

Domain	PLUMBING	Unit ID: 466
Title:	Install gutters and down pipes	
Level: 3		Credits: 4

Purpose

This unit standard specifies the competencies required to install gutters and down pipes. It includes the planning and preparing for work, determining installation requirements, installing gutters and down pipes, and cleaning up the work area.

This unit standard is intended for those who work as plumbers.

Special Notes

1. Entry information:

Prerequisites

- 434 - *Apply safety rules and regulations in plumbing operations or demonstrated equivalent knowledge and skills.*

2. To demonstrate competence, at a minimum, evidence is required of installing galvanised, fibre cement, PVC (Poly Vinyl Chloride) gutters and down pipes in accordance with given drawings and specifications.
3. Tools and equipment may include but are not limited to: straight rule, steel tape, scribe, pencil, steel square, combination square, centre punch, snips, hacksaw, dividers, hammer, pliers, vice-grip, roofing punch, spirit level, screw driver, soldering iron, cylinder of L.P (Low Pressure) gas, regulator tape, connectors and furnace for heating and soldering iron, electric drill, twist drill, masonry drill, stake, scaffolding and ladders.
4. Materials may include but are not limited to square gutter, half round gutters, round down pipes, square down pipes {all made of PVC (Poly Vinyl Chloride) , G.M.S (Galvanized Metal Sheet) and fibre cement}, bracket, flux, solder and other sealant materials.
5. Performance of all elements in this unit standard must comply with all relevant workplace requirements and/or manufacturers' specifications.
6. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act, No. 6, 1992
 - Occupational Health and Safety Regulations No. 18, 1997
 and all subsequent amendments.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on www.nta.com.na.

Elements and Performance Criteria

Element 1: Plan and prepare for work

Range

Planning and preparation is to include but is not limited to worksite inspection, hand tools defect identification, assessment of conditions and hazards and determination of work requirements.

Performance Criteria

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied.
- 1.2 Health and safety requirements with installing gutters and down pipes are adhered to throughout the work.
- 1.3 Quality assurance requirements are identified and adhered to in accordance with workplace environment.
- 1.4 Tasks are planned and sequencing in conjunction with other involved in or affected by the work.
- 1.5 Tools and equipment for installation, including personal safety equipment, are selected and checked for serviceability.
- 1.6 Work area is prepared to support the efficient installation of gutters and down pipes.

Element 2: Determine installation requirements

Performance Criteria

- 2.1 Quantities of materials required are determined from plans or specifications.
- 2.2 Required materials and equipment are identified and ordered or collected in accordance with workplace procedures.
- 2.3 Materials and equipment are checked for compliance with standards, docket or order form and for acceptable condition.

Element 3: Mount gutter and down pipes

Performance Criteria

- 3.1 Guttering is set out in accordance with drawing or specification and job instructions.
- 3.2 Supports and fixing are installed to plans specifications.
- 3.3 Gutters and down pipes are installed in accordance with drawing, job specification and standards.
- 3.4 Test is carried out in accordance with required standards and specifications.

Element 4: Clean up work area

Performance Criteria

- 4.1 Work is completed and appropriate personnel notified in line with workplace procedures.
- 4.2 Work area is cleared of waste, cleaned, restored and secured in line with workplace procedures.
- 4.3 Plant, tools and machines are cleaned, checked and maintained in line with workplace procedures.
- 4.4 Work completion details are finalised in line with workplace procedures.

Registration Data

Subfield:	General Construction
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