

Pipefitter / Steamfitter

Steamfitter – pipefitters lay out, assemble, fabricate, maintain and repair piping systems which carry water, steam, chemicals or fuel used in heating, cooling, lubricating and other processes.

To install a typical piping system in a commercial building or industrial plant, steamfitter/pipefitters:

- Study blueprints, drawings and specifications to determine the type of pipe and tools to use, and lay out the sequence of tasks
- Sometimes make detailed sketches for pipe and equipment fabrication and installation, as required
- Measure, cut, thread, groove, bend, assemble and install metal, plastic and fibreglass pipes, valves and fittings
- Join pipe sections, related equipment and secure in position
- Use testing equipment to check systems for leaks

Steamfitter – pipefitters also remove and replace worn components, do general maintenance work and may work on plant shut-downs.

Working Conditions

Steamfitter – pipefitters work both indoors and outdoors at physically demanding tasks that often require climbing. They work approximately 40 hours a week, with overtime sometimes required to meet construction deadlines. Construction contractors may require employees to travel and live in rented accommodation or at a company “on-site” camp.

There is some risk of injury involved in working with power tools and heavy equipment.

Skills and Abilities

The work is most rewarding for those who enjoy working with little direction or supervision.

To be successful in their trade, steamfitter – pipefitters need:

- The physical strength and stamina required to lift heavy materials and stand for long periods



- Manual dexterity
- Mechanical aptitude
- The ability to read and understand complex instructions
- The ability to do careful and exacting work

Working in Alberta

To work as a Steamfitter - Pipefitter in Alberta, a person must be a registered apprentice or a certified journeyperson or hold a recognized trade certificate. Steamfitter – pipefitters 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.

A steamfitter – pipefitter 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.

A steamfitter – pipefitter 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.

Steamfitter – pipefitters 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 journeypersons 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 a steamfitter – pipefitter is 3 years (three 12-month periods) including a minimum of 1500 hours of on-the-job training and 8 weeks of technical training each year.

- An applicant who previously completed courses of study or work experience related to the Steamfitter – Pipefitter 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 a Steamfitter-Pipefitter 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 steamfitter – pipefitters earn at least 50 percent of the journeyperson wage rate in their place of employment in the first year, 65 percent in the second, and 80 percent in the third year.
- Complete the required technical training each year
- Enroll in technical training
 - select an educational institution that offers training for Steamfitter-Pipefitter 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
 - for an apprentice as a **steamfitter – pipefitter**
 - 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. 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. More information is available at www.tradesecrets.gov.ab.ca or by contacting 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 6,750 hours and 54 months of 'hands-on' work experience as a steamfitter – pipefitter
- There are exceptions if the applicant has a recognized journeyperson certificate in a related trade
 - a certified plumber must have at least 4,500 hours and 36 months of 'hands-on' work experience as a steamfitter – pipefitter
 - a welder must have at least 4,500 hours and 36 months of 'hands-on' work experience as a steamfitter – pipefitter
 - a certified sprinkler systems installer must have at least 4,500 hours and 36 months of 'hands-on' work experience as a steamfitter – pipefitter
 - a certified gasfitter (A) must have at least 4,500 hours and 36 months of 'hands-on' work experience as a steamfitter – pipefitter

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)

