

SKILLED**TRADES**^{BC}

Personal Record Book

Insulator (Heat and Frost)

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: Insulator (Heat and Frost)

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.

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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:

- **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 an [Online Registration Request](#) with your new employer on the SkilledTradesBC Portal.**

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/journey person on a regular basis.

DATE (TO-FROM)	EMPLOYER	HOURS
TOTAL HOURS		

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/insulator-heat-frost>

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/insulator-heat-frost>

Read the competency tables

Some competencies are taught in many levels

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

THEORY

LINE C: ORGANIZE WORK

- Assess and prioritize tasks

LINE K: INSTALL FIRE STOP SYSTEMS

- Describe fire stopping systems and their applications
- Describe applying fire stop materials and sealants

LINE P: INSTALL FIREPROOFING

- Describe selection of fireproofing system
- Describe fireproofing of structural steel components

LINE T: PERFORM ASBESTOS ABATEMENT

- Determine required PPE for asbestos-containing materials (ACM) abatement
- Describe preparation of site for removal and containment of ACM
- Describe building temporary enclosure
- Describe removal and disposal of ACM
- Describe decontamination of area and equipment
- Describe encapsulation of ACM
- Describe enclosure of ACM
- Describe lead abatement
- Describe mould remediation

PRACTICAL

LINE A: PERFORM SAFETY-RELATED FUNCTIONS

- Use PPE and safety equipment
- Identify, remove and dispose defective PPE and safety equipment
- Maintain safe work environment

LINE B: USE AND MAINTAIN TOOLS AND EQUIPMENT

- Select and use hand tools
- Select and use measuring and layout tools
- Select and use power tools
- Use ladders and platforms
- Tie knots and hitches

LINE C: ORGANIZE WORK

- Perform task scheduling
- Organize materials for work tasks

LINE D: USE COMMUNICATION AND MENTORING TECHNIQUES

- Use communication techniques

LINE E: PERFORM ROUTINE TRADE PRACTICES

- Take and record field measurements
- Calculate area, circumference and perimeter
- Prepare substrate for insulation
- Select materials for industrial applications
- Select materials for commercial applications
- Perform layout for bevel, end cap, pan out, gored elbow and 45 degree stove pipe

LINE F: INSULATE PIPING AND FITTINGS

- Install insulation on piping systems in industrial applications
- Select, install and seal vapour barriers to pipe insulation

LINE H: INSULATE PLUMBING AND MECHANICAL PIPING SYSTEMS

- Apply insulation to pipes on commercial applications
- Apply vapour barrier to insulated pipes on commercial applications

Supervisor Signature

NOTES FROM LEVEL 1

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LEVEL 2

IMPORTANT!

Download the Program Outline!

<https://skilledtradesbc.ca/insulator-heat-frost>

Read the competency tables

Some competencies are taught in many levels

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

THEORY

LINE H: INSULATE PLUMBING AND MECHANICAL PIPING SYSTEMS

- Describe the installation of cladding, jacketing and finishes on commercial mechanical systems

LINE I: INSULATE MECHANICAL DUCTING

- Identify areas requiring vapour barrier
- Describe finishing vapour barrier on mechanical ducting

LINE J: INSULATE MECHANICAL EQUIPMENT

- Identify areas requiring vapour barrier
- Describe installing vapour barrier on mechanical equipment

LINE L: INSULATE FOR SOUNDPROOFING

- Describe soundproofing methods and materials for piping and equipment
- Describe acoustic assemblies

LINE N: INSTALL UNDERGROUND INSULATING SYSTEMS

- Describe installing pipe insulation to underground systems
- Describe pour-in-place insulation for underground systems

LINE O: SPRAY SEALERS, COATINGS AND SPRAY-ON INSULATION

- Describe preparing materials, equipment, surrounding work area and substrate for spraying
- Describe methods of applying reinforcing materials, spray insulation, coatings and sealers

LINE Q: INSTALL INSULATION FOR REFRACTORY SYSTEMS

- Describe application of insulation in refractory applications
- Describe installing reflective systems
- Describe installing cladding, jacketing and finishes on refractory systems

PRACTICAL

LINE E: PERFORM ROUTINE TRADE PRACTICES

- Calculate area and volumes of geometric shapes
- Calculate mitred elbows
- Calculate length of a side of triangles
- Estimate materials
- Draft geometric shapes
- Prepare substrate for equipment and ducts
- Perform pin welding
- Select materials and accessories for industrial equipment
- Perform layout for non-metallic cladding on tanks, vessels and equipment

LINE G: INSULATE TANKS, VESSELS AND EQUIPMENT

- Fabricate and apply insulation to tanks and vessels
- Install vapour barrier on tanks

LINE I: INSULATE MECHANICAL DUCTING

- Fabricate and install insulation on mechanical ducting

LINE J: INSULATE MECHANICAL EQUIPMENT

- Install insulation on mechanical equipment

LINE R: INSTALL INSULATION FOR CRYOGENIC SYSTEMS

- Insulate cryogenic systems
- Install vapour barriers on cryogenic systems
- Install cladding, jacketing and finishes on cryogenic systems

Supervisor Signature

NOTES FROM LEVEL 2

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LEVEL 3

IMPORTANT!

Download the Program Outline!

<https://skilledtradesbc.ca/insulator-heat-frost>

Read the competency tables

Some competencies are taught in many levels

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

THEORY

LINE E: PERFORM ROUTINE TRADE PRACTICES

- Describe selecting finishes

LINE S: INSULATE FOR MARINE APPLICATIONS

- Describe insulation for marine applications
- Describe installation of cladding, jacketing and finishes on marine applications

PRACTICAL

LINE E: PERFORM ROUTINE TRADE PRACTICES

- Use trigonometry to find angles and sides of triangles
- Use shop drawings and specifications to select materials and accessories for a shop project
- Perform layout for cladding in industrial applications

LINE F: INSULATE PIPING AND FITTINGS

- Install cladding and finishes on piping and fittings on industrial applications

LINE G: INSULATE TANKS, VESSELS AND EQUIPMENT

- Install cladding and finishes on tanks, vessels and equipment

LINE I: INSULATE MECHANICAL DUCTING

- Install cladding and finishes on insulated mechanical ducting

LINE M: INSTALL REMOVABLE COVERS

- Fabricate soft, removable covers
- Install soft, removable covers

Supervisor Signature

NOTES FROM LEVEL 3

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LEVEL 4

IMPORTANT!

Download the Program Outline!

<https://skilledtradesbc.ca/insulator-heat-frost>

Read the competency tables

Some competencies are taught in many levels

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

THEORY

LINE D: USE COMMUNICATION AND MENTORING TECHNIQUES

- Describe mentoring techniques

LINE E: PERFORM ROUTINE TRADE PRACTICES

- Interpret specifications and drawings

LINE P: INSTALL FIREPROOFING

- Describe applying protective coverings to fireproofing materials

PRACTICAL

LINE E: PERFORM ROUTINE TRADE PRACTICES

- Take and record complex field measurements
- Calculate and record material requirements
- Sketch pictorial drawings from a given view
- Perform take offs of pipings and fittings from drawings

LINE K: INSTALL FIRE STOP SYSTEMS

- Use manufacturer's systems manuals to identify approved fire stop system

LINE M: INSTALL REMOVABLE COVERS

- Layout, fabricate and insulate hard, removable covers
- Install hard, removable covers

Supervisor Signature

NOTES FROM LEVEL 4

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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:

Level 3

Date Completed:	Training Provider:
Mark:	Instructor:

Level 4

Date Completed:	Training Provider:
Mark:	Instructor:

COMPLETION REQUIREMENTS

Instructions

Keep a record of each program completion requirement achieved.

Insulator (Heat and Frost)

- Level 1 - Technical Training
- Level 2 - Technical Training
- Level 3 - Technical Training
- Level 4 - Technical Training

- 6,660 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*