

RAINWATER HARVEST AND DISPOSAL

UNIT CODE: CON/CU/PL/CR/02/5/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Install rainwater harvesting and disposal

Duration of Unit: 180 hours

Unit Description

This unit specifies the competencies required to harvest and dispose rain water. It involves preparing working drawings, quantifying materials and costing, using tools and equipment, installing rain water goods, testing rainwater goods and harvesting / disposing rainwater. It applies in the construction industry.

Summary of Learning Outcomes

1. Prepare working drawings
2. Quantify materials
3. Use tools and equipment
4. Install rainwater goods
5. Test rainwater goods

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Prepare working drawings	<ul style="list-style-type: none">• Terms and Concepts• Symbols• Scales• Measurements• Drawing techniques• Reference points	<ul style="list-style-type: none">• Observation• Oral questioning• Third party report• Interviewing• Written tests
2. Quantify and cost materials	<ul style="list-style-type: none">• Terms and concepts• Rainwater goods materials and supplies<ul style="list-style-type: none">✓ Plastics✓ Ferrous✓ Non-ferrous• Types of rainwater goods• Types of fittings	<ul style="list-style-type: none">• Observation• Written tests• Oral questioning• Interviewing• Third party report

	<ul style="list-style-type: none"> • Material and supplies schedule • Estimation of quantities • Cost estimation • Tools and equipment 	
3. Use tools and equipment	<ul style="list-style-type: none"> • Terms and concepts • PPEs and their application • Use of rainwater tools and equipment • Safety, care and maintenance of rainwater tools and equipment • Storage of rainwater tools and equipment 	<ul style="list-style-type: none"> • Observation • Written tests • Oral questioning • Interviewing • Third party report
4. Install rainwater goods	<ul style="list-style-type: none"> • Terms and concepts • Harvesting methods • Disposal methods • Types of rainwater goods • Measurements • Types of materials • Types of joints • Methods of assembling • Housekeeping 	<ul style="list-style-type: none"> • Observation • Written tests • Oral questioning • Interviewing • Third party report
5. Test rain water goods	<ul style="list-style-type: none"> • Terms and concepts • Testing methods • Types of faults • Housekeeping • Cutting methods • Materials and supplies • Installation of rainwater goods • Quality checks • Occupational safety and legal framework 	<ul style="list-style-type: none"> • Observation • Written tests • Oral questioning • Interviewing • Third party

Suggested methods of instructions

- Discussions
- Demonstration
- visiting Lecturer/Expert
- Industrial Visits

Recommended Resources

Functional Workshop with the following:

Tools and Equipment

- Plumb bob
- Measuring tools (Tape measure, infra-red light, rule etc.)
- Marking tools
- Cutting tools
- Fastening tools
- files
- Wire brushes
- Holding tools
- Drilling equipment

Supplies and Materials

- Pipes
- Gutters
- Pipe fittings
- Accessory
- Adhesives
- Sealant