ESWATINI GOVERNMENT
NATIONAL TRADE STANDARD
APPROVD BY THE INDUSTRIAL TRAINING BOARD
FOR TADE TESTING IN THE TRADE/OCCUPATION
OF
PLUMBER

(a) Practical skill Requirements Grade II

In addition to fulfilling the Grade III requirements:

Every applicant must be able to:

1. Interpret and work to diagrams of a plumbing layout for a domestic building.
2. Bend up to 1 1/2"/40mm diameter iron pipes by any method.
3. Bend up to 1"/25mm diameter light gauge copper pipes by machine or compression spring methods.
4. Identify and use various types of hard and soft solders and their fluxes.
5. Install any common sanitary and plumbing fixtures in a domestic building.
6. Cut holes using correct method in storage tanks for supply, distribution, warning/overflow and scouring pipes.
7. Correctly fit copper pipe fittings such as manipulative compression, non-manipulative compression and capillary soldered.
8. Install and/replace cast iron, asbestos-cement, PVC salt-glazed stoneware and pitch fibre sewerage pipes up to 100mm diameter.
9. Install gully, interceptor, grease and oil traps.
10. Overhaul and rectify faulty ball gate and non-return valves and their connections.
11. Prepare and fit metal roof flashings.
12. Install hot and cold water pipe runs in a domestic.
13. Make a bolted joint on a flanged pipe.

(b) Tools and Equipment Requirements Grade II

Every application should have his possession and/or be able to use tools and equipment supplied as for Grade III plus any other tools and equipment required to carry out the practical skill requirements satisfactorily.

(c) Related Knowledge Requirements Grade II

In addition to fulfilling the Grade III Requirements:
Every applicant must have a sound knowledge of:

1. Metals in common use in the trade, their application various functions.
2. The operating principles and uses of the machines enumerated under the practical skill requirements.
3. Different types of bearings, their function and application.
4. The different methods of lubrication such as grease cup, oil ring, wick, pressure, etc.
5. The brazing of cast iron and non-ferrous metals.
6. Welding equipment and the techniques of welding including the oxy-acetylene gas cutting of metal.
7. The uses of seals, gaskets and jointing drawings.
8. The various symbols used in engineering drawings.
9. Working sketches and be able to produce sketches from a drawing.