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

Inspect and quality assure timber roof truss products and documentation

SAQA US ID	UNIT STANDARD TITLE			
117270	Inspect and quality assure timber roof truss products and documentation			
ORIGINATOR		REGISTERING PROVIDER		
SGB Wood Products				
QUALITY ASSURING BODY				
-				
FIELD			SUBFIELD	
Field 01 - Agriculture and Nature Conservation			Forestry and Wood Technology	
ABET BAND	UNIT STANDARD TYPE	OLD NQF LEVEL	NEW NQF LEVEL	CREDITS
Undefined	Regular	Level 4	NQF Level 04	20
REGISTRATION STATUS		REGISTRATION START DATE	REGISTRATION END DATE	SAQA DECISION NUMBER
Reregistered		2008-08-05	2011-08-05	SAQA 0160/05
LAST DATE FOR ENROLMENT		LAST DATE FOR ACHIEVEMENT		
2012-08-05		2015-08-05		

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

This unit standard is for people who maintain the quality system during and after completion of manufacture, whilst adhering to other agreed standards pertaining to performance, safety, and the environment.

People credited with this unit standard are able to:

- Inspect timber selected for cutting
- Inspect calibration and set up of cutting equipment in compliance with angles determined on cutting bills
- Ensure that the jig selected to manufacture the trusses is set up according to the cutting bills, angles and dimensions and pressed trusses comply with cutting bills.

LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

A Learner who wishes to enter a learning programme for this Unit Standard must be able to demonstrate:

- i) Competency in mathematical and communication skills equivalent to that of a person who has qualified in these subjects at NQF Level 3;
- ii) An understanding of the basic activities of the timber roof truss manufacturing process and procedures of the relevant workplace;
- iii) Knowledge and skills in the relevant workplace procedures, health and safety measures equivalent to NQF level 3 requirements;
- iv) An understanding of the structure of wood and its relationship to its strength and appearance.

UNIT STANDARD RANGE

a) The scope of this Unit Standard covers:

- i. All the safety rules and personal protective equipment employed in the relevant production stage
- ii. All equipment and tools utilised in the relevant production phases.
- iii. All relevant production processes in the production phases.
- iv. All relevant raw material and product specifications.
- v. All production personnel involved in the various production phases.

b) The context of this Unit Standard relates to the training of a Learner at NQF Level 4 in the timber roof truss manufacturing activity.

c) The Level assigned to this Unit Standard, i.e. Level 4, is appropriate because it entails the training of a novice in a timber roof truss manufacturing environment and is a progression of the skills acquired from Levels 4 to 6.

Specific Outcomes and Assessment Criteria:

SPECIFIC OUTCOME 1

Inspect timber selected for cutting.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

All grade marks, sizes and lengths of structural S.A. Pine are correctly identified to specifications.

ASSESSMENT CRITERION 2

Defects in the timber, which render it not acceptable for truss manufacture, are identified and isolated as per specifications.

ASSESSMENT CRITERION 3

The explanation of the wood quality requirements specified confirms that knowledge and understanding of the needs regarding wood quality.

ASSESSMENT CRITERION 4

Components are identified to the cutting bills.

ASSESSMENT CRITERION 5

Standards of housekeeping and safety are adhered to as per work instructions.

SPECIFIC OUTCOME 2

Inspect the calibration and the set up of cutting equipment in compliance with angles determined on

cutting bills.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

Technical production information on the design specification relating to angle of cuts and length of material including overhangs and chord extensions is fully understood and explained as per work instructions.

ASSESSMENT CRITERION 2

An understanding of the centre line and over all lengths of material is demonstrated in the workplace.

ASSESSMENT CRITERION 3

An inspection is carried out to determine that each component complies with the size, angles, plumbness and grade of Timber as determined by the design specification and is correctly marked accordingly.

ASSESSMENT CRITERION 4

The cutting equipment is checked to ensure that the calibration is accurate and that the saw blades are sharp as per work instructions.

SPECIFIC OUTCOME 3

Ensure that the jig selected to manufacture the trusses is set up according to the cutting bills, angles and dimensions and pressed trusses comply with cutting bills.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

A check is conducted to ensure that the jig set equipment is in suitable condition to ensure accurate fabrication and that any possible problems have been reported to the supervisor.

ASSESSMENT CRITERION 2

The learner is able to demonstrate his/her ability to interpret job sheets, set out dimensions, identify truss types, setting out of pressing points on jigs by inspecting the production in the workplace.

ASSESSMENT CRITERION 3

An inspection is carried out to ensure that the correct timber components, free from defects, are placed in correct positions on the jig and are securely clamped in position with any possible gaps in timber joints reduced to the maximum allowable tolerances.

ASSESSMENT CRITERION 4

An inspection is carried out to ensure that the connector plates as determined by the design specifications are placed on top of and underneath every timber joint in the correctly specified positions to maximum allowable tolerances and fully pressed into timber at joints.

SPECIFIC OUTCOME 4

Inspect storage of manufactured timber trusses ready for delivery.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

An inspection is carried out to ensure that the correct procedures for storage of trusses vertically or

horizontally have been adhered to as per work instructions.

ASSESSMENT CRITERION 2

A check is made to ensure that the storage conditions are appropriate for storage per work instructions.

ASSESSMENT CRITERION 3

An inspection is conducted to ensure that trusses, sundries and other components have been collected together with erection and bracing documents and site directions and accessibility for site delivery.

ASSESSMENT CRITERION 4

An inspection is made to ensure that all stacked trusses line up to correct pitches and sizes of corresponding trusses on same job as per work instructions.

ASSESSMENT CRITERION 5

An inspection is carried out to ensure that trusses have been correctly identified to job specifications and erection layout drawings.

SPECIFIC OUTCOME 5

Inspect loading of manufactured trusses and auxiliary material and hardware.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

An inspection is conducted to ensure that the correct load has been identified for loading and loaded as per delivery note.

ASSESSMENT CRITERION 2

An inspection is conducted to ensure that the load is safely loaded and secured onto the transportations as per the Transport Act requirements.

ASSESSMENT CRITERION 3

A check is made to ensure that the correct documentation accompanies the load as per work instructions.

UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS

An individual who wishes to be assessed against this Unit Standard may apply to, or inform, his immediate superior in the relevant workplace, to request management to arrange for his / her assessment by the relevant assessor accredited for this purpose by the ETQA of the FIETA. Accreditation for this Unit Standard shall be from the relevant Education and Training Quality Assurer (FIETA ETQA) through formative and summative assessment by a registered Assessor. Assessment should be contextual and be conducted in the workplace as far as possible.

The relevant NSB and SGB should be notified of any feedback related to this qualification.

- Assessors must be registered as an Assessor with the relevant ETQA
- Moderators must be registered as assessors with the relevant ETQA
- Training providers must be accredited by the relevant ETQA
- Moderation should include both internal and external moderation where applicable
- The FIETA ETQA will co-ordinate all moderation activities in accordance with their policies and procedures

UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE

A demonstrated understanding of:

- i. The relevant safety procedures required by the OSHACT and the workplace;
- ii. The organisation's work instructions;
- iii. Workplace equipment and materials;
- iv. Standards of handling trusses and carrying as determined in SABS 0243;
- v. Safely securing all products and entire load onto vehicle and compliance with transport act;
- vi. Erection and bracing details as designer's requirements correctly listed on delivery documents and details accompany load to site;
- vii. Load tolerance requirements as transport act.;
- viii. Observing safety procedures and safety apparel;
- ix. Trusses lifted and carried vertically or horizontally supported having adequate intermediate support;
- x. Protection from weather exposure for long periods of in excess of approximately two weeks;
- xi. The correct method of safely storing trusses and sundry material on site;
- xii. Relative requirements of SABS standards for structural pine used in manufacture of nail-plated timber roof trusses;
- xiii. Inspection requirement procedures of the workplace;
- xiv. Knowledge of setting up procedures of cutting equipment used in the truss plant;
- xv. Knowledge of safety equipment and saw covers for protection of saw operators;
- xvi. The relevant plating and Engineering system's quality control and manufacturing procedures and tolerances;
- xvii. Awareness of timber defects in joint area (such as knots and wane) and corrective measures;
- xviii. Observing safety procedures;
- xix. Storage equipment and methods;
- xx. Handling of Trusses.

UNIT STANDARD DEVELOPMENTAL OUTCOME

Lead his sub-ordinates in his/her work area.

UNIT STANDARD LINKAGES

N/A

Critical Cross-field Outcomes (CCFO):

UNIT STANDARD CCFO IDENTIFYING

- Identify and solve problems in the work place.
- Identify and report on all quality aspects of the production phase.

UNIT STANDARD CCFO WORKING

Assist to train/coach sub-ordinates in the work areas and discuss with them and his/her superior all aspects of their activities in the work area.

UNIT STANDARD CCFO COLLECTING

Collate and analyse data provided by his/her sub-ordinates, and report on this to his/her superior.

QUALIFICATIONS UTILISING THIS UNIT STANDARD:

	ID	QUALIFICATION TITLE	OLD LEVEL	NEW LEVEL	STATUS	END DATE
Elective	49083	National Certificate: Wood Products Processing	Level 3	NQF Level 03	Reregistered	2011-08-05

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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