

CAREER PROFILES

Refrigeration and air conditioning mechanics:

Refrigeration and air conditioning mechanics install, maintain, repair, and overhaul residential central air conditioning systems, commercial and industrial refrigeration and air conditioning systems, and combined heating, ventilation, and cooling systems.

Wage/Salary Information:

\$53,200 is the median annual salary found in local job-postings.

\$30.35/hour is the median wage reported locally.

Commonly Listed Skills in Job Postings:

- Reading
- Document use
- Data analysis
- Writing
- Numeracy
- Measurement skills
- Oral communication
- Thinking
- Problem solving
- Digital technology

Job Duties:

Refrigeration and air conditioning mechanics read and interpret blueprints, drawings, or other specifications; measure and lay out reference points for installation; and 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. Refrigeration and air conditioning mechanics measure and cut piping, and connect piping using welding and brazing equipment. They install, troubleshoot, and overhaul

entire heating, ventilation, air handling, refrigeration, and air conditioning systems and start up system and test for leaks using testing devices. Refrigeration and air conditioning mechanics also recharge system with refrigerant, check and test regulators, calibrate system, and perform routine maintenance or servicing and repair and replace parts and components for entire refrigeration, air conditioning, ventilation, or heat pump systems.

Working Conditions:

The majority of refrigeration and air conditioning mechanics work 40 hours per week. However, overtime and on-call work is commonly required to complete a project or to repair malfunctioning critical equipment (e.g., freezers containing perishable items) immediately.

Refrigeration and air conditioning mechanics often work indoors. They may work in buildings under construction or in warehouses, office towers, hospitals, schools, or stores. Outside work may also be required, so workers may be exposed to various weather conditions.

Work in awkward or cramped positions and at heights is common. Hazards may include injuries from handling heavy equipment or from electrical shock. Safety procedures are followed, particularly when handling potentially harmful refrigerants.

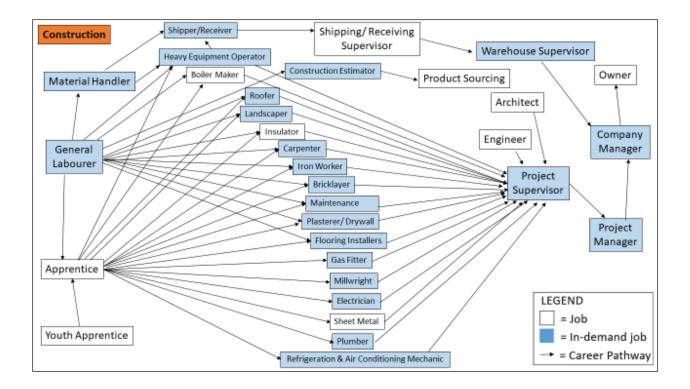
Career Pathways:

Refrigeration and air conditioning mechanics may begin their career as shop hands or in entrylevel positions, or they may begin as apprentices.

With experience, refrigeration and air conditioning mechanics can advance to supervisory positions or start their own business.

Refrigeration and air conditioning mechanics are employed by refrigeration and air conditioning installation contractors, various industrial settings, food wholesalers, engineering firms, and retail and servicing establishments. Below are potential career pathways for refrigeration and air conditioning mechanics:

- Air Conditioning and Heating Mechanic
- Central Air Conditioner Installer
- Commercial Air Conditioning Mechanic
- Heating and Cooling Mechanic
- HVAC Mechanic
- Transport Refrigeration Mechanic



Education and Training Pathways:

If you're interested in becoming a refrigeration and air conditioning mechanic, you can begin your apprenticeship or attend a local training/education program.

Apprenticeship Details:

Refrigeration and Air Conditioning Systems Mechanic

- Certification: Compulsory (required to practice this profession in Ontario)
- Red Seal: Yes
- Training: 9,000 hours of combined on-the-job and in-class technical training
- In-class training: 720 hours

Individuals interested in pursuing an apprenticeship pathway, should follow these steps:

- 1) Get hired by an employer/sponsor/union
- 2) Apply online to register as an apprentice at <u>www.ontario.ca/page/start-apprenticeship</u>
- 3) Sign a training agreement with your employer/sponsor and the Employment Ontario apprenticeship office.
- 4) Become a Member of the Ontario College of Trades Apprentices Class at <u>www.collegeoftrades.ca/membership</u>
- 5) Keep a record of the hours you work
- 6) Achieve the competencies listed in your training standard if required in your trade

- 7) Complete all of the training requirements in your trade and you will receive a Certificate of Apprenticeship (CoA).
- 8) Write the Exam for the Certificate of Qualification if required in your trade

If you are currently in high school and would like to begin an apprenticeship, visit <u>oyap.com</u> for more information about the Ontario Youth Apprenticeship Program.

Individuals unsure about whether to pursue an apprenticeship or not, can learn more by visiting <u>www.ontario.ca/page/prepare-apprenticeship</u>

St. Clair College:

Heating, Refrigeration, & Air Conditioning Technician

Admission Requirements:

- OSSD with the majority of courses at the College (C), University (U), University/College (M), or Open (O) level;
- Grade 12 Math (C) or (U);
- Senir level Physics recommended (C) or (U)

Academic Credential: Two Year - Ontario College Diploma

Professional Certification: N/A

Attendance: In-person

Full-time or Part-time: Full-time

Program Length: 2 year – 4 semesters

Program Cycle: Intake Fall and Winter

Program Cost: \$3,804.05/year

OSAP Eligible: Yes

Location: 2000 Talbot Road West, Windsor, ON, N9A 6S4

For more information on this program, please visit:

http://www.stclaircollege.ca/programs/postsec/hvac/

Disclaimer: The educational institution reserves the right to change information without notice, and may result in discrepancies between their information and the information presented above. If any errors are found, please report them to <u>info@workforcewindsoressex.com</u>.