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**SOUTH AFRICAN QUALIFICATIONS AUTHORITY  
REGISTERED UNIT STANDARD:**

**Apply knowledge and understanding of truss manufacturing in recommendations made for roof design**

<b>SAQA US ID</b>	<b>UNIT STANDARD TITLE</b>			
263762	Apply knowledge and understanding of truss manufacturing in recommendations made for roof design			
<b>ORIGINATOR</b>		<b>REGISTERING PROVIDER</b>		
SGB Forestry				
<b>QUALITY ASSURING BODY</b>				
-				
<b>FIELD</b>			<b>SUBFIELD</b>	
Field 01 - Agriculture and Nature Conservation			Forestry and Wood Technology	
<b>ABET BAND</b>	<b>UNIT STANDARD TYPE</b>	<b>OLD NQF LEVEL</b>	<b>NEW NQF LEVEL</b>	<b>CREDITS</b>
Undefined	Regular	Level 4	NQF Level 04	5
<b>REGISTRATION STATUS</b>		<b>REGISTRATION START DATE</b>	<b>REGISTRATION END DATE</b>	<b>SAQA DECISION NUMBER</b>
Registered		2009-05-13	2012-05-13	SAQA 0181/09
<b>LAST DATE FOR ENROLMENT</b>		<b>LAST DATE FOR ACHIEVEMENT</b>		
2013-05-13		2016-05-13		

*In all of the tables in this document, both the old and the new NQF Levels are shown. In the text (purpose statements, qualification rules, etc), any reference to NQF Levels are to the old levels unless specifically stated otherwise.*

This unit standard does not replace any other unit standard and is not replaced by any other unit standard.

**PURPOSE OF THE UNIT STANDARD**

People credited with this unit are able to demonstrate an understanding of the manufacturer responsibility for translating a roof and truss design into an actual roofing solution that is safe for the client, and manufactured in a cost effective manner for the fabricator. To achieve this, they are able to apply an understanding of:

- Material selection.
- Material preparation and accuracy.
- Manufacturing tolerances.
- Quality Control procedures.

## **LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING**

Communication and Mathematical Literacy at NQF Level 3.

Recognition of prior learning:

- Persons who are able to demonstrate workplace experience comparable or equivalent to the competence requirements of the unit standard will be given credit, in line with assessment processes.

## **UNIT STANDARD RANGE**

N/A

## **Specific Outcomes and Assessment Criteria:**

### **SPECIFIC OUTCOME 1**

Apply an understanding of material selection.

### **ASSESSMENT CRITERIA**

#### **ASSESSMENT CRITERION 1**

Timber defects are identified and described in terms of their cause and implications on structural strength.

#### **ASSESSMENT CRITERION 2**

Connector specifications are identified from structural drawings.

#### **ASSESSMENT CRITERION 3**

Alternate materials are identified that could be used to perform the same function as that which is specified in the design.

### **SPECIFIC OUTCOME 2**

Apply an understanding of material preparation and accuracy.

### **ASSESSMENT CRITERIA**

#### **ASSESSMENT CRITERION 1**

Timber is cut at the angles required to obtain the desired result.

#### **ASSESSMENT CRITERION 2**

Cut timber length is confirmed to be in accordance with given specifications.

#### **ASSESSMENT CRITERION 3**

Timber is cut according to the requirements in the cutting bill.

### **SPECIFIC OUTCOME 3**

Apply an understanding of manufacturing tolerances.

### **ASSESSMENT CRITERIA**

#### **ASSESSMENT CRITERION 1**

Tolerances are defined in terms of the impact on the finished product.

## **ASSESSMENT CRITERION 2**

Gaps in joints are described in terms of the effect on the total length.

## **ASSESSMENT CRITERION 3**

Trusses are categorised into those that meet given tolerances and those that fall outside given tolerances.

## **SPECIFIC OUTCOME 4**

Describe the quality control procedure.

## **ASSESSMENT CRITERIA**

### **ASSESSMENT CRITERION 1**

Equipment specifications and working tolerances are described in terms of the equipment used and the accuracy required.

### **ASSESSMENT CRITERION 2**

Methods of checking quality of trusses are described in accordance with manufacturer specifications.

### **ASSESSMENT CRITERION 3**

Strength tests are conducted on products in accordance with manufacturer specifications, and of the quality of treatment of products, is demonstrated.

### **ASSESSMENT CRITERION 4**

The quality of treatment of products is determined in accordance with manufacturer specifications.

### **ASSESSMENT CRITERION 5**

Relevant markings are applied that indicate the results of the inspections.

## **UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS**

- Anyone assessing a candidate against this unit standard must be registered as an assessor with the relevant ETQA.
- Any institution offering learning that will enable achievement of this unit standard must be accredited as a provider through the relevant ETQA.
- Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines and the agreed ETQA procedures.

## **UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE**

Knowledge considered critical to the successful achievement of this unit is covered in the specific outcomes and assessment criteria. This includes:

- Material selection.
- Material preparation and accuracy.
- Manufacturing tolerances.
- Quality Control procedures.

## **UNIT STANDARD DEVELOPMENTAL OUTCOME**

N/A

## **UNIT STANDARD LINKAGES**

N/A

## **Critical Cross-field Outcomes (CCFO):**

### **UNIT STANDARD CCFO IDENTIFYING**

Identify material selection and accuracy considerations for roof manufacturing.

### **UNIT STANDARD CCFO WORKING**

Work effectively with others and in teams.

### **UNIT STANDARD CCFO ORGANISING**

Confirming dimensions of the finished product meets specification requirements.

### **UNIT STANDARD CCFO COLLECTING**

Collect, analyse, organise and critically evaluate information by confirming compliance to specifications.

### **UNIT STANDARD CCFO COMMUNICATING**

Communicate effectively using visual, mathematical and/or language skills.

### **UNIT STANDARD CCFO DEMONSTRATING**

Understand the impact of quality control and tolerances for manufacturing production.

### **QUALIFICATIONS UTILISING THIS UNIT STANDARD:**

	<b>ID</b>	<b>QUALIFICATION TITLE</b>	<b>OLD LEVEL</b>	<b>NEW LEVEL</b>	<b>STATUS</b>	<b>END DATE</b>
Core	<a href="#">66370</a>	Further Education and Training Certificate: Roof Truss Technology	Level 4	NQF Level 04	Registered	2012-05-13

### **PROVIDERS CURRENTLY ACCREDITED TO OFFER THIS UNIT STANDARD:**

*This information shows the current accreditations (i.e. those not past their accreditation end dates), and is the most complete record available to SAQA as of today. Some Quality Assuring Bodies have a lag in their recording systems for provider accreditation, in turn leading to a lag in notifying SAQA of all the providers that they have accredited to offer qualifications and unit standards, as well as any extensions to accreditation end dates. The relevant Quality Assuring Body should be notified if a record appears to be missing from here.*

**NONE**

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