

Domain	PLUMBING	Unit ID: 467
Title:	Install and fit sanitary fixtures as part of plumbing operations	
Level: 3		Credits: 6

Purpose

This unit standard specifies the competencies required to install and fit sanitary fixtures as part of plumbing operations. It applies to the installation and fitting of sanitary plumbing, including the connection of discharge pipes to sanitary plumbing and drainage, and installations using soil and water fixtures. It includes the connection of discharge pipes to sanitary plumbing and drainage and the installation of sanitary fixtures, as well as cleaning up the work area.

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

Special Notes

1. Entry information:
 - Prerequisite
 - 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 setting out, installing and fitting of sanitary plumbing to each of the following fixtures: a water closet, a shower, a sink, a bath, a basin, a dishwashing machine, a clothes washing machine and a wall hung urinal. These tasks should be performed ensuring correct identification of requirements and finishing of the tasks, correct selection and use of appropriate processes, tools and equipment and completing all work to specification.
3. Assessment evidence may be collected from a real workplace or simulated real workplace or an appropriate simulated realistic environment in which plumbing operations are carried out.
4. Sanitary fixtures are authorised and may include but not limited to water closets, showers, sinks, baths, basins, dishwashing machines, clothes washing machines, troughs and urinals.
5. Tools and equipment may include ladders, hand and power tools, measuring equipment and heating, cutting and bending equipment, lifting/load shifting equipment may include restricted height scaffolding, elevated work platforms, hand trolleys, rollers, forklifts, chain blocks, hoists and jacks.
6. Materials include but are not limited to sanitary fixtures, UPVC (Unplasticised Poly Vinyl Chloride), copper, copper alloy and stainless steel pipes.
7. Performance of all elements in this unit standard must comply with all relevant workplace requirements and/or manufacturers' specifications.

8. 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 may include but is not be limited to workplace inspection, equipment 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 associated with installing and fitting off sanitary fixtures, and the workplace environment, are adhered to throughout the work.
- 1.3 Quality assurance requirements are identified and adhered to in line with workplace procedures.
- 1.4 Tasks are planned and sequenced in conjunction with others involved in or affected by the work.
- 1.5 Tools and equipment, including personal safety equipment, are selected and checked for serviceability in line with workplace procedures.
- 1.6 Work area is prepared to support the efficient installation and fitting of sanitary fixtures.

Element 2: Perform setting out operations

Performance criteria

- 2.1. Set out is checked for compliance with design drawings, manufacturers' instructions and relevant authority requirements.
- 2.2. Quantity and type of materials required are calculated from design drawings and specifications.
- 2.3. Materials and equipment are identified and ordered/collected in line with workplace procedures.
- 2.4. Materials and equipment are checked for compliance with standards, docket/order form and for acceptable condition.

Element 3: Mount sanitary fixtures

Performance criteria

- 3.1. Position of sanitary fixtures is determined in line with plans and specifications and site requirements.
- 3.2. Fixtures are positioned and installed to comply with plans and specifications and manufacturers' requirements.
- 3.3. Fixtures, components and pipework are assembled, installed and tested to manufacturers' requirements, job specification and standards.
- 3.4. Fixtures are installed and connected without damage or distortion to fixture, pipework, the surrounding environment, or to other services.
- 3.5. Completed installation is checked for correct functioning and compliance with 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 equipment are cleaned, checked and maintained in line with workplace procedures.
- 4.4. Documentation is completed in line with workplace procedures.

Registration Data

Subfield:	General Construction
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