

Refrigeration and Air Conditioning Systems Mechanic

Trades Qualification and Apprenticeship Act

Compulsory Trade

Designated Red Seal Trade

Trade Code 313A

NOC 7313

Description

- Read and interpret blueprints, drawings or other specifications
- Measure and lay out reference points for installation
- Assemble and install refrigeration or air conditioning components such as motors, controls, gauges, valves, circulating pumps, condensers, humidifiers, evaporators and compressors using hand and power tools
- Measure and cut piping, and connect piping using welding and brazing equipment
- Install, troubleshoot and overhaul entire heating, ventilation, air handling, refrigeration and air conditioning systems
- Start up system and test for leaks using testing devices
- Recharge system with refrigerant, check and test regulators, calibrate system and perform routine maintenance or servicing
- Repair and replace parts and components for entire refrigeration, air conditioning, ventilation or heat pump systems

Personal Qualities

- You may be required to work in cramped areas or on roof tops
- You may work outside at various times of the year
- You will climb up and down ladders
- You have the stamina to be on your feet for long periods of time
- You are safety conscious
- You need to be in good physical condition to carry materials
- Review Essential Skills profile for additional qualities srv108.services.gc.ca/english/profiles/217.shtml

Career Opportunities

- Refrigeration and Air Conditioning mechanics work for a wide variety of companies and contractors where cooling systems are required including residential, commercial and industrial sectors
- A significant portion of journeypersons are employed as unionized workers
- Many refrigeration and air conditioning mechanics have their own business

Educational/Training Requirements

- The minimum entry for apprenticeship is Grade 10; however, many employers and unions require Grade 12
- Completion of a 5 year apprenticeship program at 1,800 hours per year
- If you have completed 9,000 hours of on the job experience/training but have not completed the Apprenticeship Program you may be eligible to challenge the Certificate of Qualification

Training Availability

Trade Related Programs

Heating, Ventilation and Air Conditioning Techniques - HVAC

Durham College – Whitby Campus

durhamcollege.ca

Apprenticeship Training

George Brown College
Toronto, ON

www.georgebrown.ca/apprenticeship

Potential Earnings

- Apprentices progress initially from 40% to 80% of journeyperson's wages over time
- Wages¹ range from \$15.00 to \$38.25 an hour, excluding overtime, with journeypersons usually earning the higher end of the pay scale

Prospects For Employment

- Ratio for journeyperson/apprentice is 1:1, 2:1, 3:2, 4:2, 5:3, 6:3 or 7:4
- Employment is good and expected to grow more rapidly than average for all occupations through the year 2009² and grow at an average, or slightly average through 2014³
- Employment opportunities are linked to the economy and are somewhat cyclical with spring and summer being high demand times

Financial Incentives

- Employers who employ first, second and third year apprentices can apply for the Apprenticeship Training Tax Credit
- Employers who employ first and second year apprentices can apply for the Apprenticeship Job Creation Tax Credit
- Apprentices are able to apply for the Apprenticeship Incentive Grant
- Apprentices may also be able to apply for the Tradesperson's Tools Tax Deduction

Additional Information

United Association of Plumbers, Steamfitters and Pipe Welders

www.ua.org

HVAC Mechanic

www.hvacmechanic.com

Apprenticeship Subject Pathways

www.edu.gov.on.ca/eng/training/apprenticeship/skills/pathwaye.pdf

National Occupational Classification

www5.hrsdc.gc.ca/NOC-CNP/

Made with the Trades

www.madewiththetrades.com/exploretrades.php

Ontario Construction Secretariat

www.iciconstruction.com

¹ www.labourmarketinformation.ca

² www.ontariojobfutures.ca/profile7313.html

³ www.careersinconstruction.ca/profiles/profile_hva_graph_e.asp?p=ON