



THE REPUBLIC OF KENYA

NATIONAL OCCUPATIONAL STANDARDS
FOR
BUILDING TECHNICIAN

KNQF LEVEL 6
ISCED PROGRAM CODE: 0732 554B



TVET CDACC
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NAIROBI

SUPERVISE CONSTRUCTION PROJECT

UNIT CODE: CON/OS/BUT/CR/11/6/A

UNIT DESCRIPTION

This Unit describes the competences required to manage a construction project. It involves organizing construction site; interpreting building contract documents; preparing; project work plan, ledgers, journals and final accounts; manage human resource, site records & activities as well as coordinating quality standards and costing construction projects.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA (<i>Bold and italicized terms are elaborated in the Range</i>)
1. Organise construction site	1.1 Construction site map is drawn 1.2 Construction site spaces are allocated as per <i>construction site zoning</i> . 1.3 <i>Site infrastructure</i> and traffic routes are identified as per the site map. 1.4 Site plant and equipment are positioned according to the site map. 1.5 <i>Site installations</i> are placed according to the site map. 1.6 Site arrangement is checked and re-planned
2. Interpret building contract documents	1 Building contract documents are reviewed. 2 Building contracts are interpreted as per the contract type. 3 Contract information is recorded as per the contract interpretation.
3. Prepare construction work plan	1 Projects scope of work is determined as per the project documents. 3.2 Projects work equipment is allocated as per the time schedule. 3.3 Projects time schedule is prepared as per the scope of work.
4. Prepare project accounts	4.1 Information is obtained from ledgers and journals. 4.2 Income and expense account is prepared. 4.3 Information is balanced and agreed upon 4.4 Method statement for works is prepared
5. Manage projects human resource	5.1 Projects roles and responsibilities are identified. 5.2 Reporting relationship and staffing management plan are documented 5.3 Organisation charts and position descriptions are defined 5.4 Project team is developed as per organisational standards.

ELEMENT	PERFORMANCE CRITERIA (<i>Bold and italicized terms are elaborated in the Range</i>)
	<p>5.5 Personnel is identified depending on tasks.</p> <p>5.6 Project performance is monitored as per laid down organisational standards.</p> <p>5.7 Project evaluation is carried out.</p> <p>5.8 Project report and results are analysed.</p>
6. Keep site records	<p>6.1 Record parameters are identified based on project requirements</p> <p>6.2 Data entry methods are identified and applied</p> <p>6.3 Regular updates of records are maintained according to the job requirement</p>
7. Monitor site activities	<p>7.1 Construction requirements are identified as per building code, public health act and local government requirements.</p> <p>7.2 Construction activities progress is noted against performance standards.</p> <p>7.3 Project status/task performance is analysed against managers specification.</p> <p>7.4 Efficiency and effectiveness of site activities are analysed.</p> <p>7.5 Project report is prepared.</p>
8. Coordinate quality standards	<p>8.1 Quality standard manuals are reviewed.</p> <p>8.2 Samples of materials are taken and Quality tests performed.</p> <p>8.3 Site work progress is observed through regular visits and errors corrected.</p> <p>8.4 Qualified staffing is ensured as per their performance.</p> <p>8.5 Right quality equipment and tools are ensured.</p> <p>8.6 Technical personnel representative is placed on site</p>
9. Cost construction project	<p>9.1 Project scope of work is determined as per working drawings.</p> <p>9.2 Project work is divided into items and sub items.</p> <p>9.3 Project items are described as per mode of performance.</p> <p>9.4 Rates are inserted against the items as per building standard costing rates and site location.</p> <p>9.5 Items rates are totaled to acquire the project total.</p>

RANGE

Variable	Range
1. construction site zoning may include but is not limited to:	<ul style="list-style-type: none"> • Central zone • Internal • Intermediate • External.
1. Site infrastructure may include but is not limited to:	<ul style="list-style-type: none"> • Roads • Walk ways
2. Site Installation may include but is not limited to:	<ul style="list-style-type: none"> • First aid points • Protection equipment • Temporary works • Fire stations

REQUIRED KNOWLEDGE

- Accounting
- Contracts
- Human resource
- Costing
- Welding and fabrication
- MS projects

SKILLS

- Management Skill
- Installation Skill
- Fixing skills
- Welding and fabrication

EVIDENCE GUIDE

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

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Organised construction site. 1.2 Interpreted Contract documents. 1.3 Prepared project work plan. 1.4 Prepared ledgers and journals. 1.5 Prepared project final accounts. 1.6 Managed human resource. 1.7 Managed site records. 1.8 Monitored site activities. 1.9 Coordinated quality standards. 1.10 Costed construction project.
2. Resource Implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Materials and equipment specifications 2.2 External Labs/in site labs 2.3 Calibrated equipment 2.4 Trained Quality control staff
3. Methods of Assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Interview 3.2 Case Study/Situation 3.3 Oral questioning 3.4 Practical Test 3.5 Written Test
4. Context of Assessment	<p>Competency may be assessed on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment.</p>
5. Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>