

DUTIES OF APPRENTICES

GUIDELINES FOR DOCTOR'S LETTER

It is required that all applicants provide a letter from his or her doctor stating the applicant is physically capable of performing the work of the trade. The work of the trade consists, but is not limited to the following descriptions (please see both sides of this sheet):

DUTIES OF AN APPRENTICE PIPEFITTER

In order to perform the essential job functions an Apprentice Pipefitter must possess familiarity with the following equipment and processes and be proficient in all areas of work as described below:

- a) Principal tools and machines used in the trade, e.g., pipe cutter and pipe threader, pipe wrenches, monkey wrenches, threading tools, drills, portable power tools, grinder, hammers, punches, chisel, hacksaw, level, plumb bob, screwdriver, vices, pliers, testing equipment, arc and gas welding apparatus.
- b) Erection and dismantling of scaffolding and the use of ladders.
- c) Installation and maintenance of steam and hot water heating systems, ventilation, refrigeration systems, air conditioning, oil burning units, power piping, welding, industrial process piping, temperature control piping, high and low pressure boilers, gas fixed equipment, pneumatic piping, hydraulic piping, oil piping and process piping.
- d) Installation and maintenance of heat-controlled equipment, thermostats, and like equipment.
- e) Installation of recessed floor and wall radiators, heating and ventilating units and the testing of such installations.
- f) Installation of pipe lines and fittings, copper tubing and connections used in heating and ventilating, including the cutting of openings in walls for pipes, installation of pipe hangars, cutting and threading of pipe, assembly and testing the system under pressure for leaks.
- g) Installation of piping for refrigeration and other devices used in cooling and air conditioning, refrigeration and testing for leaks.

DUTIES OF AN APPRENTICE REFRIGERATION SERVICE TECHNICIAN

An Apprentice Refrigeration Service Technician must possess a basic knowledge of all aspects of the pipefitting trade as defined above. In addition, the Apprentice Refrigeration Service Technician must be familiar with the following equipment and processes and be proficient in all additional areas of work described below:

- a) Fittings, tubing and pipe;
- b) Setting and mounting equipment;
- c) Refrigerant and water piping;
- d) Hangers, insulation and vibration elimination equipment;
- e) Soldering and brazing;
- f) Evacuation, pressure testing, charging;
- g) Installation of controls;
- h) Start-up and testing procedures;

- i) Thermostatic, pressure, mechanical controls, humidification and timing devices, starters, contractors and relays;
- j) Valves, including refrigeration meeting devices, globe and gate, solenoid, E.P.R. C.P.R. and specialty (water regulators, steam regulators, 3-way, etc.)
- k) Compressors;
- l) Evaporators;
- m) Condensers;
- n) Air conditioning;
- o) Oil burners;
- p) Operate computer equipment and be familiar with basic software programs.

Both Apprentice Pipefitters and Apprentice Refrigeration Service Technicians should possess the ability to perform related functions, including but not limited to:

- a) Understand and follow directions;
- b) Read and comprehend schematic diagrams and manuals;
- c) Read and work from blueprints and specifications;
- d) Knowledge of verbal and physical commands;
- e) Maintain and clean equipment;
- f) Knowledge of the properties of gases, chemicals, air, water and other elements under pressure;
- g) Ability to react quickly in unexpected emergencies;
- h) Complete familiarity with and adherence to safety procedures;
- i) Must demonstrate initiative, motivation, and responsibility.
- j) Must demonstrate ability to work with others.

In order to perform these essential functions, all apprentices must have the ability to do the following:

- a) Work required full time and overtime hours indoors and outdoors in all types of weather;
- b) Be punctual and dependable;
- c) Take orders, work well with others, and be respectful;
- d) Communicate with others verbally and through hand signals;
- e) Sit, stand, lift and/or carry for 10 hours or more per day;
- f) Lift a minimum of 50 lbs. on a regular basis;
- g) Work in enclosed spaces for significant periods of time;
- h) Climb ladders and scaffolding;
- i) Grasp and manipulate small and large tools, equipment and controls;
- j) Be able to perform different operations with left and right hands simultaneously, and coordinate eyes, hands and arms rapidly and accurately;
- k) Have a valid driver's license