine (Construction) requires all units in Group A and Group G1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - High Friction Surfacing - manual (Construction) requires all units in Group A and Group H1 and units from Group AO to give a minimum total of 83 credits.

The Level 2 NVQ Diploma in Roadbuilding - Planing - machine (Construction) requires all units in Group A and Group I1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - Road Recycling - machine (Construction) requires all units in Group A and Group J1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - Soil Stabilisation - machine (Construction) requires all units in Group A and Group K1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - Surface Retexturing - machine (Construction) requires all units in Group A and Group L1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - Pavement Marking - machine (Construction) requires all units in Group A and Group M1 and units from Group AO to give a minimum total of 62 credits.

The Level 2 NVQ Diploma in Roadbuilding - Pavement Marking - manual operations (Construction) requires all units in Group A and Group N1 and units from Group AO to give a minimum total of 83 credits.

The Level 2 NVQ Diploma in Roadbuilding - Pavement Marking - road studs (Construction) requires all units in Group A and Group O1 and units from Group AO to give a minimum total of 63 credits.

Learners may choose any or none of the units in Group AD. Credit from additional units cannot be added to a pathway unless the minimum number of credit for the pathway has been attained.

#### **A - Mandatory units (all pathways)**

F/600/7138 - Conforming to general safety in the workplace

J/600/7139 - Conforming to efficient working practices in the workplace

#### **AO - Optional units (all pathways)**

R/600/7127 - Establishing work area protection and safety in the workplace

D/600/7101 - Segregating the area for highways works in the workplace

#### **B - Bituminous Paving - machine (pathway)**

##### **B1- Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **C - Concrete Paving - machine (pathway)**

### **C1- Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

L/600/8101 - Setting Out secondary dimensional work control in the workplace

## **D - Slurry/Micro Surfacing - machine (pathway)**

### **D1 - Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **E - Slurry/Micro Surfacing - manual (pathway)**

### **E1 - Mandatory units**

T/600/7993 - Manually applying specialist road surfacing in the workplace

## **F - Surface Dressing - machine (pathway)**

### **F1 - Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **G - High Friction Surfacing - machine (pathway)**

### **G1 - Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **H - High Friction Surfacing - manual (pathway)**

### **H1 - Mandatory units**

T/600/7993 - Manually applying specialist road surfacing in the workplace

## **I - Planing - machine (pathway)**

### **I1 - Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **J - Road Recycling - machine (pathway)**

### **J1 - Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **K - Soil Stabilisation - machine (pathway)**

### **K1- Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **L - Surface Retexturing - machine (pathway)**

### **L1 - Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **M - Pavement Marking - machine (pathway)**

### **M1 - Mandatory units**

K/600/7988 - Preparing, operating and controlling operations of road plant or machinery in the workplace

## **N - Pavement Marking - manual operations (pathway)**

### **N1 - Mandatory units**

H/600/7990 - Applying and removing pavement markings manually in the workplace

## **O - Pavement Marking - road studs (pathway)**

### **O1 - Mandatory units**

M/600/7992 - Installing and removing permanent road studs in the workplace

## **AD - Additional units**

K/600/8087 - Preparing to and directing and guiding plant and plant operations in the workplace

T/600/8089 - Preparing to and directing and guiding basic loads in the workplace

M/600/8091 - Preparing for, and arranging and securing plant for haulage in the workplace

A/600/8093 - Preparing for, and arranging and securing basic loads for movement in the workplace

D/600/8099 - Preparing and operating specialised powered tools and equipment in the workplace

R/600/8102 - Slinging and signalling the movement of loads (secondary role) in the workplace.

# How are the qualifications graded and assessed?

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The overall grade for each qualification is a 'pass'. The learner must achieve all the required units within the specified qualification structure.

To pass a unit the learner must:

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

The qualifications are designed to be assessed:

- in the workplace or
- in conditions resembling the workplace, as specified in the assessment requirements/strategy for the sector, or
- as part of a training programme.

## Assessment requirements/strategy

The assessment requirements/strategy for these qualifications have/has been included in *Annexe E*. They have been developed by ConstructionSkills in partnership with employers, training providers, awarding organisations and the regulatory authorities. The assessment strategy includes details on:

- criteria for defining realistic working environments
- roles and occupational competence of assessors, expert witnesses, internal verifiers and standards verifiers
- quality control of assessment
- evidence requirements.

Evidence of competence may come 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/training programme whether at or away from the workplace
- the **Recognition of Prior Learning (RPL)** where a learner can demonstrate that they can meet the assessment criteria within a unit through knowledge, understanding or skills they already possess without undertaking a course of learning. They must submit sufficient, reliable and valid evidence for internal and standards verification purposes. RPL is acceptable for accrediting a unit, several units or a whole qualification
- a **combination** of these.

It is important that the evidence 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.

## Types of evidence

To successfully achieve a unit the learner must gather evidence which shows that they have met the required standard in the assessment criteria. Evidence can take a variety of different forms including the following examples:

- direct observation of the learner's performance by their assessor
- outcomes from oral or written questioning
- products of the learner's work
- personal statements and/or reflective accounts
- outcomes from simulation, where permitted by the assessment strategy
- professional discussion
- assignment, project/case studies
- authentic statements/witness testimony
- expert witness testimony
- reflective accounts
- evidence of Recognition of Prior Learning.

Learners can use one piece of evidence to prove their knowledge, skills and understanding across different assessment criteria and/or across different units. It is, therefore, not necessary for learners to have each assessment criterion assessed separately. Learners should be encouraged to reference the assessment criteria to which the evidence relates.

Evidence must be made available to the assessor, internal verifier and Edexcel standards verifier. A range of recording documents is available on the Edexcel website [www.edexcel.com](http://www.edexcel.com). Alternatively, centres may develop their own.

## Additional requirements

The Joint Awarding Body and the SSC Working Practices Group have identified additional requirements that are needed to assess and quality assure qualifications placed on the QCF that use NVQ within their title. These requirements are shown in *Annexe E: Additional Requirements for Qualifications that use the title NVQ within the QCF*.

# Centre recognition and approval

## Centre recognition

Centres that have not previously offered Edexcel qualifications need to apply for and be granted centre recognition as part of the process for approval to offer individual qualifications. New centres must complete both a centre recognition approval application and a qualification approval application.

Existing centres will be given 'automatic approval' for a new qualification if they are already approved for a qualification that is being replaced by the new qualification and the conditions for automatic approval are met. Centres already holding Edexcel approval are able to gain qualification approval for a different level or different sector via Edexcel online.

## Approvals agreement

All centres are required to enter into an approvals agreement which is a formal commitment by the head or principal of a centre to meet all the requirements of the specification and any linked codes or regulations. Edexcel 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.

## Quality assurance

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Detailed information on Edexcel's quality assurance processes is given in *Annexe B*.

## What resources are required?

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Each qualification is designed to support learners working in the Construction and Built Environment sector. Physical resources need to support the delivery of the qualifications and the assessment of the learning outcomes and must be of industry standard. Centres must meet any specific resource requirements outlined in *Annexe E: Assessment requirements/strategy*. Staff assessing the learner must meet the requirements within the overarching assessment strategy for the sector.

# Unit format

Each unit in this specification contains the following sections.

<b>Unit title:</b> Understanding the retail selling process				
<b>Unit reference number:</b> F/502/5807				
<b>QCF level:</b> 3				
<b>Credit value:</b> 2				
<b>Guided learning hours:</b> 19				
<b>Unit summary:</b> The unit provides the learner with an understanding of the retail selling process. It covers the communication process involved in the customer choosing products, the importance of good product knowledge and the part this plays in the selling process. There is also a focus on the legislation that applies in relation to selling and also how sales levels can be maximised.				
<b>Assessment requirements/evidence requirements:</b>				
<b>Assessment recording:</b>				
<b>Learning outcomes:</b>	<b>Assessment criteria:</b>	<b>Evidence type:</b>	<b>Portfolio reference:</b>	<b>Date:</b>
1 Understand how communication techniques can be used to help the customer choose products	1.1 Explain how communication techniques can be used to match product features and benefits to complex customer needs 1.2 Explain how communication techniques can be used to narrow the choice of products to those best suited to the customers needs	O observation Q&A questions and answers P learner products RA reflective accounts/ personal statements S simulation PD professional discussion A assignment, project/case studies WT witness testimony EPW expert witness evidence RPL Recognition of Prior Learning		

Pre-publication

# Units

## **Unit 1: Conforming to general safety in the workplace**

**Unit reference number: F/600/7138**

**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 safety in the workplace within the relevant sector of industry.

### **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 conforming to general safety in the workplace to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated except for assessment criteria 4.1.

## Assessment recording

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Identify hazards associated with the workplace and record and report in accordance with organisational procedures.	1.1 report and/or record hazards within the workplace and occupations at work. 1.2 describe typical hazards associated with the occupational area including noise, resources, environmental, substances and articles, obstructions, storage and work activities. 1.3 state the methods used for reporting hazards in the workplace.			
2 Comply with all workplace safety legislation requirements.	2.1 select and wear general personal protective equipment (PPE) in the work environment in accordance with legislation and organisational requirements. 2.2 state when and why PPE should be used including protective helmets, ear protection, overalls, safety boots and high visibility clothing. 2.3 Adhere with statutory requirements, safety notices and warning notices displayed within the workplace. 2.4 describe which types of safety notices are relevant to the occupational area.			
3 Comply with and maintain all organisational security arrangements and approved procedures.	3.1 maintain security of the workplace by following organisational procedures relating to: <ul style="list-style-type: none"> <li>– during the working day</li> <li>– on completion of the day's work</li> <li>– unauthorised personnel (other operatives and the general public)</li> <li>– theft.</li> </ul> 3.2 explain how security procedures are implemented within the workplace.			
4 Comply with all emergency	4.1 follow organisational procedures for accidents and			

procedures in accordance with organisational policy.	emergencies associated with the type of work being undertaken and the work environment. 4.2 state the types of fire extinguishers available and describe how and when they are used.			
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Learner name:

Date:

Learner signature:

Date:

Assessor signature:

Date:

Internal verifier signature:

Date:

*(if sampled)*

Pre-publication

## **Unit 2: Conforming to efficient working practices in the workplace**

**Unit reference number: J/600/7139**

**QCF level: 2**

**Credit value: 3**

**Guided learning hours: 10**

### **Unit summary**

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

### **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 conforming to efficient working practices to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

## Assessment recording

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Communicate with others to establish productive working relationships.	1.1 communicate with colleagues and/or clients to ensure that the work is carried out efficiently. 1.2 explain different methods of communicating with line managers, co-workers and clients. 1.3 give reasons for using certain methods of communication for particular job activities. 1.4 describe the reasons for communicating efficiently and effectively, and the consequences of poor communication.			
2 Follow organisational procedures to maintain good work relationships.	2.1 carry out work in conjunction with other workers and maintain harmonised relationships. 2.2 explain how organisational work procedures are applied to maintain good working relationships with line managers, co-workers and clients. 2.3 state the reasons for effective working relationships with line managers, co-workers and clients. 2.4 describe the consequences for efficient working if relationships with line managers, co-workers and clients are poor.			
3 Maintain appropriate records in accordance with the organisational procedures.	3.1 complete relevant documentation according to the occupation in accordance with organisational procedures. 3.2 describe how to maintain documentation in accordance with organisational procedures relating 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.			

Learner name:

Date:

Learner signature:

Date:

Assessor signature:

Date:

Internal verifier signature:

Date:

*(if sampled)*

Pre-publication

**Unit 3:** Carrying out support work for roadbuilding operations in the workplace

**Unit reference number:** H/600/7987

**QCF level:** 1

**Credit value:** 20

**Guided learning hours:** 67

### Unit summary

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

### 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 carrying out supporting activities for roadbuilding operations to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against of the following endorsements:

- bituminous paving
- concrete paving
- slurry/microsurfacing
- surface dressing
- high friction surfacing
- planing
- road recycling
- soil stabilisation
- surface retexturing
- pavement marking.

### **Assessment recording**

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Know how to comply with relevant legislation and official guidance when supporting roadbuilding operations.	1.1 outline ways in which instructions can be given when supporting roadbuilding operations. 1.2 describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 1.3 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative. 1.4 state what the accident reporting procedures are and who is responsible for making reports.			
2 Maintain safe working practices when supporting roadbuilding operations.	2.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when supporting roadbuilding operations. 2.2 explain why and when personal protective equipment (PPE) should be used, relating to support work for roadbuilding operations, and the types, purpose and limitations of each type. 2.3 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.			
3 Select the required quantity and quality of resources for the methods of work to support roadbuilding operations.	3.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: – signs, lights and guarding materials – bituminous materials, cementitious materials, iron work,			

	<p>reinforcement, primer, bitumen emulsion, catalyst, doping agent, fibres, rubber, pigment, chippings, aggregates, calcined bauxite, slurry, arisings, soils, lime, PFA, thermoplastics, resin, membrane, adhesives, paints, chlorinated rubber, road studs</p> <p>– hand tools and ancillary equipment.</p> <p>3.2 select resources associated with the relevant support work in relation to materials, components, tools and equipment.</p> <p>3.3 state how the resources should be used correctly.</p> <p>3.4 outline potential hazards associated with the resources and method of work.</p>			
4 Minimise the risk of damage to the work and surrounding area when supporting roadbuilding operations.	<p>4.1 protect the work and its surrounding area from damage.</p> <p>4.2 minimise damage and maintain a clean work space.</p> <p>4.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.</p> <p>4.4 dispose of waste in accordance with legislation.</p> <p>4.5 state why the disposal of waste should be carried out in relation to the work.</p>			
5 Complete the work within the allocated time when supporting roadbuilding operations.	<p>5.1 demonstrate completion of the work within the allocated time.</p> <p>5.2 state the purpose of the work programme and explain why deadlines should be kept in relation to agreed starting and finishing times.</p>			
6 Comply with the given contract information to carry out support work for roadbuilding operations to the required specification.	<p>6.1 demonstrate at least four of the following work skills that are relevant to roadbuilding operations:</p> <p>– cleaning, breaking out, protecting, removing, repairing, aligning, measuring, masking, vacuuming, spraying, mixing, heating and decanting, pouring, tanking, spreading, compacting, directing, operating, securing and visually inspecting.</p> <p>6.2 carry out supporting activities on roadbuilding</p>			

	<p>operations, following given instructions, on at least one of the following occupational areas:</p> <ul style="list-style-type: none"> <li>– bituminous paving</li> <li>– concrete paving</li> <li>– slurry/microsurfacing</li> <li>– surface dressing</li> <li>– high friction surfacing</li> <li>– planing</li> <li>– road recycling</li> <li>– soil stabilisation</li> <li>– surface retexturing</li> <li>– pavement marking.</li> </ul> <p>6.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>– identify the operational area</li> <li>– protect operational and work area, plant, resources and finished work</li> <li>– direct and guide pedestrians and machines/vehicles as appropriate</li> <li>– prepare surfaces and sub-structures as appropriate</li> <li>– apply relevant resources as necessary</li> <li>– prepare materials for spreading, compacting and securing as necessary</li> <li>– clean and finish as necessary</li> <li>– use hand tools and ancillary equipment.</li> </ul> <p>6.4 safely use and store hand tools and ancillary equipment.</p> <p>6.5 state the needs of other occupations and how to communicate within a team when supporting roadbuilding operations.</p> <p>6.6 describe how to maintain the tools and equipment used when supporting roadbuilding operations.</p>			
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Pre-publication



## Assessment recording

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Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the preparation for, and directing and guiding plant.	1.1 interpret and extract information from drawings, specifications, schedules 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: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance.			
2 Organise with others the sequence and operation in which directing and guiding plant is 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 state how to organise resources prior to and during directing and guiding plant.			
3 Know how to comply with relevant legislation and official guidance to direct and guide plant.	3.1 describe their responsibilities under current legislation and official guidance whilst working: – 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. 3.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to			

	<p>site, workplace, company and operative.</p> <p>3.3 state what the accident reporting procedures are and who is responsible for making reports.</p>			
4 Maintain safe working practices when preparing for, directing and guiding plant.	<p>4.1 use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements when directing and guiding plant.</p> <p>4.2 explain why and when personal protective equipment (PPE) should be used, relating to directing and guiding plant, and the types, purpose and limitations of each type.</p> <p>4.3 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.</p>			
5 Select the required quantity and quality of resources to prepare for, and when directing and guiding plant.	<p>5.1 describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> <li>– signalling and communication equipment</li> <li>– hand tools and ancillary equipment.</li> </ul> <p>5.2 select resources associated with directing and guiding plant in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p> <p>5.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p> <p>5.4 outline potential hazards associated with the resources and method of work.</p> <p>5.5 describe how to calculate weight/bearing pressure, quantity, length and area and identification of centres of gravity associated with the method/procedures to carry out the work.</p>			
6 Minimise the risk of damage to the work and surrounding area when directing and guiding plant.	<p>6.1 protect the work and its surrounding area from damage.</p> <p>6.2 minimise damage and maintain a clean work space.</p> <p>6.3 describe how to protect work from damage and the</p>			

	<p>purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.</p> <p>6.4 dispose of waste in accordance with legislation.</p> <p>6.5 state why the disposal of waste should be carried out safely in relation to the work.</p>			
7 Complete the work within the allocated time when preparing to, and directing and guiding plant.	<p>7.1 demonstrate completion of the work within the allocated time.</p> <p>7.2 state the purpose of the work programme and describe why deadlines should be kept in relation to:</p> <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 lifting operation.</li> </ul>			
8 Comply with the given contract information to prepare to, and direct and guide plant using to the required specification.	<p>8.1 demonstrate the following work skills when preparing to, and directing and guiding plant and operations:</p> <ul style="list-style-type: none"> <li>– setting up, checking, communicating, estimating, interpreting, directing, guiding, indicating, informing, instructing, positioning, moving, signalling and relaying.</li> </ul> <p>8.2 prepare to, and position plant by directing and guiding the movement of plant and plant operations to given working instructions, using at least one of the following communication methods:</p> <ul style="list-style-type: none"> <li>– hand signals</li> <li>– hand signalling equipment</li> <li>– verbal/electronic communication.</li> </ul> <p>8.3 describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> <li>– assess and determine the movement and operations of plant</li> <li>– direct and guide the movement and operations of plant</li> <li>– signal and communicate following recognised/agreed operational procedures</li> <li>– use hand tools and ancillary equipment.</li> </ul>			

	8.4 safely use and store hand tools, signalling and communication equipment and ancillary equipment. 8.5 state the needs of other occupations and how to communicate within a team when preparing to and directing and guiding plant. 8.6 describe how to maintain the tools and equipment used to direct and guide plant.			
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Pre-publication



## Assessment recording

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the preparation for, and directing and guiding basic loads.	1.1 interpret and extract information from drawings, specifications, schedules 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: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance.			
2 Organise with others the sequence and operation in which directing and guiding basic loads is 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 state how to organise resources prior to and during directing and guiding basic loads.			
3 Know how to comply with relevant legislation and official guidance to direct and guide basic loads.	3.1 describe their responsibilities under current legislation and official guidance whilst working: – 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. 3.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to			

	<p>site, workplace, company and operative.</p> <p>3.3 state what the accident reporting procedures are and who is responsible for making reports.</p>			
4 Maintain safe working practices when preparing for, directing and guiding basic loads.	<p>4.1 use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements when directing and guiding basic loads.</p> <p>4.2 explain why and when personal protective equipment (PPE) should be used, relating to directing and guiding basic loads, and the types, purpose and limitations of each type.</p> <p>4.3 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.</p>			
5 Select the required quantity and quality of resources to prepare for, and when directing and guiding basic loads.	<p>5.1 describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> <li>– signalling and communication equipment</li> <li>– hand tools and ancillary equipment.</li> </ul> <p>5.2 select resources associated with directing and guiding basic loads in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p> <p>5.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p> <p>5.4 outline potential hazards associated with the resources and method of work.</p> <p>5.5 describe how to calculate weight/bearing pressure, quantity, length and area and identification of centres of gravity associated with the method/procedures to carry out the work.</p>			
6 Minimise the risk of damage to the work and surrounding area	<p>6.1 protect the work and its surrounding area from damage.</p>			

<p>when directing and guiding basic loads.</p>	<p>6.2 minimise damage and maintain a clean work space.          6.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.          6.4 dispose of waste in accordance with legislation.          6.5 state why the disposal of waste should be carried out safely in relation to the work.</p>			
<p>7 Complete the work within the allocated time when preparing to, and directing and guiding basic loads.</p>	<p>7.1 demonstrate completion of the work within the allocated time.          7.2 state the purpose of the work programme and describe why deadlines should be kept in relation to:          – types of progress charts, timetables and estimated times          – organisational procedures for reporting circumstances which will affect the lifting operation.</p>			
<p>8 Comply with the given contract information to prepare to, and direct and guide basic loads using to the required specification.</p>	<p>8.1 demonstrate the following work skills when preparing to, and directing and guiding basic loads:          – setting up, checking, communicating, estimating, interpreting, directing, guiding, indicating, informing, instructing, positioning, moving, signalling and relaying.          8.2 prepare to, and position basic loads by directing and guiding the movement of basic loads to the required destinations to given working instructions, using at least one of the following communication methods:          – hand signals          – hand signalling equipment          – verbal/electronic communication.          8.3 describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:          – assess and determine the movement and operations of basic loads          – direct and guide the movement and operations of basic loads</p>			

	<ul style="list-style-type: none"> <li>– signal and communicate following recognised/agreed operational procedures</li> <li>– use hand tools and ancillary equipment.</li> <li>8.4 safely use and store hand tools, signalling and communication equipment and ancillary equipment.</li> <li>8.5 state the needs of other occupations and how to communicate within a team when preparing to and directing and guiding basic loads.</li> <li>8.6 describe how to maintain the tools and equipment used to direct and guide basic loads.</li> </ul>			
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## Assessment recording

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Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the preparation of, and the arranging and securing of plant for haulage.	1.1 interpret and extract information from drawings, specifications, schedules 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: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance.			
2 Know how to comply with relevant legislation and official guidance to carry out the arranging and securing of plant for haulage.	2.1 describe their responsibilities under current legislation and official guidance whilst working: – 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. 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 preparing for and arranging and securing plant for haulage.	3.1 use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements when arranging and securing plant for haulage. 3.2 explain why and when personal protective equipment			

	<p>(PPE) should be used, relating to arranging and securing plant for haulage, and the types, purpose and limitations of each type.</p> <p>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.</p>			
<p>4 Select the required quantity and quality of resources to prepare for, and when arranging and securing plant for haulage.</p>	<p>4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> <li>– load restraint and securing accessories inc. wire rope, chain, fabric, web hooks, shackles and clamps</li> <li>– hand tools and ancillary equipment.</li> </ul> <p>4.2 select resources associated with the work in relation to load restraint and securing accessories and/or ancillary equipment.</p> <p>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.</p> <p>4.4 outline potential hazards associated with the resources and method of work.</p> <p>4.5 describe how to calculate weight/bearing pressure, quantity, length and area, and identification of centres of gravity associated with the method/procedures to carry out the work.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when arranging and securing plant for haulage.</p>	<p>5.1 protect the work and its surrounding area from damage.</p> <p>5.2 minimise damage and maintain a clean work space.</p> <p>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.</p> <p>5.4 dispose of waste in accordance with legislation.</p> <p>5.5 state why the disposal of waste should be carried out safely in relation to the work.</p>			

<p>6 Complete the work within the allocated time when preparing to, and arranging and securing plant for haulage.</p>	<p>6.1 demonstrate completion of the work within the allocated time.</p> <p>6.2 state the purpose of the work programme and describe why deadlines should be kept in relation to:</p> <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 lifting operation.</li> </ul>			
<p>7 Comply with the given contract information to prepare to, and arrange and secure plant for haulage to the required specification.</p>	<p>7.1 demonstrate the following work skills when preparing to, and arranging and securing plant for haulage:</p> <ul style="list-style-type: none"> <li>– selecting, fitting, attaching, adjusting, setting up, checking, configuring, measuring, gauging, calculating, positioning, removing and storing.</li> </ul> <p>7.2 prepare to, and arrange and secure plant for haulage to given working instructions, using appropriate restraining methods and restraining/securing accessories on the following types of plant.</p> <ul style="list-style-type: none"> <li>– wheeled plant</li> <li>– tracked plant</li> <li>– compacting plant.</li> </ul> <p>7.3 remove restraining/securing accessories from plant following haulage and ready for movement from the transporter.</p> <p>describe how to apply safe 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 plant and restraining/securing accessories</li> <li>– determine methods for restraining</li> <li>– select and use suitable restraining/securing accessories</li> <li>– arrange and secure plant</li> <li>– confirm stability, positioning and weight distribution</li> <li>– remove and store restraining/securing accessories on completion of haulage</li> <li>– work at height</li> </ul>			

	<p>– use hand tools, ancillary equipment and accessories.  7.4 safely use and store hand tools, restraining/securing accessories and ancillary equipment.  7.5 state the needs of other occupations and how to communicate within a team when preparing to and arranging and securing plant for haulage.  7.6 describe how to maintain the tools and equipment used to arrange and secure plant for haulage.</p>			
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Pre-publication



## Assessment recording

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Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the preparation of, and the arranging and securing of basic loads for movement.	1.1 interpret and extract information from drawings, specifications, schedules 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: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance.			
2 Know how to comply with relevant legislation and official guidance to carry out the arranging and securing of basic loads for movement.	2.1 describe their responsibilities under current legislation and official guidance whilst working: – 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. 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 preparing for and arranging and securing basic loads for movement.	3.1 use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements when arranging and securing basic loads. 3.2 explain why and when personal protective equipment			

	<p>(PPE) should be used, relating to arranging and securing basic loads, and the types, purpose and limitations of each type.</p> <p>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.</p>			
<p>4 Select the required quantity and quality of resources to prepare for, and when arranging and securing basic loads for movement.</p>	<p>4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> <li>– load restraint and securing accessories inc. wire rope, chain, fabric, web hooks, shackles and clamps</li> <li>– hand tools and ancillary equipment.</li> </ul> <p>4.2 select resources associated with the work in relation to lifting accessories and/or ancillary equipment.</p> <p>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.</p> <p>4.4 outline potential hazards associated with the resources and method of work.</p> <p>4.5 calculate weight/bearing pressure, quantity, length, area and identify centres of gravity relevant to the arranging and securing of basic loads.</p> <p>4.6 describe how to calculate weight/bearing pressure, quantity, length and area, and identify centres of gravity associated with the method/procedures to carry out the work.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when arranging and securing basic loads for movement.</p>	<p>5.1 protect the work and its surrounding area from damage.</p> <p>5.2 minimise damage and maintain a clean work space.</p> <p>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.</p> <p>5.4 dispose of waste in accordance with legislation.</p>			

	5.5 state why the disposal of waste should be carried out safely in relation to the work.			
6 Complete the work within the allocated time when preparing to, and arranging and securing basic loads for movement.	6.1 demonstrate completion of the work within the allocated time. 6.2 state the purpose of the work programme and describe why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the lifting operation.			
7 Comply with the given contract information to prepare to, and arrange and secure basic loads for movement to the required specification.	7.1 demonstrate the following work skills when preparing to, and arranging and securing plant for haulage: – selecting, fitting, attaching, adjusting, setting up, checking, configuring, measuring, gauging, calculating, balancing, positioning, removing and storing. 7.2 prepare to, and arrange and secure basic loads for movement to given working instructions, using appropriate load securing methods and lifting accessories on any of the three following types of basic load. – balanced – unbalanced – loose – bundled – drummed – containerised. 7.3 remove lifting accessories from basic loads following movement, and leave basic loads in a safe situation. describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: – identify the characteristics of the basic loads and lifting/securing accessories – determine methods for securing – select and use suitable lifting accessories – arrange and secure basic loads			

	<ul style="list-style-type: none"> <li>– confirm balance, stability, positioning and weight distribution</li> <li>– remove and store lifting accessories on completion of movement</li> <li>– work at height</li> <li>– use hand tools, ancillary equipment and accessories.</li> </ul> <p>7.4 safely use and store hand tools, lifting accessories and ancillary equipment.</p> <p>7.5 state the needs of other occupations and how to communicate within a team when preparing to and arranging and securing basic loads for movement.</p> <p>7.6 describe how to maintain the tools and equipment used to arrange and secure basic loads for movement.</p>			
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Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
<p>1 Interpret the given information relating to the preparation and use of powered tools and/or equipment.</p>	<p>1.1 interpret and extract information from drawings, specifications, risk assessments, method statements, legislation, codes of practice, operating instructions and manufacturers' information.</p> <p>1.2 comply with information and/or instructions derived from risk assessments and method statements.</p> <p>1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.</p> <p>1.4 describe different types of information, their source and how they are interpreted in relation to:</p> <ul style="list-style-type: none"> <li>– drawings, specifications, risk assessments, method statements, legislation, codes of practice, manufacturers' information and instructions applicable to powered tool operations.</li> </ul>			
<p>2 Know how to comply with relevant legislation and official guidance to prepare and use powered tools and/or equipment.</p>	<p>2.1 describe their responsibilities under current legislation and official guidance whilst working:</p> <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> <p>2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.</p> <p>2.3 state what the accident reporting procedures are and who is responsible for making reports.</p>			
<p>3 Maintain safe working practices when preparing for and using</p>	<p>3.1 use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and</p>			

<p>powered tools and/or equipment.</p>	<p>organisational requirements when using powered tools and/or equipment.  3.2 explain why and when personal protective equipment (PPE) should be used, when using powered tools and/or equipment, 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.</p>			
<p>4 Request and select the required quantity and quality of resources to prepare for sustain powered tools and/or equipment.</p>	<p>4.1 request and select resources associated with the type of work in relation to fuel, power source, lubricants and consumables.  4.2 outline the organisational procedures for requisitioning consumables and other resources and why they have been developed and how they are used.  4.3 outline potential hazards associated with the resources and method of work and how they are overcome.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when using powered tools and/or equipment.</p>	<p>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 safely in relation to the work.</p>			
<p>6 Carry out-pre-use preparation inspections on powered tools and/or equipment in accordance with given procedures.</p>	<p>6.1 demonstrate the following work skills when preparing for and using powered tools and/or equipment for the work:  – measuring, aligning, assembling, fitting, levelling, positioning, checking, securing, connecting and adjusting.  6.2 prepare power unit tool(s) and/or ancillary equipment</p>			

	<p>in the workplace to given working instructions.</p> <p>6.3 use and maintain power units, tools and ancillary equipment applicable to the work.</p> <p>6.4 describe the method of work for pre-use checks needed and the preparation required before using and operating powered tools and/or equipment.</p>			
<p>7 Operate powered tools and/or equipment in accordance with safe working practices to achieve the working outcome.</p>	<p>7.1 demonstrate the following work skills when using powered tools and/or equipment:</p> <ul style="list-style-type: none"> <li>– measuring, aligning, assembling, fitting, levelling, positioning, checking, securing, connecting and adjusting.</li> </ul> <p>7.2 operate and monitor power unit tool(s) and associated equipment in the workplace to given working instructions relating to continual running, closing down and cleaning.</p> <p>7.3 return powered tools and/or equipment to a safe operational condition on completion of work.</p> <p>7.4 describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> <li>– prepare, position and set up for work</li> <li>– secure accessories and tool attachments</li> <li>– carry out pre-use checks to manufacturer’s and suppliers information/procedures</li> <li>– operate, use and control</li> <li>– monitor and maintain</li> <li>– close down and secure</li> <li>– disassemble</li> <li>– transport and/or secure.</li> </ul> <p>7.5 state the needs of other occupations and how to communicate within a team when preparing for and using powered tools and/or equipment.</p> <p>7.6 disassemble power units, tools and ancillary equipment following completion of work.</p>			

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Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of slinging and signalling the movement of loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

### **Assessment recording**

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Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the preparation for and the slinging and signalling of loads.	1.1 interpret and extract information from drawings, specifications, schedules, method statements 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: – drawings, specifications, schedules, method statements, manufacturers' information, approved procedures and Codes of Practice.			
2 Organise with others the sequence and operation in which the slinging and signalling of loads is 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 state how to organise resources prior to and when slinging and signalling of loads.			
3 Know how to comply with relevant legislation and official guidance to carry out slinging and signalling of loads.	3.1 describe their responsibilities under current legislation and official guidance whilst working: – 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. 3.2 describe the organisational security procedures for			

	<p>tools, equipment and personal belongings in relation to site, workplace, company and operative.</p> <p>3.3 state what the accident reporting procedures are and who is responsible for making reports.</p>			
<p>4 Maintain safe working practices when preparing for and slinging and signalling loads.</p>	<p>4.1 use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements when slinging and signalling of loads.</p> <p>4.2 explain why and when personal protective equipment (PPE) should be used, relating to slinging and signalling of loads, and the types, purpose and limitations of each type.</p> <p>4.3 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.</p>			
<p>5 Select the required quantity and quality of resources to prepare for and when slinging and signalling loads.</p>	<p>5.1 describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> <li>– lifting accessories</li> <li>– signalling and communication equipment</li> <li>– hand tools and ancillary equipment.</li> </ul> <p>5.2 select resources associated with slinging/signalling in relation to hand tools, attachments, slinging equipment, lifting aids/accessories, signalling and communication equipment.</p> <p>5.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p> <p>5.4 outline potential hazards associated with the resources and method of work.</p> <p>5.5 describe how to calculate weight, bearing pressure, quantity, length and area associated with the method/procedures to carry out slinging/signalling.</p>			

<p>6 Minimise the risk of damage to the work and surrounding area when slinging and signalling loads.</p>	<p>6.1 protect the work and its surrounding area from damage.          6.2 minimise damage and maintain a clean work space.          6.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.          6.4 dispose of waste in accordance with legislation.          6.5 state why the disposal of waste should be carried out safely in relation to the work.</p>			
<p>7 Complete the work within the allocated time when preparing to and slinging and signalling loads.</p>	<p>7.1 demonstrate completion of the work within the allocated time.          7.2 state the purpose of the work programme and describe why deadlines should be kept in relation to:          – types of progress charts, timetables and estimated times          – organisational procedures for reporting circumstances which will affect the lifting operation.</p>			
<p>8 Comply with the given contract information to prepare to and sling and signal loads for movement to the required specification.</p>	<p>8.1 demonstrate the following work skills when preparing to and slinging and signalling loads:          – measuring, gauging, estimating, fitting, fixing, testing, balancing, interpreting, judging, explaining, preparing, indicating, informing, instructing, signing, positioning, adjusting, configuring, moving, securing, signalling, relaying and removing.          8.2 prepare to and attach loads to lifting equipment, and guide loads using signals to the required destination to given working instructions using appropriate load securing methods and lifting accessories.          8.3 describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:          – confirm method of communication          – determine the method of slinging          – select and use suitable slinging equipment/lifting</p>			

	<p>accessories</p> <ul style="list-style-type: none"> <li>– sling loads securely and balance within correct weight distribution following agreed/recognised operational procedures</li> <li>– position loads safely and securely</li> <li>– remove and store lifting accessories</li> <li>– use hand tools, ancillary equipment and accessories.</li> </ul> <p>8.4 safely use and store hand tools and slinging, signalling, communication and ancillary equipment.</p> <p>8.5 state the needs of other occupations and how to communicate within a team when preparing to and slinging and signalling loads.</p> <p>8.6 describe how to maintain the tools and equipment used to sling and signal loads.</p>			
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Learner name:

Date:

Learner signature:

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Assessor signature:

Date:

Internal verifier signature:

Date:

*(if sampled)*

Pre-publication

## **Unit 10: Establishing work area protection and safety in the workplace**

**Unit reference number: R/600/7127**

**QCF level: 2**

**Credit value: 10**

**Guided learning hours: 33**

### **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.

### **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 establishing work area protection and safety 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 endorsement:

- Own occupational area of work.

### **Assessment recording**

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

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 information from drawings, plans, method statements, specifications, schedules, site inspections 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: – drawings, plans, method statement, specifications, schedules, site inspection reports, manufacturers' information, regulations and official guidance associated with protecting work areas.			
2 Know how to comply with relevant legislation and official guidance when establishing work area protection and safety.	2.1 describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, unconfined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative. 2.3 state what the accident reporting procedures are and who is responsible for making reports.			
3 Maintain safe working practices when establishing work area protection and safety.	3.1 use personal protective equipment (PPE) and access equipment (if applicable) safely to carry out the activity in accordance with legislation and organisational			

	<p>requirements when establishing work area protection and safety.</p> <p>3.2 explain why, when and how personal protective equipment (PPE) should be used, relating to establishing work area protection and safety, and the types, purpose and limitations of each type.</p> <p>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.</p>			
<p>4 Select the required quantity and quality of resources for the methods of work to establish work area protection and safety.</p>	<p>4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:</p> <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> <p>4.2 select resources associated with own work in relation to materials, components, fixings, tools and equipment.</p> <p>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.</p> <p>4.4 outline potential hazards associated with the resources and method of work.</p> <p>4.5 describe how to calculate quantity, length and area associated with the method/procedure to establish work area protection and safety.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when establishing work area protection and safety.</p>	<p>5.1 protect the work and its surrounding area from damage.</p> <p>5.2 minimise damage and maintain a clean work space.</p> <p>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.</p> <p>5.4 dispose of waste in accordance with legislation.</p>			

	5.5 state 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 state the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme.			
7 Comply with the given contract information to establish work area protection and safety to the required specification	7.1 demonstrate the following work skills when establishing work area protection and safety: – measuring, setting out, positioning, assembling, constructing, securing and dismantling. 7.2 install, maintain and remove temporary protection and safety arrangements for the work area, to given working instruction, relating to barriers/temporary structures and one of the following: – protection and safety notices – safety lighting. 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – plan for the protection and the safety of the work and surrounding environment – install and maintain the protection and safety equipment – dismantle and remove protection and safety equipment – install safety notices – install lighting systems – use hand tools, power tools and equipment – work at height – use access equipment. 7.4 safely use and store materials, hand tools, portable			

	<p>power tools and ancillary equipment.</p> <p>7.5 state the needs of other occupations and how to communicate within a team when establishing work area protection and safety.</p> <p>7.6 describe how to maintain the tools and equipment used when establishing work area protection and safety.</p>			
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Learner name:

Learner signature:

Assessor signature:

Internal verifier signature:

*(if sampled)*

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Pre-publication

## **Unit 11: Segregating the area for highways works in the workplace**

**Unit reference number: D/600/7101**

**QCF level: 2**

**Credit value: 8**

**Guided learning hours: 27**

### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in segregating the area for highways works in the workplace within the relevant sector of industry.

### **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 segregating the area for highways works to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

## Assessment recording

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when segregating the area for highways works.	1.1 interpret and extract information from drawings, specifications, schedules, site inspections 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: – drawings, specifications, schedules, manufacturers' information, statutory regulations and current Codes of Practice governing traffic management (NRSWA).			
2 Know how to comply with relevant legislation and official guidance when segregating the area for highways works.	2.1 describe their responsibilities under current legislation and official guidance whilst working: – 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, in live traffic situations. 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 segregating the area for highways works.	3.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when segregating the area for highways works.			

	<p>3.2 explain why and when personal protective equipment (PPE) should be used, relating to segregating the area for highways works, and the types, purpose and limitations of each type.</p> <p>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.</p>			
<p>4 Select the required quantity and quality of resources for the methods of work to segregate the area for highways works.</p>	<p>4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:</p> <ul style="list-style-type: none"> <li>– signs, lights, guards and portable traffic lights</li> <li>– pedestrian and vehicular traffic control systems</li> <li>– give and take signs, notices and equipment for the traffic management control</li> <li>– hand and/or powered tools and equipment.</li> </ul> <p>4.2 select resources associated with own work in relation to materials, components, tools and equipment.</p> <p>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.</p> <p>4.4 outline potential hazards associated with the resources and method of work.</p> <p>4.5 describe how to calculate quantity, length, area and wastage associated with the method/procedure to segregate the area for highways works.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when segregating the area for highways works.</p>	<p>5.1 protect the work and its surrounding area from damage.</p> <p>5.2 minimise damage and maintain a clean work space.</p> <p>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.</p> <p>5.4 dispose of waste in accordance with legislation.</p> <p>5.5 state why the disposal of waste should be carried out in relation to the work.</p>			

<p>6 Complete the work within the allocated time when segregating the area for highways works.</p>	<p>6.1 demonstrate completion of the work within the allocated time.</p> <p>6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:</p> <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>			
<p>7 Comply with the given contract information to segregating the area for highways works to the required specification.</p>	<p>7.1 demonstrate the following work skills when segregating the area for highways works:</p> <ul style="list-style-type: none"> <li>– measuring, locating, setting out, positioning, assembling and removing.</li> </ul> <p>7.2 segregate the area for live highways works in compliance with recognised current Codes of Practice and contractor’s working instructions, relating to:</p> <ul style="list-style-type: none"> <li>– access and egress to site</li> <li>– work activity and storage of resources</li> <li>– signs, lighting and guarding, portable traffic signals for traffic management control.</li> </ul> <p>7.3 remove signs, lighting and guarding, portable traffic signals in compliance with recognised current Codes of Practice.</p> <p>7.4 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>– plan for site safety, storage of materials and traffic management control around the highways works</li> <li>– set out signs, traffic lights, guarding for traffic management control</li> <li>– dismantle and remove signs, traffic lights, guarding</li> <li>– use hand tools, power tools and equipment.</li> </ul> <p>7.5 safely use and store hand tools, portable power tools and ancillary equipment.</p> <p>7.6 state the needs of other occupations and how to communicate within a team when segregating the area for</p>			

	highways works. 7.7 describe how to maintain the tools, equipment and traffic control equipment used when segregating the area for highways works.			
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Learner name:

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Learner signature:

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Assessor signature:

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Internal verifier signature:

Date:

*(if sampled)*

Pre-publication



This unit must be assessed against the following endorsements:

– bituminous paving plus paver driver or any two from the following:

screwman

roller driver

chipping machine driver

loader-compressor driver

sweeper driver/operator

or for remedials driver/operator one of the following: membrane installer driver/operator or velocity patcher driver/operator

– concrete paving plus: concrete paver driver/operator

– slurry/microsurfacing plus any one of the following:

applicator driver/operator

tanker driver/operator

tipper grab driver/operator

sweeper driver/operator

roller driver/operator

– surface dressing plus one or more of the following:

tanker driver/operator

chipper driver/operator

tanker and chipper driver/operator

roller driver/operator

loading shovel driver/operator

sweeper driver/operator

spray bar operator

– high friction surfacing plus one or more of the following:

tanker driver/operator

spray bar operator

chipper driver/operator

sweeper driver/operator

– planing plus one of the following:

up to 500 mm without elevator driver/operator

500 mm –1 m with elevator driver/operator

over 1 m with elevator driver/operator

– road recycling plus: driver/operator

– soil stabilisation plus: driver/operator

- surface retexturing plus one of the following:
  - mechanical retexturing driver/operator
  - flailer driver/operator
  - high pressure jetter driver/operator
  - grinder driver/operator
  - sweeper driver/operator
- pavement marking plus: steersman/white liner vehicle operator.

### **Assessment recording**

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
<p>1 Interpret the given information relating to the work and resources when preparing, using and controlling road plant or machinery.</p>	<p>1.1 interpret and extract information from drawings, specifications, schedules, method statements and manufacturers' information, relating to the plant or machinery and type of work being carried out.                      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:                      – drawings, specifications, schedules, manufacturers' information, method statements and regulations governing operations of plant or machinery.</p>			
<p>2 Organise with others the sequence in which the preparing, using and controlling road plant or machinery are to be carried out.</p>	<p>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.</p>			
<p>3 Know how to comply with relevant legislation and official guidance when preparing, using and controlling road plant or machinery.</p>	<p>3.1 describe their responsibilities under current legislation and official guidance whilst working:                      – 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.                      3.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to</p>			

	<p>site, workplace, company and operative.</p> <p>3.3 state what the accident reporting procedures are and who is responsible for making reports.</p>			
<p>4 Maintain safe working practices when preparing, using and controlling road plant or machinery.</p>	<p>4.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing, using and controlling road plant or machinery.</p> <p>4.2 explain why, when and how personal protective equipment (PPE) should be used, relating to preparing, using and controlling road plant or machinery, and the types, purpose and limitations of each type.</p> <p>4.3 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.</p>			
<p>5 Request and select the required quantity and quality of resources when preparing, using and controlling road plant or machinery.</p>	<p>5.1 describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, in relation to:</p> <ul style="list-style-type: none"> <li>– consumables, lubricants, fuels</li> <li>– attachments</li> <li>– paving materials (bituminous; concrete; aggregates, resins, membranes, calcined bauxite, catalyst, doping agents, fibres, pigment, resins, primers)</li> <li>– recycling materials</li> <li>– line marking materials</li> <li>– equipment/accessories.</li> </ul> <p>5.2 request and select resources associated with own work in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p> <p>5.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p> <p>5.4 outline potential hazards associated with the resources and method of work.</p> <p>5.5 describe how to calculate weight, quantity, length and</p>			

	area associated with the method/procedure to prepare, use and control road plant or machinery.			
6 Minimise the risk of damage to the work and surrounding area when preparing, using and controlling road plant or machinery.	<p>6.1 protect the work and its surrounding area from damage.</p> <p>6.2 minimise damage and maintain a clean work space.</p> <p>6.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.</p> <p>6.4 dispose of waste in accordance with legislation.</p> <p>6.5 state why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.</p>			
7 Complete the work within the allocated time when preparing, using and controlling road plant or machinery.	<p>7.1 demonstrate completion of the work within the allocated time.</p> <p>7.2 shut down and secure the plant.</p> <p>7.3 state the purpose of the work programme and explain why deadlines should be kept in relation to:</p> <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>			
8 Comply with the given contract information to form and/or maintain roads by using and controlling road plant or machinery to the required specification.	<p>8.1 demonstrate the following work skills when preparing, using and controlling road plant or machinery:</p> <ul style="list-style-type: none"> <li>– checking, setting up, adjusting, communicating, securing, laying, striping, compacting, marking, levelling and finishing.</li> </ul> <p>8.2 prepare, operate, control operations and shut down road plant or machinery to given working instructions relating to one of the following areas:</p> <ul style="list-style-type: none"> <li>– Bituminous paving: as paver driver or any two of the following – screwman, roller driver, chipping machine driver, loader-compressor driver, sweeper driver/operator or for remedials driver/operator for one of the following –</li> </ul>			

	<p>membrane installation, velocity patching</p> <ul style="list-style-type: none"> <li>– Concrete paving: as driver/operator of the concrete paver</li> <li>– Slurry/microsurfacing: as driver/operator of any one of the following – applicator, tanker, tipper grab, sweeper, roller</li> <li>– Surface dressing: as driver/operator of any one of the following – tanker, chipper, spray bar, tanker and chipper combined, roller, loading shovel, linked tipper, sweeper</li> <li>– High friction surfacing: as driver/ operator of any one of the following – tanker, spray bar, chipper, sweeper</li> <li>– Planing operations: as driver/operator of any one of the following – up to 500 mm without elevator; 500 mm –1 m with elevator; over 1 m with elevator</li> <li>– Road recycling: as driver/operator</li> <li>– Soil stabilisation: as driver/operator</li> <li>– Surface retexturing: as driver/operator for any one of the following – mechanical retexturing, flailing, high pressure jetting, grinding, sweeper</li> <li>– Pavement marking: as steersman/ operator for white liner vehicle.</li> </ul> <p>8.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>– identify with the work requirements and your occupational role</li> <li>– identify with the type of plant or machinery to be used</li> <li>– confirm the area of work, the operations, safety and security requirements</li> <li>– prepare, set up and carry out checks for performance of the plant or machinery</li> <li>– carry out and control operations according to your role and the required performance of plant or machinery</li> <li>– stop, shut down operations and secure plant or machinery</li> </ul>			
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	<p>– use equipment and/or accessories.  8.4 safely use and store ancillary equipment and/or accessories.  8.5 state the needs of other occupations and how to communicate within a team when preparing, using and controlling road plant or machinery.  8.6 describe how to maintain the tools, plant/machinery and equipment used when preparing, using and controlling road plant or machinery.</p>			
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Learner name:

Date:

Learner signature:

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Assessor signature:

Date:

Internal verifier signature:  
*(if sampled)*

Date:

Pre-publication



## Assessment recording

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

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 information from drawings, method statements, specifications, schedules manufacturers' information and reference point. 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: – drawings, specifications, schedules, method statements, manufacturers' information, reference points and regulations governing buildings and construction work.			
2 Know how to comply with relevant legislation and official guidance to set out dimensional control of the work.	2.1 describe their responsibilities under current legislation and official guidance whilst working: – 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. 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 setting out dimensional control of the work.	3.1 use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during setting out dimensional control of the work.			

	<p>3.2 explain why and when personal protective equipment (PPE) should be used, relating to setting out dimensional control of the work, and the types, purpose and limitations of each type.</p> <p>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.</p>			
<p>4 Select the required quantity and quality of resources to set out dimensional control of the work.</p>	<p>4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> <li>– measuring tools and equipment</li> <li>– marking equipment</li> <li>– level and alignment tools.</li> </ul> <p>4.2 select resources associated with the work in relation to measuring tools and instruments, marking materials/components and tools and equipment.</p> <p>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.</p> <p>4.4 outline potential hazards associated with the resources and method of work.</p> <p>4.5 describe how to calculate quantity of resources associated with the work methods.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when setting out dimensional control of the work.</p>	<p>5.1 protect the work and its surrounding area from damage.</p> <p>5.2 minimise damage and maintain a clean work space.</p> <p>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.</p> <p>5.4 dispose of waste in accordance with legislation.</p> <p>5.5 state why the disposal of waste should be carried out safely in relation to the work.</p>			

<p>6 Complete the work within the allocated time when setting out dimensional control of the work.</p>	<p>6.1 demonstrate completion of the work within the allocated time.</p> <p>6.2 state the purpose of the work programme and describe why deadlines should be kept in relation to:</p> <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 lifting operation.</li> </ul>			
<p>7 Comply with the given contract information to set out dimensional control of the work to the required specification.</p>	<p>7.1 demonstrate the following work skills when setting out dimensional control of the work:</p> <ul style="list-style-type: none"> <li>– transferring, transposing, levelling, measuring, marking, positioning, fixing and securing.</li> </ul> <p>7.2 setting out dimensional control for the work to contractor's working instructions for any three of the following:</p> <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> <p>7.3 describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <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 line, angles and levels to dimensional control requirements</li> <li>– use hand tools and measuring and marking equipment</li> <li>– work at height</li> <li>– use access equipment.</li> </ul> <p>7.4 describe how to calculate height, depth, angle, length and area associated with the method/procedures to set</p>			

	<p>out dimensional control of the work.</p> <p>7.5 safely use and store hand tools and ancillary equipment.</p> <p>7.6 state the needs of other occupations and how to communicate within a team when setting out dimensional control of the work.</p> <p>7.7 describe how to maintain the tools and equipment used to set out dimensional control of the work.</p>			
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Learner name:

Learner signature:

Assessor signature:

Internal verifier signature:  
*(if sampled)*

Date:

Date:

Date:

Date:

Pre-publication

## **Unit 14: Manually applying specialist road surfacing in the workplace**

**Unit reference number: T/600/7993**

**QCF level: 2**

**Credit value: 70**

**Guided learning hours: 233**

### **Unit summary**

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

### **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 manually applying specialist road surfacing in the workplace 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:

- slurry/microsurfacing mixer/applicator
- high friction hot applied boiler/screedbox/spreader operative
- high friction cold applied mixer/pourer/spreader operative
- surface dressing operative.

### **Assessment recording**

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when manually applying specialist road surfacing.	1.1 interpret and extract information from drawings, specifications, schedules 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: – drawings, specifications, schedules, manufacturers' information and regulations relating to slurry/microsurfacing or high friction surfacing.			
2 Know how to comply with relevant legislation and official guidance when manually applying specialist road surfacing.	2.1 describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative. 2.3 state what the accident reporting procedures are and who is responsible for making reports.			
3 Maintain safe working practices when manually applying specialist road surfacing.	3.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when manually applying specialist road surfacing. 3.2 explain why, when and how personal protective equipment (PPE) should be used, relating to the manual			

	<p>application of specialist road surfacing, and the types, purpose and limitations of each type.</p> <p>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.</p>			
<p>4 Select the required quantity and quality of resources for the methods of work to manually apply specialist road surfacing.</p>	<p>4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:</p> <ul style="list-style-type: none"> <li>– primers, epoxy or thermoplastic resins, bitumous emulsion, catalyst, doping agents, fibres, rubber, pigments</li> <li>– aggregate, calcined bauxite</li> <li>– masking tape</li> <li>– mixer and mixer pots</li> <li>– heaters</li> <li>– hand and/or powered tools and equipment.</li> </ul> <p>4.2 select resources associated with own work in relation to materials, components, fixings, tools and equipment.</p> <p>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.</p> <p>4.4 outline potential hazards associated with the resources and method of work.</p> <p>4.5 describe how to calculate quantity, length, area and wastage associated with the method/procedure to manually apply specialist road surfacing.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when manually applying specialist road surfacing.</p>	<p>5.1 protect the work and its surrounding area from damage.</p> <p>5.2 minimise damage and maintain a clean work space.</p> <p>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.</p> <p>5.4 dispose of waste in accordance with legislation.</p> <p>5.5 state why the disposal of waste should be carried out</p>			

	safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.			
6 Complete the work within the allocated time when manually applying specialist road surfacing.	<p>6.1 demonstrate completion of the work within the allocated time.</p> <p>6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:</p> <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>			
7 Comply with the given contract information to manually apply specialist road surfacing to the required specification.	<p>7.1 demonstrate the following work skills when manually applying specialist road surfacing:</p> <ul style="list-style-type: none"> <li>– measuring, setting out, marking, positioning, drying, cleaning, masking, priming, mixing, spraying, heating and decanting, spreading, rolling, curing, inspecting and communicating.</li> </ul> <p>7.2 prepare for and manually apply specialist road surfacing to given working instructions using one of the following methods:</p> <ul style="list-style-type: none"> <li>– slurry/microsurfacing</li> <li>– high friction surfacing (cold applied)</li> <li>– high friction surfacing (hot applied)</li> <li>– surface dressing.</li> </ul> <p>7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>– establish an agreed time frame for resurfacing</li> <li>– prepare substrate, to include measuring, setting out, marking out, drying, cleaning and repairing if applicable</li> <li>– prepare equipment as necessary</li> <li>– level and realign ironwork</li> <li>– prepare materials, to include storing, handling and mixing</li> <li>– apply materials to prepared surfaces, to include heating,</li> </ul>			

	pouring, screeding and spreading – remove and dispose of arisings – communicate and co-ordinate progress on specialist resurfacing – return infrastructure to operational status – use hand tools, power tools and equipment. 7.4 safely use and store hand tools, portable power tools and ancillary equipment. 7.5 state the needs of other occupations and how to communicate within a team when manually applying specialist road surfacing. 7.6 describe how to maintain the tools and equipment used to manually apply specialist road surfacing.			
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Learner name:

Date:

Learner signature:

Date:

Assessor signature:

Date:

Internal verifier signature:

Date:

*(if sampled)*

Pre-publication

**Unit 15: Applying and removing pavement markings manually in the workplace**

**Unit reference number: H/600/7990**

**QCF level: 2**

**Credit value: 70**

**Guided learning hours: 233**

### **Unit summary**

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

### **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 manually applying and removing pavement markings 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:

- permanent markings
- temporary markings.

### **Assessment recording**

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when applying and removing pavement markings manually.	1.1 interpret and extract information from drawings, specifications, schedules 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: – drawings, specifications, schedules, manufacturers' information and regulations governing temporary and permanent markings on roads and pavements.			
2 Know how to comply with relevant legislation and official guidance when applying and removing pavement markings manually.	2.1 describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative. 2.3 state what the accident reporting procedures are and who is responsible for making reports.			
3 Maintain safe working practices when applying and removing pavement markings manually.	3.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when applying and removing pavement markings manually. 3.2 explain why and when personal protective equipment (PPE) should be used, relating to applying and removing			

	<p>pavement markings manually, and the types, purpose and limitations of each type.</p> <p>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.</p>			
<p>4 Select the required quantity and quality of resources for the methods of work to apply and remove pavement markings manually.</p>	<p>4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:</p> <ul style="list-style-type: none"> <li>– thermoplastic materials</li> <li>– adhesives</li> <li>– paints</li> <li>– temporary preformed materials</li> <li>– temporary surface mounted studs</li> <li>– hand and/or powered tools and ancillary equipment.</li> </ul> <p>4.2 select resources associated with own work in relation to materials, components, fixings, tools and equipment.</p> <p>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.</p> <p>4.4 outline potential hazards associated with the resources and method of work.</p> <p>4.5 describe how to calculate quantity, length, area and wastage associated with the method/procedure to apply and remove pavement markings manually.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when applying and removing pavement markings manually.</p>	<p>5.1 protect the work and its surrounding area from damage.</p> <p>5.2 minimise damage and maintain a clean work space.</p> <p>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.</p> <p>5.4 dispose of waste in accordance with legislation.</p> <p>5.5 state why the disposal of waste should be carried out in relation to the work.</p>			

<p>6 Complete the work within the allocated time when applying and removing pavement markings manually.</p>	<p>6.1 demonstrate completion of the work within the allocated time.</p> <p>6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:</p> <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>			
<p>7 Comply with the given contract information to apply and remove pavement markings manually to the required specification.</p>	<p>7.1 demonstrate the following work skills when applying and removing pavement markings manually:</p> <ul style="list-style-type: none"> <li>– measuring, setting out, marking, positioning, preparing, and communicating.</li> </ul> <p>7.2 apply and remove pavement markings manually to contractor's specifications and working instructions, for at least one of the following:</p> <ul style="list-style-type: none"> <li>– permanent markings (thermoplastic applications and/or paint applications)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>– temporary markings (temporary preformed applications and temporary surface mounted studs).</li> </ul> <p>7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>– establish agreed time frame for pavement marking work</li> <li>– prepare area, materials and equipment</li> <li>– apply pavement markings manually</li> <li>– remove pavement markings</li> <li>– apply and remove temporary preformed applications</li> <li>– install and remove temporary surface mounted studs</li> <li>– communicate and co-ordinate progress</li> <li>– use hand tools, power tools and ancillary equipment.</li> </ul> <p>7.4 safely use and store hand tools, portable power tools and ancillary equipment.</p> <p>7.5 state the needs of other occupations and how to communicate within a team when applying and removing</p>			

	pavement markings manually. 7.6 describe how to maintain the tools and equipment used when applying and removing pavement markings manually.			
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Learner name:

Date:

Learner signature:

Date:

Assessor signature:

Date:

Internal verifier signature:

Date:

*(if sampled)*

Pre-publication

**Unit 16: Installing and removing permanent road studs in the workplace**

**Unit reference number: M/600/7992**

**QCF level: 2**

**Credit value: 50**

**Guided learning hours: 167**

**Unit summary**

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

**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 installing and removing permanent road studs in the workplace to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

## Assessment recording

Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Pre-publication

## Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing and removing permanent road studs.	1.1 interpret and extract information from drawings, specifications, schedules 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: – drawings, specifications, schedules, manufacturers' information and regulations governing temporary and permanent markings on roads and pavements.			
2 Know how to comply with relevant legislation and official guidance when installing and removing permanent road studs.	2.1 describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative. 2.3 state what the accident reporting procedures are and who is responsible for making reports.			
3 Maintain safe working practices when installing and removing permanent road studs.	3.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing and removing permanent road studs. 3.2 explain why and when personal protective equipment (PPE) should be used, relating to installing and removing			

	<p>permanent road studs, and the types, purpose and limitations of each type.</p> <p>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.</p>			
<p>4 Select the required quantity and quality of resources for the methods of work to install and remove permanent road studs.</p>	<p>4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:</p> <ul style="list-style-type: none"> <li>– road studs</li> <li>– fixing materials</li> <li>– hand and/or powered tools and ancillary equipment.</li> </ul> <p>4.2 select resources associated with own work in relation to materials, components, fixings, tools and equipment.</p> <p>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.</p> <p>4.4 outline potential hazards associated with the resources and method of work.</p> <p>4.5 describe how to calculate quantity, length, area and wastage associated with the method/procedure to install and remove permanent road studs.</p>			
<p>5 Minimise the risk of damage to the work and surrounding area when installing and removing permanent road studs.</p>	<p>5.1 protect the work and its surrounding area from damage.</p> <p>5.2 minimise damage and maintain a clean work space.</p> <p>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.</p> <p>5.4 dispose of waste in accordance with legislation.</p> <p>5.5 state why the disposal of waste should be carried out in relation to the work.</p>			
<p>6 Complete the work within the allocated time when installing and removing permanent road studs.</p>	<p>6.1 demonstrate completion of the work within the allocated time.</p> <p>6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:</p>			

	<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>			
7 Comply with the given contract information to install and remove permanent road studs to the required specification.	<p>7.1 demonstrate the following work skills when installing and removing permanent road studs:</p> <ul style="list-style-type: none"> <li>– measuring, setting out, marking, positioning, fitting, fixing, securing and communicating.</li> </ul> <p>7.2 install and remove permanent road studs to contractor's working instructions, relating to:</p> <ul style="list-style-type: none"> <li>– inset milled stud</li> <li>– inset drilled stud</li> <li>– fixed surface mounted studs.</li> </ul> <p>7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> <li>– establish agreed time frame for installing or removing permanent road studs</li> <li>– prepare area, materials and equipment for installing or removing permanent road studs</li> <li>– install and remove milled, drilled and surface mounted road studs and permanent road studs</li> <li>– remove permanent road studs</li> <li>– communicate and co-ordinate progress on the installation of permanent road studs</li> <li>– use hand tools, power tools and equipment.</li> </ul> <p>7.4 safely use and store hand tools, portable power tools and ancillary equipment.</p> <p>7.5 state the needs of other occupations and how to communicate within a team when installing and removing permanent road studs.</p> <p>7.6 describe how to maintain the tools and equipment used when installing and removing permanent road studs.</p>			

Learner name:

Learner signature:

Assessor signature:

Internal verifier signature:  
*(if sampled)*

Date:

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Date:

Pre-publication

## Further information

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Our customer service numbers are:

BTEC and NVQ	0844 576 0026
GCSE	0844 576 0027
GCE	0844 576 0025
The Diploma	0844 576 0028
DIDA and other qualifications	0844 576 0031

Calls may be recorded for training purposes.

## Useful publications

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Related information and publications include:

- Centre Handbook for Edexcel QCF NVQs and Competence-based Qualifications published annually
- functional skills publications – specifications, tutor support materials and question papers
- *Regulatory Arrangements for the Qualification and Credit Framework* (published by Ofqual, August 2008)
- the current Edexcel publications catalogue and update catalogue.

Edexcel publications concerning the Quality Assurance System and the internal and standards verification of vocationally related programmes can be found on the Edexcel website.

NB: Some of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

## How to obtain National Occupational Standards

CITB-ConstructionSkills  
Bircham Newton  
King's Lynn  
Norfolk  
PE31 6RH

Telephone: 01485 577577

Fax: 01485 577793

Email: [call.centre@cskills.org](mailto:call.centre@cskills.org)

## Professional development and training

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Edexcel supports UK and international customers with training related to NVQ and BTEC qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues including:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing student-centred learning and teaching approaches
- building functional skills into your programme
- building effective and efficient quality assurance systems.

The national programme of training we offer can be viewed on our website ([www.edexcel.com/training](http://www.edexcel.com/training)). You can request customised training through the website or by contacting one of our advisers in the Training from Edexcel team via Customer Services to discuss your training needs.

The training we provide:

- is active
- is designed to be supportive and thought provoking
- builds on best practice
- may be suitable for those seeking evidence for their continuing professional development.

## Annexe A: Progression pathways

The Edexcel qualification framework for the Construction and Built Environment sector

Level	General qualifications	Diplomas	BTEC vocationally-related qualifications	BTEC specialist qualification/professional	NVQ/competence
8					
7					
6					Please refer to <a href="http://www.edexcel.com">www.edexcel.com</a>
5			Edexcel BTEC Level 5 HN Diploma in Construction		Please refer to <a href="http://www.edexcel.com">www.edexcel.com</a>
4			Edexcel BTEC Level 4 HN Certificate in Construction		Please refer to <a href="http://www.edexcel.com">www.edexcel.com</a>
3		Edexcel Level 3 Diploma in Construction and the Built Environment	Edexcel BTEC Level 3 Certificate, Subsidiary Diploma, Diploma Extended Diploma in Construction and the Built Environment	Edexcel BTEC Level 3 Award, Extended Certificate and Diploma in Construction and the Built Environment	Please refer to <a href="http://www.edexcel.com">www.edexcel.com</a>
2		Edexcel Level 2 Diploma in Construction and the	Edexcel BTEC Level 2 Certificate, Extended Certificate and Diploma in	Edexcel BTEC Level 2 Award, Certificate and Extended Certificate in	Please refer to <a href="http://www.edexcel.com">www.edexcel.com</a>

Level	General qualifications		Diplomas	BTEC vocationally-related qualifications	BTEC specialist qualification/professional	NVQ/competence
			Built Environment	Construction	Construction and the Built Environment (Craft) and Construction and the Built Environment (Technician)	
1			Edexcel Level 1 Diploma in Construction and the Built Environment	Edexcel BTEC Level 1 Award, Certificate, Diploma in Construction (QCF)	Edexcel BTEC Level 1 Award, Certificate, Extended Certificate in Construction and the Built Environment	Please refer to <a href="http://www.edexcel.com">www.edexcel.com</a>
Entry				Edexcel Entry Level BTEC Award in Construction (Entry 3) (QCF)		

## Annexe B: Quality assurance

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### Key principles of quality assurance

- A centre delivering Edexcel qualifications must be an Edexcel recognised centre and must have approval for qualifications that it is offering.
- The centre agrees as part of gaining recognition to abide by specific terms and conditions around the effective delivery and quality assurance of assessment; the centre must abide by these conditions throughout the period of delivery.
- Edexcel makes available to approved centres a range of materials and opportunities to exemplify the processes required for effective assessment and provide examples of effective standards. Approved centres must use the guidance on assessment to ensure that staff who are delivering Edexcel qualifications are applying consistent standards.
- An approved centre must follow agreed protocols for: standardisation of assessors; planning, monitoring and recording of assessment processes; internal verification and recording of internal verification processes; and for dealing with special circumstances, appeals and malpractice.

### Quality assurance processes

The approach to quality assured assessment is made through a partnership between a recognised centre and Edexcel. Edexcel is committed to ensuring that it follows best practice and employs appropriate technology to support quality assurance process where practicable. Therefore, the specific arrangements for working with centres will vary. Edexcel seeks to ensure that the quality assurance processes that it uses do not place undue bureaucratic processes on centres and works to support centres in providing robust quality assurance processes.

The learning outcomes and assessment criteria in each unit within this specification set out the standard to be achieved by each learner in order to gain each qualification. Edexcel operates a quality assurance process, which is designed to ensure that these standards are maintained by all assessors and verifiers.

For the purposes of quality assurance all individual qualifications and units are considered as a whole. Centres offering these qualifications must be committed to ensuring the quality of the units and qualifications they offer, through effective standardisation of assessors and internal verification of assessor decisions. Centre quality assurance and assessment processes are monitored by Edexcel.

The Edexcel quality assurance processes will involve:

- gaining centre recognition and qualification approval if a centre is not currently approved to offer Edexcel qualifications
- annual visits to centres by Edexcel for quality review and development of overarching processes and quality standards. Quality review and development visits will be conducted by an Edexcel quality development reviewer
- annual visits by occupationally competent and qualified Edexcel Standards Verifiers for sampling of internal verification and assessor decisions for the occupational sector
- the provision of support, advice and guidance towards the achievement of National Occupational Standards.

Centres are required to declare their commitment to ensuring quality and appropriate opportunities for learners that lead to valid and accurate assessment outcomes. In addition, centres will commit to undertaking defined training and online standardisation activities.

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## Annexe C: Centre certification and registration

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Edexcel Standards Verifiers will provide support, advice and guidance to centres to achieve Direct Claims Status (DCS). Edexcel will maintain the integrity of Edexcel QCF NVOs through ensuring that the awarding of these qualifications is secure. Where there are quality issues identified in the delivery of programmes, Edexcel will exercise the right to:

- direct centres to take actions
- limit or suspend certification
- suspend registration.

The approach of Edexcel in such circumstances is to work with the centre to overcome the problems identified. If additional training is required, Edexcel will aim to secure the appropriate expertise to provide this.

### What are the access arrangements and special considerations for the qualifications in this specification?

Centres are required to recruit learners to Edexcel qualifications with integrity.

Appropriate steps should be taken to assess each applicant's potential and a professional judgement made about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should consult Edexcel's policy on learners with particular requirements.

Edexcel's policy on access arrangements and special considerations for Edexcel qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the 1995 Disability Discrimination Act and the amendments to the Act) without compromising the assessment of skills, knowledge, understanding or competence. Please refer to *Access Arrangements and Special Considerations for BTEC and Edexcel NVO Qualifications* for further details.  
[www.edexcel.com](http://www.edexcel.com).

## Annexe D: Additional requirements for qualifications that use the title NVQ within the QCF

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## Purpose of document

1. The purpose of this document is to make clear what additional requirements are needed to assess and quality assure qualifications that use the title NVQ within the QCF.
2. When an SSC/SSB and awarding organisation wants to use the title NVQ in the naming of a qualification within the QCF, the awarding organisation is required to make sure this qualification is assessed and quality assured in accordance with these additional requirements and other requirements described in the SSC/SSB assessment strategy.
3. The aims of these additional requirements are to
  - ensure that all competence based qualifications that use the title NVQ within the QCF are
    - assessed consistently
    - quality assured consistently
  - maintain the integrity of qualifications that use the title NVQ within the QCF
  - establish the NVQ brand within the QCF
  - keep bureaucracy associated with assessment and quality assurance of qualifications that use the title NVQ within the QCF to a minimum.

## Background

4. <sup>1</sup> “At the heart of an NVQ is the concept of occupational competence; the ability to perform to the standards required in employment across a range of circumstances and to meet changing demands. NVQs are first and foremost about what people can do. They go beyond technical skills to include planning, problem solving, dealing with unexpected occurrences, working with other people and applying the knowledge and understanding that underpins overall competence”.
5. NVQs are based entirely on National Occupational Standards (NOS) developed by an SSC/SSB, which describe the competence needed in an occupational role.
6. Qualifications that use the title NVQ within the QCF must comply with the rules of combination determined by the SSC/SSB. Awarding organisations are not allowed to develop another qualification that does not use the title NVQ within the QCF, if it uses the same rules of combination as a qualification that does use the title NVQ within the QCF.
7. The QCF offers increased flexibility in the way occupational competence can be assessed and demonstrated. Qualifications that use the title NVQ in the title within the QCF are just one way of assessing and demonstrating occupational competence. SSCs/SSBs are free to work with their awarding organisations to agree what qualifications will be used to assess occupational competence. Qualifications that use the title NVQ within the QCF, are not a preferred method for assessing occupational competence and all qualifications accredited through the QCF have equal status.
8. When developing a qualification for the QCF, including qualifications that use the title NVQ within the QCF, an awarding organisation must be a recognised awarding organisation and must meet the Qualification Requirements in the Regulatory Arrangements for the Qualifications and Credit Framework, published by The Office of the Qualifications and Examinations Regulator (Ofqual) in August 2008.
9. The qualification regulators confirmed that a group of SSCs and SSBs would be free to develop specific, additional requirements about the way in which qualifications that use the title NVQ within the QCF will be assessed and quality assured. For those recognised awarding organisations that want to assess occupational competence through the use of qualifications that use the title NVQ within the QCF, it has been agreed by SSCs and SSBs that the following additional requirements must be met.

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<sup>1</sup> NCVO's NVQ Criteria and Guidance 1995.  
N024991– Specification – Edexcel qualifications in Roadbuilding (Construction) (QCF) –  
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# Additional requirements for qualifications that use the title NVQ within the QCF

## Introduction

10. Qualifications that use the title NVQ within the QCF must be assessed and quality assured in accordance with the following additional requirements.

## Assessment requirements

11. When a qualification uses the title NVQ within the QCF, awarding organisations are required to make sure their recognised assessment centres understand how learners are to be assessed.
12. Assessment methodologies must meet the assessment strategy developed in partnership between the relevant SSC or SSB and awarding organisations for the qualification. The assessment strategy must be published and made available separately and will include the requirements for assessment of qualifications that use the title NVQ within the QCF. The assessment criteria for each unit will be part of the units that make up the qualification.
13. Learners must complete real work activities in order to produce evidence to demonstrate they have met the NOS and are occupationally competent.
14. When a learner cannot complete a real work activity, simulation is allowed.
15. Simulation is allowed when
  - a learner is required to complete a work activity that does not occur on a regular basis and therefore opportunities to complete a particular work activity do not easily arise
  - a learner is required to respond to a situation that rarely occurs, such as responding to an emergency situation
  - the safety of a learner, other individuals and/or resources will be put at risk.
16. When simulation is used, assessors must be confident that the simulation replicates the workplace to such an extent that learners will be able to fully transfer their occupational competence to the workplace and real situations.
17. Units that must not be assessed by simulation must be identified by the SSC/SSB in the assessment strategy for the qualification or family of qualifications.
18. Learners must be assessed by assessors
  - who are occupationally competent in the occupational areas they are assessing where they have sufficient and relevant technical/occupational competence in the unit, at or above the level of the unit being assessed and as defined by the assessment strategy for that qualification

- <sup>2</sup>who must hold or be working towards a suitable assessor qualification to confirm they understand assessment and how to assess learners
  - must be fully conversant with the unit(s) against which the assessments and verification are to be undertaken.
19. All assessors must carry out assessment to the standards specified in the A units.
  20. All assessment decisions made by a trainee assessor must be checked by a qualified assessor or an assessor recognised by an awarding organisation.
  21. Trainee assessors must have a plan, which is overseen by the recognised assessment centre, to achieve the relevant assessor qualification(s) within an agreed timescale.

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<sup>2</sup> Currently an assessor could hold unit A1 and/or unit A2. Or from the past unit D32 and/or unit D33. SSCs also identify other suitable equivalent qualifications.  
N024991– Specification – Edexcel qualifications in Roadbuilding (Construction) (QCF) –  
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## Quality assurance requirements

22. When a qualification uses the title NVQ within the QCF, awarding organisations are required to make sure their recognised assessment centres understand how the qualification will be quality assured.
23. Qualifications that use the title NVQ within the QCF, must be verified
  - internally by an internal verifier, who is accountable to the assessment centre
  - externally by an external verifier, who is accountable to the awarding organisation or an agent of the awarding organisation.
24. With reference to internal verification, internal verifiers must
  - <sup>3</sup>hold or be working towards a suitable internal verifier qualification to confirm they understand how to internally verify assessments
  - have sufficient and relevant technical/occupational familiarity in the unit(s) being verified
  - be fully conversant with the standards and assessment criteria in the units to be assessed
  - understand the awarding organisation's quality assurance systems and requirements for this qualification.
25. Trainee internal verifiers must have a plan, which is overseen by the recognised assessment centre, to achieve the internal verifier qualification within an agreed timescale.
26. With reference to external verification, external verifiers must
  - <sup>4</sup>hold or be working towards a suitable external verification qualification to confirm they understand and are able to carry out external verification
  - have no connections with the assessment centre, in order to maintain objectivity
  - have sufficient and relevant technical/occupational understanding in the unit(s) being verified
  - be fully conversant with the standards and performance criteria in the units to be assessed
  - understand the awarding organisation's quality assurance systems for this qualification.
27. Trainee external verifiers must have a plan, which is overseen by the awarding organisation, to achieve the external verifier qualification within an agreed timescale.

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<sup>3</sup> Currently an internal verifier needs to hold unit V1. Or from the past unit D34. SSCs also identify other suitable equivalent qualifications.

<sup>4</sup> Currently an external verifier needs to hold unit V2. Or from the past unit D35.

28. Awarding organisations must decide the frequency of external monitoring activities. Any decision must be based on
- the risks associated with a qualification that is designed to help a learner demonstrate occupational competence
  - an evaluation of the centre's performance and past record.
29. Awarding organisations will have in place suitably constituted audit processes, which are supported by naturally occurring quality assurance and monitoring systems that already exist in workplace assessment environments.

Pre-publication

## Annexe E: Assessment requirements/strategy

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The Assessment Strategy is being updated by ConstructionSkills. The updated version will appear in the final version of this document. Meanwhile, the current Assessment Strategy may be found on the Edexcel website.

Pre-publication

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Ofqual  
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Llywodraeth Cynulliad Cymru  
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