

- I. JOB TITLE : CABLE JOINTER (POWER)
- II. JOB LEVEL : SKILLED WORKER
- III. JOB DESCRIPTION : Joints low voltage cables (i.e. not exceeding 1000 volts) either with the circuits dead or one or both ends energised and joints dead cables of all voltages.
- IV. TRADE SKILLS : Ability to:
1. Correctly use and maintain the tools of the trade including power tools, test equipment and measuring instruments.
  2. Prepare different types of cables with different cable sheathing systems and accessories for the jointing process.
  3. Joint copper or aluminium conductor cables using soldering, mechanical or compression techniques.
  4. Joint telephone and pilot cables.
  5. Terminate cables using soldering, mechanical or compression techniques.
  6. Insulate cable joints and terminations according to the specifications or code of practice using heat shrink tubing or cold mix compound.
  7. Plumb lead or aluminium sheathed cable in any plane and apply the alternative use of mechanical earth connector.
  8. Identify different types of cables, and different cores and pairs for telephone and pilot cables.
  9. Use safety equipment, and protective devices and equipment.
  10. Correctly instruct, supervise and transfer skills to any apprentice or semi-skilled worker assigned to him to ensure safety and quality of work.
  11. Apply Live work procedures and skills for Tee and Straight LV joints and terminations.

V. TRADE THEORY : Knowledge of:

1. Single and three-phase circuits, balanced and unbalanced loads in three-phase four-wire circuits.
2. Cable sizes, ratings, bending radii, direct laying and draw in systems.
3. Use of voltage indicating equipment and measuring instruments.
4. Cable construction, jointing materials, reading and interpretation of jointing instructions, jointing sequence and joint specifications.
5. Metals and compounds mixing and curing temperature effects on cable materials.
6. Electric stress and stress relieving methods as well as prevention of water entry to joints.
7. Test equipment and testing methods applicable to cable joints.
8. Safety and environmental precautions on the use of fluxes, flame, resins and compounds and the responsibility to protect the public.
9. Industrial hazards, safety and health precautions, energy saving and environmental concerns.
10. Installation practice and regulations, and relevant codes of practice.
11. Relevant ordinances and regulations.

VI. ENTRY ROUTE : Preferred Minimum Entry Qualification:

Completion of Secondary 3.

Training:

4-year organized apprenticeship or 3-year organized apprenticeship if preceded by a relevant one-year full-time basic craft course, with attendance at a relevant part-time day-release or block-release craft course in a an institute of vocational education or equivalent. (If the trade covers only LV cables, 3-year apprenticeship is considered adequate to master the skills and techniques)