



THE REPUBLIC OF KENYA

COMPETENCY BASED CURRICULUM

FOR

CARPENTRY AND JOINERY

KNQF LEVEL 4

ISCED PROGRAM CODE: 0722 354B



TVET CDACC

P.O BOX 15745-00100

NAIROBI

DOORS AND DOOR FRAMES

UNIT CODE:CON/CU/CAJ/CR/01/4/B

Relationship to Occupational Standards

This unit addresses the unit of competency: Construct doors and door frames

Duration of Unit: 90 hours

Unit Description

This unit describes the competence required to construct doors and door frames. It involves interpreting working drawing, preparing construction materials, marking out product profile, cutting out product profile and performing fixing of the joints. It also includes performing finishing processes, examining quality of the finished product and performing workplace housekeeping

Summary of Learning Outcomes

1. Interpret working drawing
2. Prepare construction materials
3. Mark out product profile
4. Cut out product profile
5. Perform fixing of the joints
6. Perform finishing processes
7. Examine quality of the finished product
8. Perform workplace Housekeeping

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Interpret working drawing	<ul style="list-style-type: none">• Elevation• Sections• Dimensions• Scale• Symbols• Sketching battened doors• Types of battened door• Types of panelled doors• Types of flush doors	<ul style="list-style-type: none">• Practical assignment• Oral/written tests
2. Prepare Construction materials	<ul style="list-style-type: none">• Interpretation of working drawing• Preparation of a cutting list	<ul style="list-style-type: none">• Practical assignment

	<ul style="list-style-type: none"> • Criteria for selection of timber • Types of construction materials <ul style="list-style-type: none"> ✓ Timber ✓ Ply wood ✓ Nails and screws ✓ Wood glue ✓ Sand paper • Uses and specifications of materials, tools and equipment • Safety Practices <ul style="list-style-type: none"> ✓ PPE ✓ Handling of tools, materials and equipment ✓ Good housekeeping 	<ul style="list-style-type: none"> • Oral • Written tests
3. Mark out product profile	<ul style="list-style-type: none"> • Marking out tools <ul style="list-style-type: none"> ✓ Tape measure ✓ Try square ✓ Marking gauge ✓ Workshop rod • Marking out procedures <ul style="list-style-type: none"> ✓ Mark mortise ✓ Mark tenons ✓ Mark grooves ✓ Mark rebate ✓ Mark chamfer 	<ul style="list-style-type: none"> • Practical assignment • Oral • Written tests
4. Cut out product profile	<ul style="list-style-type: none"> • Types of cutting out tools <ul style="list-style-type: none"> ✓ Saws ✓ Chisels ✓ Mallet ✓ Planes • Cutting procedure <ul style="list-style-type: none"> ✓ Cut out mortises ✓ Cut out tenons ✓ Cut out the grooves ✓ Cut out rebates ✓ Cut out chamfers 	<ul style="list-style-type: none"> • Practical assignment • Oral • Written tests
5. Perform fitting of the joints	<ul style="list-style-type: none"> • Types of fitting tools <ul style="list-style-type: none"> ✓ Hammers 	<ul style="list-style-type: none"> • Written tests

	<ul style="list-style-type: none"> ✓ Screw drivers ✓ Wood glue ✓ Nails ✓ Screws ✓ Clamps ✓ Dowels • Types of joints <ul style="list-style-type: none"> ✓ Mortise and tenon ✓ Tongue and grooves ✓ Scribes joints ✓ Rebate • Procedure of fitting joints <ul style="list-style-type: none"> ✓ Apply glue to tenons and mortises ✓ Fit tenons to mortises ✓ Fit battens to grooves ✓ Fit stiles ✓ Clamp the door ✓ Fix the joints ✓ Cut and fix the braces • Criteria for selecting fixing devices 	<ul style="list-style-type: none"> • Oral • practical assignment
6. Perform finishing processes	<ul style="list-style-type: none"> • Types of finishing processes <ul style="list-style-type: none"> ✓ Wiping excessive glue ✓ Applying filler to any dent ✓ Sanding and applying coat of varnish • Hanging door in the frame • Fixing ironmongery /hardware <ul style="list-style-type: none"> ✓ Lock ✓ Tower bolts ✓ Door closers ✓ Door pullers 	<ul style="list-style-type: none"> • Oral • practical assignments • Written tests
7. Examine quality of the finished product	<ul style="list-style-type: none"> • Fitness and joint quality • Final appearance • Function-ability of the door 	<ul style="list-style-type: none"> • Oral • practical assignments • Written

8. Perform workplace Housekeeping	<ul style="list-style-type: none"> Housekeeping procedures <ul style="list-style-type: none"> ✓ Gather off cuts ✓ Gather shavings/ saw dust ✓ Clean the floor return tools to the store 	<ul style="list-style-type: none"> Oral practical assignments Written
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Suggested Methods of Instruction

- Demonstration by trainer
- Practical work by trainee
- Demonstration videos
- Group discussions

Recommended Resources

- Carpentry and joinery hand tools
 - ✓ Saws
 - ✓ Hammers
 - ✓ Planes
 - ✓ Gauges
 - ✓ Chisels
 - ✓ Squares
 - ✓ Tape measure
- Codes of practice
- Reference books
- Timber nails
- Screws
- Sand papers
- Varnish
- Wood glue
- dust coat
- First aid kits
- Googles
- Gloves

- Safety boots