

PERFORM BUILDING SUPER STRUCTURE WORKS II

UNIT CODE: 0732 551 22A

TVET CDACC UNIT CODE: CON/OS/BUT/CC/12/6/MA

UNIT DESCRIPTION:

This unit cover the principles required by a building technician in acquiring knowledge, skills and attitude required in building Superstructure works which largely include: Erection of structural elements, carrying out construction wall works, upper floor construction, construction wall bridging openings and Erection of structural elements.

ELEMENT These describe the key outcomes which make up workplace function	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance of each of the elements <i>Italicized</i> terms are elaborated in the Range of Variables
1 Erect columns and beams	1.1 Props are erected in accordance to construction Regulations 1.2 Reinforcement bars are positioned as per structural design drawings 1.3 Concrete materials are mixed as per design ratio requirements 1.4 Mixed concrete is placed and compacted as per requirements
2 Construct staircases	2. 1Construct stair 2. 2structure 2. 3Type of stair is identified as per working drawing. 2. 4Setting out is executed as per specifications 2. 5Formwork is erected as per specifications 2. 64.Reinforcement bars are fixed as per structural design requirements
3. Construct fireplaces and chimneys	3.1 Brickwork to ground floor level is built up according to building regulations 3.2 Fireplace elements are constructed according to 3.3 the ground floor type and construction 3.4 regulations 3.5 Fireplace is lined with fireback as per building 3.6 regulations 3.7 Metal baskets are installed as per construction requirements

RANGE

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

Variable	Range
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1. Protective equipment may include but is not limited to;	• Gloves, • overalls, • safety boots, • Helmets
2. Structural element tools and equipment may include but are not limited to:	• Plumb Bob • Spirit level • Pipe level • Hammer
3. Structural element materials may include but are not limited to:	• Cement • Sand • Bars • Ballast
4. Protective equipment may include but not limited to:	• Gloves, • overalls, • safety boots, • Helmets
5. Wall construction tools and equipment may include but not limited to:	• Plumb Bob • Spirit level • Pipe level • Trowel • Spade • Wood float • Straight edge.
6. Types of walls may include but not limited to:	• Masonry walls • Monolithic • Precast • Framed
7. Walling materials may include but are not limited	• Bricks • Blocks • Timber
8. The type of upper floor may include but is not limited	• Timber floor • Reinforced concrete • Ripped floor • Waffle floor • Precast floor
9. Upper-floor construction tools and equipment may include but not limited	• Wheelbarrow • Pipe level • Vibrator • Trowel • Spade
10. Upper-floor construction materials may include but are not limited	• Cement • Sand • Bars • Ballast • Water
12. Building Services conduits may include but are not limited	• PVC pipes • PPR Pipes

13. Wall bridging construction tools and equipment may include but not limited	• Wheelbarrow • Pipe level • Vibrator • Trowel • Spade • Rebar bender • Tiring tool • Hacksaw • Rebar bending machine • Rebar cutting machine
14. Wall bridging construction materials may include but are not limited	• Timber • Reinforcement Bars • Cement • Sand • Water

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills:

1. The individual needs to demonstrate the following skills:
2. Communication skills
3. Analytical skills
4. Problem solving skills
5. Time management
6. Drawing interpretation skills

Required Knowledge:

The individual needs to demonstrate knowledge of:

1. Occupational Health and Safety
2. Construction material principles

EVIDENCE GUIDE

These provides advice on assessment and must be read in conjunction with performance criteria, required skills, knowledge and range.

1. Critical aspect of competency	Assessment requires evidence that the candidate: 1.1 Fixed Reinforcement bars as per job specification 1.2 Erected Formwork as per work requirements 1.3 Placed Concrete as per work requirements 1.4 Done Curing as per work requirements 1.5 Laid out Damp proof course as per building code requirement 1.6 Erected Construction wall as per work procedure 1.7 Carried out Cleanup, waste collection and disposal as per job requirements. 1.8 Installed out Building Services conduits are according to work requirements. 1.9 Installed Upper floor as per building code requirement 1.10 Installed Reinforcement according as per job requirement 1.11 Cured structural elements as per work requirements
2. Resource Implications	The following resources should be provided: 2.1 Access to relevant workplace or appropriately simulated environment where assessment can take place 2.2 Resources appropriate for performance of assessment tasks
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1 Practical 3.2 Project 3.3 Third party report 3.4 Portfolio of evidence 3.5 Written tests 3.6 Oral questioning