

SKILLED**TRADES**^{BC}

Personal Record Book

Gasfitter Class A

This is your Record Book!

DO NOT SUBMIT TO SkilledTradesBC

This is not required to achieve certification

- It is a record of your progress towards achieving certification in the trade
- It provides a record of your experience
- It is your responsibility to keep it up-to-date
- Take it with you if you change employers

Note: Employers and supervisors are not responsible for keeping your Record Book up-to-date. They are responsible for sign-off of hours and sign-off of competencies once you have achieved the required level of skills and knowledge.

APPRENTICE IDENTIFICATION

Trade: GASFITTER – CLASS A

Legal First Name:		Legal Last Name:	
Suite Number:	Street Number and Name:		
City:		Province:	Postal Code:
Telephone Number:		Email Address:	

Work Safely!

A safe work attitude contributes to an accident free environment. Accident prevention and safe working conditions are the responsibility of both employers and employees.

Wear the required personal protective equipment, follow safe work practices and follow all safety regulations applicable to specific job activities.

Employer's responsibilities:

- Provide and maintain safety equipment and protective devices
- Ensure proper safe work clothing is worn
- Enforce safe work procedures
- Provide safeguards for machinery, equipment and tools
- Observe all accident prevention regulations
- Train employees in safe use and operation of equipment

Employee's responsibilities:

- Work in accordance with the safety regulations pertaining to job environment
- Work in such a way as not to endanger themselves or fellow workers.

CONTENTS

APPRENTICE IDENTIFICATION.....	2
CONTENTS.....	3
EMPLOYER INFORMATION.....	4
WORKPLACE HOURS	6
DATE (TO-FROM)	7
EMPLOYER	7
HOURS.....	7
TOTAL HOURS	7
RECORD OF COMPETENCIES	8
LEVEL 1	9
LEVEL 2	14
MISSING COMPETENCIES?	18
TECHNICAL TRAINING	19
COMPLETION REQUIREMENTS.....	20
CERTIFICATIONS	21

EMPLOYER INFORMATION

Originating Employer

Start Date:	End Date:
Employer:	
Contact Person:	
Address:	Phone:
	Email:
	Fax:
Supervisor/Journeyperson 1:	*TWID #:
	Phone:
	Email:
Supervisor/Journeyperson 2:	TWID #:
	Phone:
	Email:

*TWID # – Trade Worker Identification Number

If you have more than one employer during your apprenticeship, record the information for subsequent employers on the following page(s).

If your job ends or you change employers...

Before leaving your place of employment:

- Please have your sponsor update your Work Based Training hours on their [*SkilledTradesBC Portal account*](#).
- Update Record of Competencies with your supervisor.
- Confirm with your employer that your workplace hours have been reported to SkilledTradesBC, and if possible, get a copy of all Work-Based Training Hours reports submitted.
- Notify SkilledTradesBC of the change in your employment by submitting a [*SkilledTradesBC Portal registration*](#) with your new employer.

When re-employed...

You must be registered with your new employer before submitting any work-based training hours to the SkilledTradesBC.

Subsequent Employers

Start Date:	End Date:
Employer:	
Contact Person:	
Address:	Phone:
	Email:
	Fax:
Supervisor/Journeyperson 1:	TWID #:
	Phone:
	Email:
Supervisor/Journeyperson 2:	TWID #:
	Phone:
	Email:

Subsequent Employers

Start Date:	End Date:
Employer:	
Contact Person:	
Address:	Phone:
	Email:
	Fax:
Supervisor/Journeyperson 1:	TWID #:
	Phone:
	Email:
Supervisor/Journeyperson 2:	TWID #:
	Phone:
	Email:

WORKPLACE HOURS

Instructions

Make an entry in this section each time your hours are reported to SkilledTradesBC.

1. Get a copy of the *Workplace Hours Report* from your employer.
2. Fill in the dates of the reporting period and the hours reported.
3. Enter your employer name, address and phone number.
4. Keep your Record Book in a safe place.

Workplace Hours

Workplace hours must be submitted to SkilledTradesBC by your employer on a regular basis. Your hours should be reported at least every six months; however, every three months is preferred.

At the beginning of your apprenticeship discuss the frequency of reporting with your employer.

Keeping Workplace hours up-to-date in your Record Book gives you the tools to better manage your apprenticeship. It provides you with the opportunity to:

- Follow up with your employer each reporting period to ensure your hours are reported on a regular basis.
- Discuss your progress with your direct supervisor/journeyperson on a regular basis.

RECORD OF COMPETENCIES

Instructions

The Record of Competencies is filled out and signed-off by the journeyperson supervising your work.

1. Know what skills are expected at each level of the program.
2. Ask the journeyperson to sign off on the competency when you have acquired the skills and are able to perform the task without supervision.
3. If the journeyperson agrees that you have the required skills, they will:
 - Record the date that the competency was achieved
 - Sign off on the competency
 - Enter their Trades Worker Identification Number (TWID #)

What is a Record of Competencies?

The Record of Competencies lists all competencies you should be knowledgeable in prior to receiving your certification. Keeping this section up to date will allow you to track your progress towards certification and demonstrate proficiency in the skills within the scope of your trade. Completion of the entire program should result in you becoming a skilled and knowledgeable journeyperson.

- Refer to this section periodically to ensure you are getting the work experience you need.
- Use the competencies as a guide to ensure work tasks are assigned so that you acquire the skills and knowledge required to be successful in the trade.

Review the Record of Competencies on a regular basis with your direct supervisor/journeyperson to ensure they have been completed.

Program Outline

The Program Outline provides detailed information on the scope of knowledge and skills expected at each level of the program, further defining the competencies listed in the Record Book. The Program Outline is a great resource for developing a training plan.

Download from: <https://skilledtradesbc.ca/gasfitter-class-a>

Apprenticeship Toolkit

For general information on apprenticeship and tips for navigating the apprenticeship system in BC visit SkilledTradesBC's website to learn about the [*apprenticeship basics*](#).

LEVEL 1

IMPORTANT!

Download the Program Outline!

<https://skilledtradesbc.ca/gasfitter-class-a>

Read the competency tables

Some competencies are taught in many levels

For detailed information about that competency, go to the Program Outline

THEORY

LINE A: USE COMMON OCCUPATIONAL SKILLS

- Interpret process flow diagrams
- Interpret piping and instrumentation diagrams
- Interpret the B149.3 Gas Code
- Interpret CSD-1 Code for Controls and Safety Devices for Automatically Fired Boilers
- Describe documentation responsibilities

LINE B: APPLY FUNDAMENTALS OF GAS UTILIZATION

- Describe the combustion process
- Describe draft systems
- Describe draft control systems
- Describe the effects of emission controls on draft
- Describe the parts and operation of gas fired heating/cooling systems
- Describe the installation and testing of mechanical safety devices
- Describe types of alternate fuels for appliances over 400 MBH (120 kW)
- Describe the applications of alternate fuel appliances over 400 MBH (120 kW)
- Describe the installation of dual-fuel appliances over 400 MBH (120 kW)

LINE C: APPLY ELECTRICAL CONCEPTS

- Describe transformers
- Describe proportional control operation

- Describe power converters
- Describe control point instrumentation
- Interpret the Canadian Electrical Code Part 1, Section 28
- Describe operation and protection of three phase motors
- Describe communication and networking technology

LINE D: PLAN GAS-FIRED APPLIANCE SYSTEM INSTALLATIONS

- Describe propane storage
- Describe propane installations

LINE E: INSTALL GAS-FIRED SYSTEMS

- Describe the installation of LPG, LNG and CNG storage, vaporizing and mixing systems

PRACTICAL

LINE A: USE COMMON OCCUPATIONAL SKILLS

- Use combustion analyzers
- Use signal generators

LINE B: APPLY FUNDAMENTALS OF GAS UTILIZATION

- Perform natural draft calculations
- Perform propane-air mix calculations

LINE C: APPLY ELECTRICAL CONCEPTS

- Create a control narrative
- Design a wiring diagram
- Operate ECMs and VFDs
- Install cabling and components
- Troubleshoot complex circuits

LINE D: PLAN GAS-FIRED APPLIANCE SYSTEM INSTALLATIONS

- Size gas piping systems
- Select valve train components
- Size special venting
- Select mechanical draft control systems
- Size air supply systems for combined appliance inputs exceeding 400 MBH
- Select ICI appliances
- Select mechanical ICI burners
- Select flame safeguard systems
- Select combustion, safety and operating controls
- Select electrical components
- Design and source an ICI fuel supply system from meter set to appliance inlet

LINE E: INSTALL GAS-FIRED SYSTEMS

- Install gas pressure regulators and valve train components
- Install ICI venting systems
- Install combustion and ventilation air supply for ICI systems
- Install draft control systems
- Install ICI flame safeguards
- Install combustion, safety and operating controls
- Install ICI boilers

LINE F: COMMISSION GAS-FIRED APPLIANCES AND EQUIPMENT

- Commission fuel and air delivery systems
- Perform combustion analysis and adjustments

LINE G: MAINTAIN AND SERVICE GAS-FIRED APPLIANCES AND EQUIPMENT

- Repair and replace furnace refractory

Supervisor Signature

NOTES FROM LEVEL 1

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

LEVEL 2

IMPORTANT!

Download the Program Outline!

<https://skilledtradesbc.ca/gasfitter-class-a>

Read the competency tables

Some competencies are taught in many levels

For detailed information about that competency, go to the Program Outline

THEORY

LINE A: USE COMMON OCCUPATIONAL SKILLS

- Describe the operation of Meggers
- Describe design registry

LINE B: APPLY FUNDAMENTALS OF GAS UTILIZATION

- Describe the control of combustion emissions

LINE C: APPLY ELECTRICAL CONCEPTS

- Describe PLC ladder logic
- Describe SAMA drawings

LINE F: COMMISSION GAS-FIRED APPLIANCES AND EQUIPMENT

- Describe appliance start-up procedures
- Describe testing and emission requirements
- Describe the operation of PLCs
- Describe training and handover of gas-fired equipment

LINE G: MAINTAIN AND SERVICE GAS-FIRED APPLIANCES AND EQUIPMENT

- Describe the maintenance of small gas utilities
- Describe servicing gas burners and ancillary equipment
- Describe maintaining boilers and ancillary equipment

- Describe maintaining gas-fired appliances
- Describe maintaining gas-fired refrigeration equipment
- Describe servicing fuel/air delivery systems
- Describe decommissioning and disconnecting gas-fired appliances and equipment

PRACTICAL

LINE C: APPLY ELECTRICAL CONCEPTS

- Configure communication and networking devices

LINE D: PLAN GAS-FIRED APPLIANCE SYSTEM INSTALLATIONS

- Select oil valve train components
- Select control point instrumentation
- Integrate automation and instrumentation controls

LINE E: INSTALL GAS-FIRED SYSTEMS

- Install ICI burners
- Install automation and instrumentation control systems
- Install ICI air heating appliances

LINE F: COMMISSION GAS-FIRED APPLIANCES AND EQUIPMENT

- Commission fuel/air delivery systems
- Use gas metering devices
- Commission boilers and ancillary equipment
- Commission direct-fired make-up air heaters
- Commission furnaces and ovens
- Program temperature, pressure and operating controls
- Program combustion control systems
- Commission draft control systems

LINE G: MAINTAIN AND SERVICE GAS-FIRED APPLIANCES AND EQUIPMENT

- Troubleshoot and repair control systems

Supervisor Signature

NOTES FROM LEVEL 2

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

Note:

MISSING COMPETENCIES?

To develop the best journeyperson possible employers should attempt to provide training in all competencies for the trade. This is not always possible.

If your employer is unable to provide training in any competency required for your trade, note that competency below. Competencies listed here will remain unsigned until your employer can provide training in that area or until you find an alternate way to gain the experience needed.

Competency:	Date:
Reason:	
Alternate plan:	

Competency:	Date:
Reason:	
Alternate plan:	

TECHNICAL TRAINING

Instructions

Keep a record of each level of technical training completed.

Level 1

Date Completed:	Training Provider:
Mark:	Instructor:

Level 2

Date Completed:	Training Provider:
Mark:	Instructor:

COMPLETION REQUIREMENTS

Instructions

Keep a record of each program completion requirement achieved.

GASFITTER – CLASS A

- Level 1 - Technical Training
- Level 2 - Technical Training

- 3,000 Work-Based Training Hours

- Interprovincial Red Seal examination
- Recommendation for Certification signed by sponsor

Note: After all other completion requirements have been met, SkilledTradesBC sends a Recommendation for Certification form to the sponsor requesting signoff.

CERTIFICATIONS

Instructions

Keep a record of the credentials and endorsements you have earned, including the certification number and date of issue.

CREDENTIAL EARNED	NUMBER	DATE OF ISSUE

*If you have any questions, please contact SkilledTradesBC
Customer Service at customerservice@skilledtradesbc.ca
778-328-8700 or toll free (within BC) at 1-800-660-6011*