

Domain
Title:
Level: 4

CARPENTRY
Design products

Unit ID: 1611

Credits: 7

Purpose

This unit standard specifies the competencies required to design products for different applications. It includes planning and preparing for work, identifying types of products, explaining factors that influence design and developing and presenting design for construction.

This unit standard is intended for those who work as carpenters.

Special Notes

1. Entry information:

Prerequisite:

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

2. This unit standard is to be delivered and assessed in the context of carpentry operations and should be assessed in conjunction with other relevant technical unit standards selected from this domain.

3. To demonstrate competence, at a minimum, evidence is required of design products. Products includes counter, podium, stage, pedestal, chairs, couches, laminated balloon back, bent wood, lathed, upholstery and lazy boy and tables.

4. Assessment evidence may be collected from a real workplace, or simulated real workplace in which carpentry operations are carried out.

5. 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.

6. Regulations and legislation relevant to this unit standard include the following:

- Labour Act, No. 11, 2007 as amended;
- 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: Plan and prepare for work

Range

Planning and preparation include but are not limited to worksite inspection, equipment and materials defects identification, assessment of conditions and hazards and determination of work requirements.

Performance criteria

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are developed and applied.
- 1.2 Safety requirements are followed in line with safety plans and policies.
- 1.3 Sign and barricade requirements are identified and implemented.
- 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement of work.
- 1.5 Material quantity requirements are calculated in line with plans and specifications.
- 1.6 Materials appropriate to the work application are prepared safely handled and located ready for use.
- 1.7 Environmental protection requirements are identified and applied in line with environmental plans and regulatory obligations.

Element 2: Identify types of products

Performance criteria

- 2.1 Different types of designs are explained.
- 2.2 History of products design is explained.
- 2.3 Selecting of appropriate design and explained.

Element 3: Explain factors that influence design

Performance criteria

- 3.1 Designs for functionality and ergonomics are described.

- 3.2 Design for appearance is explained
- 3.3 Design for strength of materials and durability of products are described
- 3.4 Importance of designing with construction principles in mind is explained.

Element 4: Develop and present design for construction

Performance criteria

- 4.1 Presentation of design in forms of sketches and drawings are explained and demonstrated.
- 4.2 Development of scale models and mock-ups are explained and demonstrated.
- 4.3 Presentation of real product as a design is explained and demonstrated.

Registration Data

Subfield:	General Construction
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