-SQA- SCOTTISH QUALIFICATIONS AUTHORITY

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

NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- 4230411

-Session- 1991-92

-Superclass-

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-Title-

DECORATIVE FLOORLAYING: **PLANNING** AND **STAIR** INSTALLATION OF SHEET AND TILE **COVERINGS**

-DESCRIPTION-

Purpose

This module is designed to enable the student to plan and install sheet and tile top coverings on timber and concrete staircases which require preparatory work.

It is aimed at students wishing to pursue a career in decorative floorlaying and receiving complementary industrial experience.

Preferred Entry Level 4230310 Decorative Floorlaying: Sub-Floor Preparation

4230320 Decorative Floorlaying: Laying Floor

Coverings (Tile Form)

4230330 Decorative Floorlaying: Laying Floor Coverings (Sheet Form).

Outcomes

The student should:

- 1. prepare a timber staircase to accept sheet and tile stair coverings;
- 2. prepare a solid non-timber staircase to accept sheet and tile stair coverings;
- 3. select nosings, profiles and other extrusions for fitting to main types of stairs to receive sheet and tile stair coverings;
- 4. fit nosings and profiles to concrete and timber stairs, using appropriate fixing methods;
- plan the fitting of sheet material and tiles to treads, 5. risers, stringers and landings;

6. fit a range of covering materials to treads, risers, stringers and landings, using appropriate fixing methods.

Assessment Procedures

Acceptable performance in this 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 A TIMBER STAIRCASE TO ACCEPT SHEET AND TILE STAIR COVERINGS

PCs

- (a) The inspection of the stairs by the student determines whether the structure is sound.
- (b) The inspection of the stairs by the student identifies any worn or damaged areas requiring screeding and any loose members.
- (c) The removal of existing floor coverings and fixings is correct in that the stairs are clean, smooth and free from protruding nails.
- (d) Loose treads, risers and stringers are secured to provide a firm base for the covering.
- (e) The screeding compound is mixed in accordance with the manufacturer's instructions.
- (f) The screeding compound applied to worn or damaged areas is evenly spread.
- (g) The curing time allowed for the screeding compound is appropriate to the localised conditions.
- (h) The screeding compound is rubbed down as necessary after curing, to achieve a smooth and level surface.

IA Practical Exercise

The student will be set a practical exercise to test the knowledge and skills required to prepare a timber staircase to accept sheet and tile stair coverings.

The student will be presented with a timber staircase or section of a timber staircase, which is to receive top covering and will be required to complete the following tasks:

- (i) inspect the staircase;
- (ii) remove existing coverings and fixings;
- (iii) secure loose members;
- (iv) mix and apply screeding compound;
- (v) inspect and rub down screeding compound as necessary after curing.

For these tasks, the student will be provided with the necessary tools, equipment and materials.

Satisfactory achievement of the Outcome will be based on the student attaining all the Performance Criteria.

OUTCOME 2 PREPARE A SOLID NON-TIMBER STAIRCASE TO ACCEPT SHEET AND TILE STAIR COVERINGS

PCs

- (a) The inspection of the stairs by the student determines whether the structure is sound.
- (b) The inspection of the stairs by the student identifies any worn or damaged areas requiring screeding.
- (c) The removal of existing floor coverings and fixings ensures that the stairs are clean, smooth and free from adhesions.
- (d) The mixture of the screeding compound is in accordance with the manufacturer's instructions.
- (e) The screeding compound applied to worn or damaged areas is evenly spread.
- (f) The curing time allowed for the screeding compound is appropriate to the localised conditions.
- (g) The screeding compound is rubbed down where necessary, after curing, to achieve a smooth and level surface.

IA Practical Exercise

The student will be set a practical exercise to test the knowledge and skills required to prepare a solid non-timber staircase to accept sheet and tile stair coverings.

The student will be presented with a solid non-timber staircase or section of a solid non-timber staircase, which is to receive top covering and will be required to complete the following tasks:

- (i) inspect the staircase and identify worn or damaged areas requiring screeding;
- (ii) remove existing coverings and fixings;

- (iii) mix screeding compound;
- (iv) repair defective stairs with screeding compound;
- (v) inspect and rub down screeding compound as necessary after curing.

For these tasks, the student will be presented with the necessary tools, equipment and materials.

Satisfactory achievement of the Outcome will be based on the student obtaining all the Performance Criteria.

OUTCOME 3

SELECT NOSINGS, PROFILES AND OTHER EXTRUSIONS FOR FITTING TO MAIN TYPES OF STAIRS TO RECEIVE SHEET AND TILE STAIR COVERINGS

PCs

- (a) The nosings, profiles and other extrusions selected are compatible with the types of stairs.
- (b) The selection of the nosings, profiles and other extrusions is in accordance with the manufacturer's recommendations for conditions of use.
- IA Practical Exercise

The student will be set a practical exercise to test the knowledge required to select nosings, profiles and other extrusions for fitting to main types of stairs to receive sheet and tile stair coverings.

The student will be presented with four examples of types of stairs, to be prepared to receive coverings, as follows:

- (i) straight riser;
- (ii) angled riser:
- (iii) small bull nosed tread;
- (iv) full bull nosed tread.

In addition, the student will be presented with a range of nosings, profiles and other extrusions, to include examples of the following:

- (i) aluminium and plastic edging strips;
- (ii) plastic coverings;
- (iii) metal and non-metal nosings.

The student will be required to select the appropriate nosings, profiles and extrusions for each of the given stair-types.

Satisfactory achievement of the Outcome will be based on the student obtaining all the Performance Criteria.

OUTCOME 4 FIT NOSINGS AND PROFILES TO CONCRETE AND TIMBER STAIRS, USING APPROPRIATE FIXING METHODS

PCs

- (a) The measuring, marking and cutting of the nosings and profiles is accurate within a tolerance of 1mm.
- (b) The cut edges of the nosings and profiles are clean, smooth and free from burrs.
- (c) The fitted nosings and profiles are free from damage or marking.
- (d) Screws and plugs used in fixing are of the type and size recommended for the fittings in the manufacturer's instructions.
- (e) Adhesives are used in accordance with the manufacturer's instructions and health and safety considerations.
- (f) The working practices followed by the student are safe and in accordance with the relevant current health and safety regulations.

IA Practical Exercise

The student will be set two practical exercises to test the knowledge and skills required to fit nosings and profiles to concrete and timber stairs, using appropriate fixing methods.

The student will be presented with the following:

- (i) a timber turned staircase or a section of a timber turned staircase:
- (ii) a whole flight or a section of straight concrete stairs:
- (iii) previously selected nosings and profiles for fitting to the stairs (timber and concrete);
- (iv) the tools and equipment necessary for the measuring, marking and fitting of the nosings and profiles;
- (v) adhesives, screws and plugs for fixing.

The student will be required to complete the following exercises:

- 1. For the timber turned staircase, measure, cut, fit and fix with screws a minimum of 4 aluminium nosings, 2 of which must be angled nosings.
- 2. For the concrete staircase, complete the following 2 tasks:
 - (i) measure, cut, and fix a minimum of 2 profiles to straight concrete stairs, using drilling, plugging, screwing and adhesion;

(ii) fit, cut and fix a minimum of 4 nosings to straight concrete stairs, using drilling, plugging, screwing and adhesion.

Satisfactory achievement of the Outcome will be based on the student attaining all the Performance Criteria.

OUTCOME 5 PLAN THE FITTING OF SHEET MATERIAL AND TILES TO TREADS, RISERS, STRINGERS AND LANDINGS

PCs

- (a) A clear and accurate written record is made of measurements.
- (b) The measurements noted, of the areas to be covered, are accurate within 1mm.
- (c) The cutting plan is correct in terms of:
 - (i) clear and accurate measurements;
 - (ii) neat and clean appearance;
 - (iii) economical planned use of material.
- (d) A sufficient amount of sheet material is estimated for the requirements of exercise 1, with an appropriate allowance for scribing.
- (e) A sufficient quantity of tiles is estimated for the requirements of exercise 2, with a 5% allowance for waste.

IA Practical Exercise

The student will be set 2 practical exercises to test the knowledge and skills required to plan the fitting of sheet material and tiles to treads, risers, stringers and landings.

The student will be presented with a staircase or section of a staircase including landing, which is to receive sheet material or tiles, and will be required to complete the following exercises:

- Measure a section of staircase (not less than 4 stairs plus landing) and make a cutting plan for covering the treads, risers, stringers and landing in sheet material.
- Measure a section of staircase (not less than 4 stairs plus landing) and estimate the quantity of tiles required to cover treads and risers, stringers and landing.

Satisfactory achievement of the Outcome will be based on the student attaining all the Performance Criteria.

OUTCOME 6 FIT A RANGE OF COVERING MATERIALS TO TREADS, RISERS, STRINGERS AND LANDINGS, USING APPROPRIATE FIXING METHODS

PCs

- (a) Instructions are followed correctly.
- (b) The measuring, marking and cutting of the covering materials is accurate.
- (c) The fitted covering materials are free from damage or marking.
- (d) Fitting of the tiles and sheet material is achieved with the minimum wastage or spoilage.
- (e) Adhesives are used in accordance with the manufacturer's instructions and health and safety considerations.
- (f) The working practices followed by the student are safe and in accordance with the relevant current health and safety regulations.

IA Practical Exercise

The student will be set two practical exercises to test the knowledge and skills required to fit a range of covering materials to treads, risers and stringers and landings, using appropriate fixing methods.

The student will be presented with the following:

- (i) a supply of sheet covering material for fitting to treads, risers, stringers and landings;
- (ii) a quantity of floor tiles for fitting to treads, risers, stringers and landings;
- (iii) a staircase or 2 sections of a staircase including landings:
- (iv) the tools and equipment necessary for the measuring, marking and cutting of the material;
- (v) adhesives and other fixing materials;
- (vi) a cutting plan for the sheet material.

The student will be required to complete the following exercises:

- 1. For a section of staircase containing not less than 4 stairs and a landing, measure, cut, fit and fix sheet material provided to treads, risers, stringers and landing in accordance with the cutting plan.
- For a section of staircase containing not less than 4 stairs and a landing, measure, cut, fit and fix tiles to treads, risers, stringers and landing from the supply of tiles provided.

Satisfactory achievement of the Outcome will be based on the student attaining all the Performance Criteria.

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

CONTENT/CONTEXT

Corresponding to Outcomes 1-6:

- Inspection procedures. Removal of existing floor coverings and fixings. Securing of loose timber work; tools required. Mixing of screeding compound; curing time and factors affecting this. Application, levelling and rubbing down of screeding. Types of screeding compound; tools and equipment required for application.
- Inspection procedures. Removal of existing floor coverings and fixings.
 Mixing of screeding compounds; curing time and factors affecting this.
 Application, smoothing and rubbing down of screeding. Types of screeding compound; tools and equipment required for application.
- 3. Main types of nosings, profiles and other extrusions. Main types of stairs. Criteria for selection of nosings, profiles and other extrusions.
- 4. Measurement procedures; marking and cutting of plastic and metal nosings and profiles; appropriate tools and equipment. Fixing of nosings and profiles; use of adhesives, screws and plugs. Health and safety regulations.
- 5. Measurement procedures and notation; calculation of materials. Production of a cutting plan.
- 6. Main types of woven and non-woven carpets; appropriate tools. Fitting procedures for treads, risers, stringers and landings. Use of adhesives. Health and safety regulations.

SUGGESTED LEARNING AND TEACHING APPROACHES

Site or simulated conditions can be used. The safety aspects concerning the use of cutting tools and the use of adhesives should be stressed. The Outcomes can be approached as a continuous exercise.

As much practical experience as possible is desirable.

The achievement of the Outcomes may be facilitated by the use of demonstrations, samples, videos, catalogues, site and factory visits. As much practical experience as possible is desirable.

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