WATER STORAGE SYSTEMS AND AUXILLIARY FITTINGS INSTALLATION

UNIT CODE: CON/CU/PL/CR/05/5/A

Relationship to Occupational Standards
This unit addresses the Unit of Competency: install water storage systems and auxiliary fittings

Duration of Unit: 110 hours

Unit Description
This unit specifies the competencies required to install water storage systems and auxiliary fittings. It involves preparing working drawings, quantifying and costing materials, installing storage systems and auxiliary fittings, and testing and commissioning auxiliary fittings. It applies in the construction industry.

Summary of Learning Outcomes

1. Prepare water storage drawings
2. Quantify and cost materials
3. Install storage systems and auxiliary fittings
4. Test and commission storage and auxiliary fittings

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Prepare water storage drawings	• Terms and Concepts • Symbols • Measurements • Storage fittings • Storage capacity	• Observation • Oral questioning • Interviewing • Third party reports • Written tests
2. Quantify and cost storage materials	• Terms and concepts • Types of storage • Types of auxiliary fittings • Quantify materials and supplies • estimation of quantities and costs	• Observation • Written tests • Oral questioning • Interviewing • Third party reports

3. Install storage systems and auxiliary fittings	• Terms and concepts • PPEs • Types of storages systems • Size • Shape • Materials • manufacturer • Pumping systems • Boosted • Direct pumping • Indirect pumping • Unboosted • Zoned system • Types of pumps • Installation • Supports • Positioning • Housekeeping • Occupational safety and legal requirements	• Observation • Written tests • Oral questioning • Interviewing • Third party reports
4. Test and commission storage and auxiliary fittings	• Tests • Leakages • Heads • Pressure • Faults • Leakages • Sanction and delivery pressure • Water hammer • Air lock	• Observation • Written tests • Oral questioning • Interviewing • Third party reports

Suggested Methods of Instructions

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

Recommended Resources

Functional Plumbing Workshop with the following:

Tools and Equipment

- Pipe wrench
- Pipe cutter
- Hacksaw
- Pipe Threading Equipment
- Vice - Bench
- Pliers
- Tap and Punch
- Files
- Screwdrivers
- Drill with various sizes of bits
- Mallet
- Ball hammer
- PPR machine / Heat Fusion equipment
- Pipe bender
- Sealant gun

Supplies and Materials

- Fittings
- Backnuts
- Cisterns
- Valves
- Sealant
- Water proofing agents