



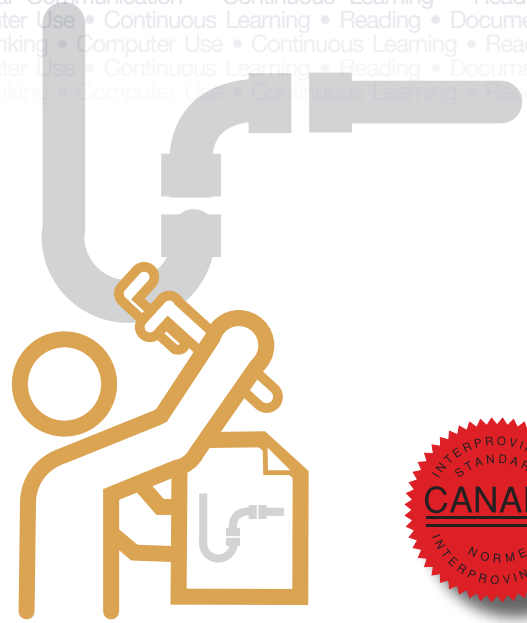
Now and Tomorrow
Excellence in Everything We Do

Essential Skills and Apprenticeship

Essential Skills for Success as a Plumber

Plumbers use Essential Skills to complete trade-related tasks. Use this fact sheet to:

- learn how Essential Skills are used on the job;
- find out the skills you need to succeed in your trade; and
- help prepare yourself for your career.



Plumber

Reading



- Read brochures from suppliers to find information on materials.
- Read health and safety notices.
- Read and follow product installation procedures.
- Read Material Safety Data Sheets (MSDS) to obtain information about hazardous products.
- Read manuals to install, repair and maintain plumbing systems.
- Read trade text books to understand the science related to plumbing, such as the properties of water, metals and alloys.
- Read the Canadian Plumbing Code to follow the regulations on plumbing systems.

Document Use



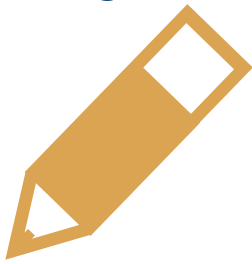
- Read notes in daily log books to track work in progress.
- Read assembly drawings to install fixtures and appliances.
- Interpret diagrams in the Canadian Plumbing Code to ensure that the capacity of a building's venting systems complies with regulatory requirements.
- Interpret schematics to trace the circuit for gas flow when planning for the installation of piping.
- Interpret drawings to find municipal connections or water sources and to plan the routing of pipe when installing water services.
- Interpret blueprints to find the locations of piping and catch basins for drainage systems.

Numeracy



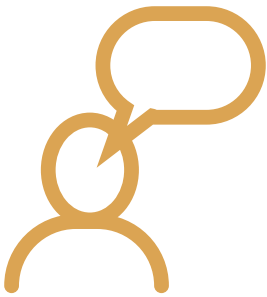
- Measure to locate and mark positions for pipe connections.
- Compare pressure gauge readings and manufacturers' standards when installing gas pipes underground.
- Schedule daily activities to complete assigned tasks.
- Estimate the time and quantity of materials needed to complete a project.
- Adjust schedules to coordinate work with other tradespersons.
- Make calculations using formulae, such as determining the total fall on a drain line.
- Prepare invoices based on hourly labour rates, cost of materials and taxes.
- Make calculations using trigonometric constants based on the angle of elbows.

Writing



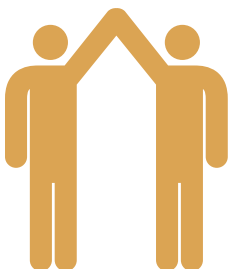
- Write short notes about repairs in progress and tasks to be completed.
- Write a list of materials required for a job.
- Maintain a daily log book to record hours worked, tasks completed and problems encountered.
- Complete incident reports to record an accident in the workplace.

Oral Communication



- Talk to suppliers about the availability of parts.
- Communicate with other tradespersons on a job site to coordinate work and discuss potential problems.
- Communicate with a foreperson to receive job assignments.
- Talk to suppliers to troubleshoot system problems.
- Talk to customers who may be agitated or concerned.

Working with Others



- Coordinate with other plumbers and tradespersons on a job site to determine the order in which various work tasks should be completed.
- Participate in discussions about work processes or product improvement.
- Demonstrate how to perform tasks to other workers.
- Orient or train new employees.
- Communicate with customers, suppliers and management.

**For more information on Essential Skills
and related resources, visit**

hrsdc.gc.ca/essentialskills

**For more information on the Interprovincial
Standards Red Seal Program, visit**

www.red-seal.ca

You can order this publication by contacting:

Publications Services
Human Resources and Skills Development Canada
140 Promenade du Portage
Phase IV, 12th Floor
Gatineau, Quebec
K1A 0J9

Fax: 819-953-7260
Online: <http://www.hrsdc.gc.ca/publications>

This document is available on demand in alternative formats (Large Print, Braille, Audio Cassette, Audio CD, e-Text Diskette, e-Text CD, or DAISY), by contacting 1 800 O Canada (1 800 622 6232). If you have a hearing or speech impairment and use a teletypewriter (TTY), call 1 800 926 9105.

© Her Majesty the Queen in Right of Canada, 2009

Paper
Cat. No.: HS18-10/1-2009E
ISBN: 978-1-100-13815-2

PDF
Cat. No.: HS18-10/1-2009E-PDF
ISBN: 978-1-100-13834-3