

-SQA- SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
24 Douglas Street
GLASGOW G2 7NQ**

NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number-	1153041	-Session-	1991-92
-Superclass-	SL		

-Title-	CONSTRUCTION OF FENCES WITH AN ACCESS DEVICE
----------------	---

-DESCRIPTION-

Purpose	This module is designed to enable the candidate to acquire the skills and knowledge required to play a part in the construction of new fences, the repair of existing fences and erect an access device on a fence line.
---------	--

It is aimed at those who wish to develop their abilities at craft level within the land-based sector.

Preferred Entry Level	No formal entry requirements.
-----------------------	-------------------------------

Outcomes	The candidate should: <ol style="list-style-type: none">1. prepare for fence construction or repair;2. play a full part in the construction of a tension wired fence;3. repair a broken line wire using a preformed fence connector;4. erect an access device on a fence line.
----------	---

Assessment Procedures	Acceptable performance in the module will be satisfactory achievement of all the Performance Criteria specified for each Outcome.
-----------------------	---

The following abbreviations are used below:

PC	Performance Criteria
IA	Instrument of Assessment

Note: The Outcomes and PCs are mandatory and cannot be altered. The IA may be altered by arrangement with SQA. (Where a range of performance is indicated, this should be regarded as an extension of the PCs and is therefore mandatory.)

OUTCOME 1**PREPARE FOR FENCE CONSTRUCTION OR REPAIR**

PCs

- (a) The estimate of the type and quantities of materials required is correct in terms of their conventional codes and quantities required.
- (b) The listing of equipment which would be used is comprehensive.
- (c) The planning of the work to be undertaken is feasible.
- (d) The presentation and recording of all information is accurate and neat.

IA Assignment

The candidate will be set an assignment to test the knowledge and skills required to prepare for fence construction or repair.

The candidate will be presented with a site for a stated type of fence construction or repair and will be required to prepare a job specification and a work plan based upon the Performance Criteria stated.

Satisfactory achievement of the Outcome will be based on all the Performance Criteria being met.

OUTCOME 2**PLAY A FULL PART IN THE CONSTRUCTION OF A TENSION WIRED FENCE**

PCs

- (a) The erection of a straining post is firm and will withstand straining of the wires.
- (b) The erection of an intermediate or turning post is firm enough to maintain the line of the fence.
- (c) The fixing of the strut, thrust plate and retaining wire to the post is secure.
- (d) The attachment, tensioning and securing of line wires is correct.
- (e) The piercing of the holes for the stobs is carried out at spacing to accord with the job specification.
- (f) The driving of the stobs is to an appropriate depth according to the ground conditions.
- (g) The stapling of the wires to the stobs is uniformly spaced with the aid of a template.
- (h) The erection of the netting is in accordance with the relevant FC leaflet.

- (i) The filling of gaps at the bottom of the fence is appropriate for the circumstances encountered.
- (j) The recording of the task performed is complete in terms of the materials and quantities used.
- (k) The outline of the reasons for erecting a fence is correct for the prescribed situation.

IA Assignment

The candidate will be set an assignment to test the application of knowledge and skills required to play a full part in the construction of a tension wired fence.

The candidate will be expected to play a full part in the construction of a tension wired fence consisting of at least 2 strainers, 1 intermediate or turning post and 2 nets. Where a plain wire fence is being constructed, the trainee can demonstrate the ability to join netting using pieces of netting. In addition the candidate will be asked to outline the reasons for erecting a fence for a prescribed situation.

The practical elements of the Outcome (Performance Criteria (a) to (i)) may be carried out with the aid of an observation checklist.

Satisfactory achievement of the Outcome will be based on all the Performance Criteria being met.

OUTCOME 3

REPAIR A BROKEN LINE WIRE USING A PREFORMED FENCE CONNECTOR

PCs

- (a) The removal of connectors and netting between line wires is completed to a distance of 2 metres either side of the break.
- (b) The securing of the butt ends of the line wires using a preformed fence connector is completed in accordance with the relevant FSC guideline and the related checklist.
- (c) The storage and disposal of surplus and waste materials is appropriate to the type and amount of waste material.

IA Practical Exercise

The candidate will be set a practical exercise to test the application of knowledge and skills required to repair a broken line wire using a preformed fence connector.

The candidate will be expected to repair one broken line wire using a preformed connector and complete the records, meeting all the standards specified in the Performance Criteria.

The assessment may be carried out with the aid of an observation checklist.

Satisfactory achievement of the Outcome will be based on all the Performance Criteria being met.

OUTCOME 4 ERECT AN ACCESS DEVICE ON A FENCE LINE

- PCs
- (a) The estimate of the materials required to erect an access device is correct in terms of their conventional codes and quantities required.
 - (b) The selection of tools and equipment is appropriate to the job to be undertaken.
 - (c) The erection of the access device is correct in terms of construction, its operation and purpose and is in accordance with the given specifications.

IA Practical Exercise

The candidate will be set a practical exercise to test the application of knowledge and skills required to erect an access device on a fence line.

The candidate will be expected to play a full part in the erection of an access device on a fence line. The type of access device to be erected should be appropriate to the given situation.

The assessment may be carried out with the aid of an observation checklist.

Satisfactory achievement of the Outcome will be based on all the Performance Criteria being met on one occasion.

**The following sections of the descriptor are offered as guidance.
They are not mandatory.**

CONTENT/CONTEXT

The candidate should at all times comply with procedures and regulations designed for safe practice and use safe working practice specified for equipment and work area.

Reference should be made to FSC32 and to Forestry Commission Leaflet 87 "Forest Fencing".

Knowledge of the practices which are not permitted under fencing regulations, eg. combinations of barbed and electric, and barbed on roadsides.

Familiarity with the local/general names of materials and structures in order to be understood when asking for materials for particular tasks.

Knowledge of the range and use of specialist tools and equipment used for fencing.

Corresponding to Outcomes 1-4:

1. The British Standards Institution publish minimum dimensions for the timber components in fencing and wire manufacturers have a standard system of coding to describe their products.

The candidate should be presented with the site for a new fence or the existing fence in need of major repair. Estimation of the materials required and equipment necessary to carry out the work. The type of fence to be stipulated.

Choice of the tools and materials when setting out for a remote task so that unnecessary journeys are avoided; development of ingenuity in overcoming abnormal circumstances so that stock can be successfully contained, without recourse to others for advice.

- 2,3 & 4 Use of tools and equipment appropriate to the practice of the locality and relevant to the candidate's likely work situation; and development of awareness of the hazards to self, others and livestock, of injudicious practices.

Erect a length of fence or carry out major repair using the appropriate tools and equipment for the task.

Improvisations and use of standard aids for the spacing of stobs and heights of wires; logical lay-out of materials and collection of tools on completion.

Access device is erected ensuring its operation and effect meets the requirements laid down by management. The access device can be ready made or constructed on site and can take the form of a 5-barred, water, flood, badger or kissing gate. A stile that meets requirements laid down by management is acceptable.

The candidate should know why fences are erected i.e. to contain or exclude stock, vermin or trespassers and specification reflects the purpose/purposes for which they are intended.

The candidate should keep worksheets of tasks performed indicating the materials and quantities used, and in so doing, develop independence and a responsibility in selecting the tools and materials required for each practical task. The candidate should develop an awareness of animal psychology and human behaviour related to the tasks to be carried out.

SUGGESTED LEARNING AND TEACHING APPROACHES

The candidate should follow an activity-based approach seeking guidance at each stage.

In a work-based situation the Outcome is best achieved by placing the candidate to partner an expert, but in a college situation two candidates should work as a team.

Each procedure should be explained, demonstrated and followed by supervised participation on the part of the candidates ensuring that both elements of the partnership participate in all aspects of the work.

Candidates should be encouraged to familiarise themselves with the terminology in common use in the wire trade, with standard dimensions of timber components and the types and purpose of a range of access devices.

© Copyright SQA 1992

09/02/98