

Domain

JOINERY AND CABINET MAKING
Set out and manufacture wooden stair
components for straight flight stairs

Title:

Level: 4

Credits:8

Purpose

This unit standard specifies the competencies required to set out and manufacture stair components for straight flight stairs. This includes conducting setting out procedures, preparing strings for assembly, preparing newels, preparing balustrade components, preparing landing structural components, and finishing surfaces and pre-assemble stair.

This unit standard is intended for those who work as joiners and cabinet makers.

Special Notes

1. Entry information:

Prerequisite:

- 1157-*Demonstrate basic knowledge of workplace health and safety* or demonstrated equivalent knowledge and skills.

2. To demonstrate competence, at a minimum, evidence is required of set out and manufacturing the components for a single level straight flight set of stairs.
3. Assessment evidence may be collected from a real or simulated workplace in which joinery and cabinet making operations are carried out.
4. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' and company guidelines, instructions, and reasonable flat rate time.
5. Stair designs may include but not limited to straight flight with closed string, open string, open rise, close rise and nosing.
6. Tools and equipment may include but are not limited to hand tools, portable power tools, supporting tools and stationary machines.
7. Materials used in stair construction may include but not limited to timber, medium density fibreboard, plywood, steel and plastic.
8. '*Specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations and workplace specific requirements.
9. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act No 11, 2007 as amended;
 - SABS 0400, NOSA, Local Authorities Act;
 - Occupational Health and Safety Regulations No. 18, 1997

and all subsequent amendments.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on www.namqa.org and the Namibia Training Authority on www.nta.com.na.

Elements and Performance Criteria

Element 1: Conduct setting out procedures

Performance criteria

- 1.1 Tools and equipment are selected to carry out processes consistent with job requirements.
- 1.2 Steel Square and pitch board are prepared to set out stair pitch.
- 1.3 Strings are set out to show lengths for junctions with newels and landings.
- 1.4 Floors or landing height relationships with allowances for floor discrepancies are marked on newels.
- 1.5 Newels are set out to show positions of strings to determine position of treads, riser, flooring, joists, bearers and handrails.

Element 2: Prepare strings for assembly

Performance criteria

- 2.1 String set outs for treads and risers are checked.
- 2.2 Waste from housing cuts are removed to set out and required depth.
- 2.3 Grooves or mortises to receive balusters run are carried out.
- 2.4 Open strings are cut to set out shape for treads, risers and wedges.
- 2.5 Ends of strings are cut to set out requirements for junction with newels/landing or left long for on-site fitting.
- 2.6 Strings are marked for identification in line with workplace procedures.

Element 3: Prepare newels

Performance criteria

- 3.1 Newel set out is checked for work requirements with tread nosing marked.
- 3.2 Housings are cut and made accurately to set out and required depth.
- 3.3 Mortises to receive strings and handrail are cut to set out and specified depth.
- 3.4 Head of newel are cut and finished to specified finish.
- 3.5 Newels are marked for identification.

Element 4: Prepare balustrade components

Performance criteria

- 4.1 Handrail is prepared to shape with groove run for balusters.
- 4.2 Mortises in handrail for balusters are made.
- 4.3 Balusters are cut to design length.
- 4.4 Handrails are cut to design length.

Element 5: Prepare landing structural components

Performance criteria

- 5.1 Bearers are cut to length and allowance for on-site fitting.
- 5.2 Joists are cut to length and allowance for on-site fitting.
- 5.3 Flooring boards and nosing are cut to length allowable for fitting on-site.

Element 6: Finish surfaces and pre-assemble stair

Performance criteria

- 6.1 Exposed surfaces of components are sanded to specifications for finish.
- 6.2 Component parts are checked to ensure that they fit to specification.
- 6.3 Component parts are preassembled to ensure stair will assemble appropriately.
- 6.4 Components are handled with care to avoid damage.

Registration Data

Subfield:	Manufacturing
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