



National Unit specification

General information

Unit title: Place and Finish Non Specialist Concrete (SCQF level 5)

Unit code: HA2T 45

Superclass: TG

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Unit purpose

This Unit provides an introduction to the key principles and techniques of laying and finishing non specialist concrete in a construction environment. It will develop the learner's understanding and practical skills of laying and finishing concrete. This Unit is suitable for learners who have little or no knowledge of concreting work.

Outcomes

On successful completion of the Unit the learner will be able to:

- 1 Demonstrate the knowledge and understanding required to place, finish, protect and cure non specialist concrete.
- 2 Prepare base for laying non specialist concrete.
- 3 Lay, finish, protect and cure non specialist concrete to a given specification.

Credit points and level

1 National Unit credit at SCQF level 5: (6 SCQF credit points at SCQF level 5)

Recommended entry to the Unit

Entry is at the discretion of the centre. Learners undertaking this Unit will have little or no knowledge or qualifications in placing and finishing non specialist concrete.

National Unit specification: General information (cont)

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Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes for this Unit specification.

Achievement of this unit gives automatic certification of the following Core Skills component:

Complete Core Skill	None
Core Skill component	Critical Thinking at SCQF level 4 Planning and Organising at SCQF level 4

Context for delivery

If this Unit is delivered as part of a National Progression Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Equality and inclusion

This Unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

National Unit specification: Statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Demonstrate the knowledge and understanding required to place, finish, protect and cure non specialist concrete.

Performance Criteria

- (a) Identify the materials and resources required for non specialist concrete.
- (b) Calculate the materials required for a specific task.
- (c) Identify the tools, equipment and plant used for mixing, transporting, placing, finishing and protecting non specialist concrete.
- (d) Identify hazards and control measures including PPE involved.
- (e) Identify the sequence of operations used to lay, finish, protect and cure non specialist concrete.

Outcome 2

Prepare base for laying non specialist concrete.

Performance Criteria

- (a) Prepare the base for the concrete according to given specification.
- (b) Set out any required formwork as specified.
- (c) Lay Damp Proof Membrane (DPM) as specified.
- (d) Position any reinforcement as specified.

Outcome 3

Lay, finish, protect and cure non specialist concrete to a given specification.

Performance Criteria

- (a) Transport and lay concrete to the given specification.
- (b) Compact concrete using appropriate tools and equipment.
- (c) Finish concrete surface to the given specification.
- (d) Cure concrete to the given specification.
- (e) Disposing of waste in accordance with current legislation.

National Unit specification: Statement of standards (cont)

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Evidence Requirements for this Unit

Evidence is required to demonstrate that the learner has achieved this Unit to the standard specified in the Outcomes and Performance Criteria.

Performance and knowledge evidence is required to demonstrate that the learner has achieved the standard specified in the Outcomes and Performance Criteria.

Performance and knowledge evidence must be produced at an appropriate point in training under supervised conditions once the learner has developed the necessary skills and knowledge required to carry out the assessment. This evidence must be supplemented with a completed assessor observational/operational checklist.

Written and/or oral evidence is required which demonstrates that the learner has achieved Outcome 1 to the standards specified in the Outcome and Performance Criteria. The evidence for this Outcome should be obtained under controlled, supervised conditions. The assessment will be closed-book and should last no more than 45 minutes.

Performance evidence supplemented with an assessor observation checklist/record should be used to show that the learner has achieved Outcomes 2 and 3 to the standard specified in the Outcomes and Performance Criteria. Each learner will be observed to show that they can achieve the following throughout the delivery of the Unit:

- ◆ Prepare base for concreting
- ◆ Erect formwork/edge restraint
- ◆ Concrete slabs/bases
- ◆ Finish concrete surface with at least two different finishes
- ◆ Cure and protect concrete

Learners must adhere to relevant Health and Safety regulations and legislation relating both to working practices within the construction environment, as well as those specific to any practical task they are requested to carry out (such as emphasising the importance of selecting and using the correct PPE at all times).



National Unit Support Notes

Unit title: Place and Finish Non Specialist Concrete (SCQF level 5)

Unit Support Notes are offered as guidance and are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

The Outcomes and Performance Criteria for this Unit can be demonstrated by the learner preparing the base, laying, finishing and curing concrete for the following tasks:

- ◆ Prepare base for concreting
- ◆ Erect formwork/edge restraint
- ◆ Concrete slabs/bases
- ◆ Finish concrete surface
- ◆ Cure and protect concrete

Using the following materials:

- ◆ Concrete constituents (gravel, sand, cement, water)
- ◆ Fabric reinforcement and spacers
- ◆ Edgings
- ◆ Fixings
- ◆ Release Agents

The content and context of this Unit has been set at an introductory level so that the learner can develop a basic knowledge and ability in laying and finishing concrete within a construction environment.

Health and Safety are vital to working practices within the construction industry and therefore, emphasis will be placed wherever appropriate during the delivery of this Unit on the correct application of Health and Safety principles and processes, in accordance with current codes of practice and legislation.

National Unit Support Notes (cont)

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Guidance on approaches to delivery of this Unit

These notes are for guidance purposes only, and are not to be considered as a complete training package for centres to follow.

The introductory training for this Unit should cover theoretical and practical principles before any practical application of knowledge is carried out by learners.

Delivery of this Unit will be focussed on enabling learners to develop the knowledge required for laying, compacting, finishing and curing concrete safely.

Learners should learn and be encouraged to communicate the theories and principles behind concreting techniques. Delivery of this Unit should also ensure learners learn about the different components of concrete, using the correct terminology and understanding the correct tools, equipment and materials to be used for specified tasks, before any practical assessment work takes place.

Emphasis will also be placed on the importance of learners accurately understanding and interpreting the information provided within work specifications and drawings.

During delivery of the practical components of this Unit, learners should understand the importance of ensuring good visibility at all times when operating tools and machinery.

E-learning approaches may be appropriate to help tailor delivery to suit the individual needs or learning styles of learners. This might include, for example, encouraging learners to use electronic resources to conduct research into a specific knowledge area.

Opportunities for integrated delivery of the Core Skills and knowledge developed in other Units may be possible within the practical activities in this Unit.

Guidance on approaches to assessment of this Unit

Centres may use the method of assessment which they consider to be most appropriate but are encouraged to use the Training Assessment Programme (TAP) developed centrally by SQA. It is expected that learners will have to demonstrate current knowledge and understanding of safe working practice and risk assessment methods, etc prior to being set the assessment tasks.

Knowledge and Understanding of the processes involved in *Place and Finish Non Specialist Concrete (SCQF level 5)* should be assessed before any practical assignments are carried out by learners. This will include assessment of a learner's ability to prepare the work area for laying modular pavement.

Practical assignments should be carried out under supervised conditions and recorded in an assessor observation/operational checklist. Assessments should confirm that a learner has the ability to safely lay modular pavement using designated machinery or equipment correctly and safely, whilst adhering to current statutory Health and Safety regulations and legislation.

National Unit Support Notes (cont)

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Adherence to current statutory working regulations and Health and Safety procedures will be observed during the practical exercise carried out by the learner towards all Outcomes.

Detailed assessment material for this Unit will be found in the relevant Training and Assessment Programme (TAP). Centres may use the instruments of assessment which they consider to be most appropriate but are advised to use the TAP which has been developed centrally by SQA. Any other instruments of assessment used must be comparable to the TAP and have been prior verified.

Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

Opportunities for developing Core and other essential skills

Learners will apply the Core Skill of *Numeracy* when calculating concrete requirements to meet the stated specification. Identifying the materials and resources required including concrete, fabric reinforcement, edgings and fixings will require learner to think critically, plan and organise the task accordingly — key aspects of the Core Skill of *Problem Solving*.

The opportunity for the Core Skill *Working with Others* will be provided as learners ensure the safety of others as they comply with codes of practice and working regulations.

Throughout this Unit, learners will be expected to develop the Core Skill of *Communication* within the practical assessment environment, for example to inform others of any safety considerations, using the correct terminology and a tone appropriate to the workplace environment.

This unit has the Critical Thinking component of Problem Solving embedded in it. This means that when learners achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 4 and Planning and Organising at SCQF level 4.

History of changes to Unit

Version	Description of change	Date

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General information for learners

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This section will help you decide whether this is the Unit for you by explaining what the Unit is about, what you should know or be able to do before you start, what you will need to do during the Unit and opportunities for further learning and employment.

This Unit is designed to introduce you to skills required by workers in the construction industry. The Unit will focus on the knowledge and skills required to lay, finish, protect and cure non specialist concrete.

Health and Safety and Sustainability are integral and key to the Construction Industry therefore throughout the Unit emphasis will be placed where appropriate on the application of Health and Safety and Sustainability. Safety working practices will be looked at in accordance with current safety codes of practice and regulations.

There will be a series of training exercises followed by some practical task based assessment and multi choice knowledge assessment. Completion of the Unit will provide you with the basic skills necessary to enable you to progress to more complex aspects of construction which in turn will further develop your skills and knowledge.

The elements of the Core Skill of *Problem Solving*, such as Planning and Organising and Critical Thinking will be developed and enhanced as you undertake this Unit. You will need to take account of a range of factors in order to work efficiently and safely, such as the choice of tools, appropriate materials, safety issues, safety equipment and sustainability.

There are opportunities to develop co-operative working skills. You will also be required to comply fully with health and safety requirements which gives you opportunities to develop awareness of the safety of others.

Numeracy skills will be naturally enhanced through the practical use of calculation and measuring scales and although *Communication* skills are not formally assessed, as you complete practical tasks, you may be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

This unit has the Critical Thinking component of Problem Solving embedded in it. This means that when you achieve the Unit, your Core Skills profile will also be updated to show you have achieved Critical Thinking at SCQF level 4 and Planning and Organising at SCQF level 4.