



**REPUBLIC OF KENYA**

**NATIONAL OCCUPATIONAL STANDARDS  
FOR  
CARPENTRY AND JOINERY CRAFTSPERSON  
KNQF LEVEL 5**

**PROGRAMME CODE:0722 554B**



**TVET CDACC  
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## CONSTRUCT WINDOWS & WINDOW FRAMES

**UNIT CODE:** CON/OS/CAJ/CR/02/5/B

### UNIT DESCRIPTION

This Unit describes the competencies required to construct windows and window frames. It involves interpreting working drawing, preparing construction materials, constructing ordinary casement windows & window frames, constructing special windows and window frames, performing finishing processes, examining quality of the finished product and performing workplace housekeeping.

### ELEMENTS AND PERFORMANCE CRITERIA

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b> <i>(Bold and italicized terms are elaborated in the Range)</i>
1. Interpret working drawing	1.1 Working drawing is interpreted based on building code 1.2 Measurements are converted as required 1.3 Symbols are identified and interpreted based on International technical drawing standards 1.4 Window opening is identified as per the job requirements
2. Prepare Construction materials	2.1 Cutting list of materials is prepared as per the working drawing 2.2 <b>Materials, tools and equipment</b> are selected and prepared as per the working drawing 2.3 Prepared timber ready for making a window and window frame
3. Construct ordinary casement windows & window frames	3.1 Marking tools are identified as per the job requirements 3.2 Marking is carried out according to the working drawing 3.3 Cutting out tools are identified as per the job requirements 3.4 Cutting out is carried out as per the working drawing 3.5 Final assembling of the window is done as per the working drawing specification

ELEMENT	<b>PERFORMANCE CRITERIA</b> <i>(Bold and italicized terms are elaborated in the Range)</i>
	3.6 Trial fitting is done as per the working drawing specifications 3.7 Fixed appropriate <b>hardware</b> on the window as per working drawing 3.8 Window is fixed in frame as per the drawing specification
4. Construct special windows and window frames	4.1 Identified <b>types of special windows</b> as per the job requirements 4.2 Identified the functions of the special windows as per job requirements 4.3 Constructed special windows and window frames according to the architectural drawing/design specifications
5. Perform finishing processes	5.1 Scrapping is performed as per job requirement 5.2 Sanding is done as per the job requirements 5.3 Staining is conducted according to job requirement 5.4 Painting/varnishing is performed based on the manufacturer's instructions
6. examine quality of the finished product	6.1 Examined finished product as per the job requirements 6.2 Recorded quality check results as per the work place procedures
7. perform workplace housekeeping.	7.1 <b>Housekeeping</b> is conducted as per workplace procedures 7.2 Materials, tools and equipment are returned to their respective stores as per work place procedures

## RANGE

Variable	Range
1. Materials may include but is not limited to:	<ul style="list-style-type: none"> <li>• Hard wood</li> <li>• Soft wood</li> <li>• Manufactured boards</li> <li>• Iron mongery</li> </ul>
2. Tools & equipment may include but is not limited to:	<ul style="list-style-type: none"> <li>• Planes</li> <li>• Square</li> <li>• Saws</li> <li>• Chisel saws</li> <li>• Claw hammer</li> <li>• Mallet</li> <li>• Tape measure</li> <li>• Screw driver</li> </ul>
3. Hardware may include but is not limited to:	<ul style="list-style-type: none"> <li>• Fasteners</li> <li>• Hinges</li> <li>• Stays and pins</li> <li>• Caulking lock and handle</li> <li>• Espangnolettes</li> </ul>
4. Housekeeping may include but is not limited to:	<ul style="list-style-type: none"> <li>• Cleaning</li> <li>• Clearing</li> <li>• Keep work place tidy</li> </ul>

## REQUIRED KNOWLEDGE AND SKILLS

### Knowledge

- Construction dimensions
- Architectural drawing
- Local authority by-laws
- Building code
- Structural elements
- Codes of practice
- Basic arithmetic
- Measurement
- Building drawing

### Skills

- Measurement
- Basic arithmetic
- Design
- Computer literacy
- planning

## 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"> <li>1.1 Interpreted working drawing</li> <li>1.2 Prepared construction materials</li> <li>1.3 Constructed ordinary casement windows &amp; window frames</li> <li>1.4 Construct special windows and window frames</li> <li>1.5 Performed finishing processes</li> <li>1.6 Examined quality of the finished product</li> <li>1.7 Performed workplace housekeeping.</li> </ul>
2. Resource Implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> <li>2.1 Training workshops</li> <li>2.2 Construction tools and equipment</li> <li>2.3 Occupational Safety and health manuals</li> <li>2.4 Construction materials</li> <li>2.5 Reference textbooks</li> <li>2.6 Qualified trainers</li> </ul>
3. Methods of Assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>3.1. Practical assignment</li> <li>3.2. Written</li> <li>3.3. Oral interview</li> <li>3.4. Demonstrations</li> </ul>
4. Context of Assessment	<p>Competency may be assessed</p> <ul style="list-style-type: none"> <li>4.1 On job</li> <li>4.2 Off job</li> <li>4.3 During Industrial Attachment.</li> </ul>
5. Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>