

Insulator

Insulators apply, remove and repair thermal and acoustical insulation (e.g., calcium silicate, glass foam, mineral wool, styrofoam, fibreglass) on all types of industrial equipment (e.g., duct piping, heat exchangers, tanks, vessels).

In general, insulators:

- Read and interpret drawings and specifications to determine insulation requirements
- Select the amount and type of insulation to be installed as well as a method of securing the insulation (e.g., spraying, pinwelding, wiring, pasting, strapping, taping) according to the type and shape of surface, whether or not the equipment is cold or hot, inside or outside, and what the equipment is going to be used for
- Measure and cut insulating material and coverings to the required shape and dimension
- Fit insulation around obstructions or shape insulation materials and protective coverings
- Install vapour barriers and finish insulated surfaces by applying metal cladding, canvas, plastic sheeting or cement
- Remove or seal off old asbestos insulation

Working Conditions

Insulators work both indoors and outdoors, often in uncomfortable or potentially hazardous circumstances: in very hot or cold settings, on ladders or scaffolding, in cramped areas, with materials that are dusty, itchy or toxic. They must observe safety precautions and use equipment such as respirators, coveralls, and safety glasses/goggles.

Insulators usually work a 40-hour, five-day week but may work 40 hours in four days. Some overtime may be required to meet construction deadlines. Those employed in the maintenance of industrial plants may work shifts.



Skills and Abilities

The work is most rewarding for those who enjoy doing tasks precisely. It is also an occupation for people who prefer stability and security.

To be successful in their trade, insulators need:

- Manual dexterity
- The ability to lift up to 25 kilograms
- The agility required to work in cramped spaces
- The ability to work at heights and in hot and cold environments

Working in Alberta

To work as an Insulator in Alberta, a person must:

- Be a registered apprentice, a certified journeyman, hold a recognized trade certificate OR
- Work for an employer who is satisfied that the worker has the skills and knowledge expected of a certified journeyman, OR
- Be self-employed

Insulators learn their skills by registering with Alberta Apprenticeship and Industry Training to participate in apprenticeship training and, upon successful completion, are awarded the Alberta Journeyman Certificate.

An insulator who holds a valid trade certificate from Alberta or from another Canadian province or territory may apply to write the Interprovincial Exam and, if successful, be granted a Red Seal under the Interprovincial Standards Program. The Red Seal is recognized throughout most of Canada.

An insulator who holds a certificate that was issued by another recognized apprenticeship authority in Canada (province, territory or federal jurisdiction) may apply for an Alberta Equivalency document under the Equivalency Program.

Insulators who:

- Hold a non-recognized Canadian credential in an Alberta-designated trade, OR
- Can demonstrate skills and experience in an Alberta-designated trade that meets standards set for journeymen in Alberta may be eligible to apply for trade certification under the Qualification Certificate Program.



Individuals possessing a valid Alberta Journeyman Certificate, an Alberta Occupational Certificate, or a credential that is recognized as equivalent to an Alberta trade or occupational certificate are eligible to receive a Blue Seal business credential after completing the necessary requirements.

Apprenticeship Training

The term of apprenticeship for an insulator is 4 years (four 12-month periods) including a minimum of 1375 hours of on-the-job training and 6 weeks of technical training in the first and second year, 1300 hours of on-the-job training and 8 weeks of technical training in the third year, and 1600 hours of on-the-job training in the fourth year.

- An applicant who previously completed courses of study or work experience related to the Insulator trade or holds a related journeyperson certificate and has the employer's recommendation, may qualify for credit that could reduce the term of apprenticeship
- A person who has previous training or work experience in the trade and wants to determine their level of skill and knowledge for entry or advanced standing in an apprenticeship program may apply for a Prior Learning Assessment.
- A high school student can become an apprentice and gain credits toward apprenticeship training and a high school diploma at the same time under the Registered Apprenticeship Program (RAP)

To learn the skills required of an Insulator in Alberta and be issued an Alberta Journeyman Certificate, a person must:

- Satisfy the entrance requirements or pass the entrance exam
- Find a suitable employer who is willing to hire and train an apprentice

Most employers prefer to hire high school graduates and may select apprentices from among their current employees.

- With their employer, complete the Apprenticeship Application and Contract and submit it to an Apprenticeship and Industry Training Office
- Pay the non-refundable application fee as identified on the application noted above
- Complete the required on-the-job training
 - during on-the-job training, apprentice insulators earn at least 50 percent of the journeyperson wage rate in their place of employment in the first year, 60 percent in the second, 70 percent in the third, and 80 percent in the fourth year.
- Complete the required technical training each year



- Enroll in technical training
 - select an educational institution that offers training for Insulator apprentices, and a time to attend training
 - determine requirements for enrolling at the selected institution, and forward completed enrollment form to the selected institution
- Review books and materials required for training
- Successfully complete all required exams

Review the Apprenticeship and Industry Training Policy on Cheating

- Apprentices may attempt the Interprovincial Exam in the final period of their apprenticeship training and, if successful, be granted a Red Seal.
- Review the Apprenticeship and Industry Training Policy on Cheating

When apprentices attend technical training, they are required to pay the applicable tuition fee and purchase course supplies.

Grants, scholarships and other financial assistance may be available. For more information contact an Apprenticeship and Industry Training Office.

Interprovincial Standards (Red Seal) Program

To qualify for a Red Seal, a person must:

- Hold a valid trade certificate in a trade that participates in the Interprovincial Standards (Red Seal) Program:
 - an Alberta trade certificate or completion of apprenticeship certificate, OR
 - a journeyperson or completion of apprenticeship certificate issued by another Canadian province or territory
- For applications based on Alberta certificates
 - complete the Interprovincial (Red Seal) Examination Application - Alberta Certified (no application fee is required)
 - submit the application to an Apprenticeship and Industry Training Office
- For applications based on non-Alberta certificates
 - complete the Interprovincial (Red Seal) Examination Application - Canadian Certified
 - submit the application to an Apprenticeship and Industry Training Office
 - pay the non-refundable application fee as identified on the application form



- Prepare for the exam
 - review the Apprenticeship and Industry Training Policy on Cheating
 - review available resource materials
- Successfully complete the required exam

Equivalency Program

To qualify for an Equivalency document based on a recognized credential, a person must:

- Have a valid trade credential issued by another Canadian province or territory or by the Department of National Defence
 - completion of apprenticeship certificate issued before the trade began participation in the Interprovincial Standards (Red Seal) Program, OR
 - completion of apprenticeship certificate issued in a trade that does not participate in the Interprovincial Standards (Red Seal) Program, OR
 - other recognized trade credential
- Complete the Equivalency Application and deliver it in person to an Apprenticeship and Industry Training Office. Government issued photo identification is required.
- Pay the non-refundable application fee as identified on the application noted above

A person who has a recognized certificate, as described above, does not require an Alberta Equivalency document to work in the trade in Alberta. However, some employers may require an Alberta Equivalency document as proof that the certificate is equivalent to the requirements of the trade in Alberta.



Qualification Certificate Program

To qualify for a Qualification Certificate *based on Canadian credentials*, a person must:

- Have a valid trade credential issued by another Canadian province or territory or by the Department of National Defence, and the credential is NOT recognized as being equivalent to a trade certificate issued by Alberta
- Complete the Qualification Certificate – Canadian Credentials Application and submit it to an Apprenticeship and Industry Training Office.
- Pay the non-refundable application fee as identified on the application noted above
- Prepare for the exam(s)
 - review the Apprenticeship and Industry Training Policy on Cheating
 - review available resource materials
- Successfully complete the required exam(s)

To qualify for an Alberta Qualification Certificate *based on work experience*, a person must:

- Have at least 8,475 hours and 72 months of 'hands-on' work experience as an insulator

Time spent on supervisory or foreman duties, counter work, heading the tool crib, or on a training course is NOT counted as 'hands-on' work experience.

- Complete the Qualification Certificate - Work Experience Application and submit it to an Apprenticeship and Industry Training Office
- Pay the non-refundable fees as identified on the application noted above

This application fee covers the verification and assessment of the applicant's work experience hours/months as well as one attempt at the Qualification Certificate theory examination. The Qualification Certificate practical examination requires a separate fee as identified on the application noted above.

- Prepare for the exam(s)
 - review the Apprenticeship and Industry Training Policy on Cheating
 - review available resource materials
- Successfully complete the required exam(s)

