

EXECUTING SUBSTRUCTURE WORKS

UNIT CODE: CON/CU/BUT/CR/02/5

UNIT DURATION: 80 Hours

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Execute substructure works

Unit Description

This Unit describes the competencies required to execute substructure works. It involves excavating, levelling and concreting foundation trenches, constructing foundation wall and solid ground floor.

Summary of Learning Outcomes

1. To excavate Foundation trenches
2. To level foundation trenches
3. To concrete foundation trenches
4. To construct foundation wall
5. To construct solid ground floor

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Excavate foundation trenches	<ul style="list-style-type: none">• Types of soil• Excavation depths• Methods of Excavation• Excavation plant, tools and equipment• Foundation trenches• Safety barriers	<ul style="list-style-type: none">• Written assessment• Practical• Projects• Oral assessment• Portfolio of Evidence
2. Level foundation trenches	<ul style="list-style-type: none">• Leveling foundation trench• Planking and strutting materials• Methods of planking and strutting• Dewatering methods	<ul style="list-style-type: none">• Written assessment• Practical• Projects• Oral assessment• Portfolio of Evidence

<p>3. Concrete foundation trenches</p>	<ul style="list-style-type: none"> • Mixing materials <ul style="list-style-type: none"> - Cement - Aggregates • Concrete mixing tools and equipment • Preparation method of concrete mix • Methods of placing concrete • Curing of concrete 	<ul style="list-style-type: none"> • Written assessment • Practical • Projects • Oral assessment • Portfolio of Evidence
<p>4. Construct foundation wall</p>	<ul style="list-style-type: none"> • Service pipes • Setting out of foundation walls • Construction of foundation wall • Foundation back filling 	<ul style="list-style-type: none"> • Written assessment • Practical • Projects • Oral assessment • Portfolio of Evidence
<p>5. Construct solid ground floor</p>	<ul style="list-style-type: none"> • Ground floor and termite treatment • Levelling and compaction of floor base • Ground floor components • Hardcore • Damp proofing materials • BRC mesh • Service receptors • Formwork to edges • Ground floor slab construction 	<ul style="list-style-type: none"> • Written assessment • Practical • Projects • Oral assessment • Portfolio of Evidence

Suggested Methods of Instruction

- Discussion
- Direct Instruction
- Lecture
- Question and answer
- Site visits
- Practicals

Recommended Resources for 25 Trainees

- 10 Desktop computers/laptops
- 50 Wooden pegs

- 25 Builder's square
- 25 Tape measures
- Assorted Hand Tools and implements
- 2 Projector
- 5 Whiteboard
- 10 roll Flip Chart
- Assorted colour of whiteboard markers
- White lime
- Building stones
- Timber

easytvvet.com