

SKILLED**TRADES**^{BC}

Personal Record Book
Ironworker (Generalist)

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: IRONWORKER (GENERALIST)

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/Journey person 1:	*TWID #:
	Phone:
	Email:
Supervisor/Journey person 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 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 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.

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, he/she will:
 - Record the date that the competency was achieved
 - Sign off on the competency
 - Enter his/her 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/ironworker-generalist>

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/ironworker-generalist>

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 SAFE WORK PRACTICES

- Identify and describe workplace hazards
- Describe non-emergency injury reporting procedures
- Describe how worksite safety policies are established
- Attain confined space awareness qualification
- Recognize a confined space
- Identify various classes of fires
- Attain first aid certification
- Attain WHMIS certification

LINE B: USE TOOLS AND EQUIPMENT

- Describe and select measurement and layout tools
- Identify potential power sources
- Describe different methods of cutting
- Describe safety considerations for cutting and welding
- Describe how to operate and maintain cutting tools
- Describe SMAW welding
- Describe how to operate and maintain welding tools
- Describe ladders and elevated platforms
- Attain aerial work platform certification

- Describe connecting and anchoring tools/equipment and their uses in concrete

LINE C: ORGANIZE WORK

- Describe types of drawings
- Interpret drawings
- Identify views on drawings
- Describe methods of communication
- Describe considerations when handling, ordering and coordinating materials

LINE D: USE RIGGING, HOISTING AND LIFTING EQUIPMENT

- Describe fibre and wire rope
- Describe hoisting and rigging equipment
- Describe rigging hardware components appropriate for the task
- Identify auxiliary hoisting equipment
- Describe types of mechanical moving equipment
- Describe uses for mechanical moving equipment

LINE E: APPLY CRANE WORK PROCEDURES

- Identify types of cranes
- Identify hazards associated with cranes
- Describe crane components
- Describe crane assembly and breakdown location
- Describe how to move cranes on site

LINE F: ERECT STRUCTURAL MEMBERS

- Describe the principles of skeletal construction
- Describe common building materials
- Describe general forces/stresses on structural components
- Describe methods of controlling forces on structures

- Describe the purpose and function of structural members and fasteners

LINE G: APPLY REINFORCING TECHNIQUES

- Describe the principles of concrete
- Describe where the forces on concrete are manifested in structures
- Describe the properties of reinforcing systems
- Describe the principles of reinforced concrete
- Identify reinforcing materials

LINE H: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES

- Describe pre-stressed systems
- Describe pre-stressed systems and accessories
- Describe pre-stressing equipment
- Describe installation of anchorages
- Describe organization and protection of tendons and accessories
- Describe pre-stressed members
- Describe unbonded post-tensioning systems
- Describe the stressing of tendons
- Describe the cutting, capping and grouting of tendons

PRACTICAL

LINE A: USE SAFE WORK PRACTICES

- Manage workplace hazards
- Demonstrate emergency procedures
- Locate and interpret the Occupational Health and Safety Regulations applicable to the ironworker workplace
- Apply confined space procedures
- Select appropriate fall protection equipment
- Use fall protection equipment and systems
- Select and use personal protective equipment
- Apply preventative fire safety precautions
- Select appropriate fire extinguishers for the class of fire and environmental condition
- Use equipment to prevent various classes of fire
- Follow WHMIS requirements

LINE B: USE TOOLS AND EQUIPMENT

- Select hand tools appropriate to the task
- Use reinforcing hand tools
- Use structural hand tools
- Inspect and maintain tools
- Use and maintain measurement and layout tools
- Select and use power tools
- Inspect and maintain power tools
- Perform weld using SMAW techniques
- Select and use ladders and platforms
- Select and use access equipment
- Use a hammer drill to drill vertically and horizontally into concrete

LINE C: ORGANIZE WORK

- Apply mathematical principles to solve problems
- Use a drawing to prepare a material list
- Communicate with others
- Handle materials according to job requirements

LINE D: USE RIGGING, HOISTING AND LIFTING EQUIPMENT

- Use slings, hitches and bends for rigging
- Tie knots, bends and hitches
- Use rope for hand lines and load control
- Select and use hoisting and rigging equipment
- Use mechanical moving equipment

LINE E: APPLY CRANE WORK PROCEDURES

- Set up a mobile crane
- Use communication procedures for moving and hoisting
- Use safe lifting procedures

LINE F: ERECT STRUCTURAL MEMBERS

- Attach structural members
- Level, plumb and align structural members
- Install structural members
- Finalize the installation of structural members

LINE G: APPLY REINFORCING TECHNIQUES

- Splice reinforcing material
- Install reinforcing material

Supervisor Signature

NOTES FROM LEVEL 1

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LEVEL 2

IMPORTANT!

Download the Program Outline!

<https://skilledtradesbc.ca/ironworker-generalist>

Read the competency tables

Some competencies are taught in many levels

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

THEORY

LINE B: USE TOOLS AND EQUIPMENT

- Describe welding processes
- Identify welding joints and positions
- Describe weld testing and defects

LINE C: ORGANIZE WORK

- Identify structural requirements based on erection drawings
- Identify welding symbols
- Identify reinforcing requirements based on reinforcing steel drawings
- Determine structural requirements for an erection drawing

LINE E: APPLY CRANE WORK PROCEDURES

- Describe conventional crane assembly/disassembly for crawler/mobile

LINE F: ERECT STRUCTURAL MEMBERS

- Describe and use levelling, plumbing and alignment techniques for structural members
- Describe Q-decking installation and its function
- Describe installation techniques of miscellaneous components

LINE H: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES

- Describe bonded post-tensioning systems
- Describe the placing of ducts and anchors and tendons
- Describe the preparation of tendons for stressing
- Describe the stressing of tendons
- Describe the cutting, capping and grouting of tendons

LINE I: MAINTAIN AND UPGRADE STRUCTURAL STEEL AND COMPONENTS

- Identify the current condition of components
- Describe how to decommission structures and components
- Describe how to disassemble components
- Describe how to remove components

PRACTICAL

LINE B: USE TOOLS AND EQUIPMENT

- Use levelling equipment
- Perform SMAW
- Perform oxy fuel cutting
- Perform gouging
- Prepare a test plate and perform CWB SMAW

LINE C: ORGANIZE WORK

- Apply mathematical principles to solve problems

LINE D: USE RIGGING, HOISTING AND LIFTING EQUIPMENT

- Use ropes, slings and hitches (fibre and wire) for rigging
- Select and use hoisting and rigging equipment

LINE E: APPLY CRANE WORK PROCEDURES

- Set up a crane

LINE F: ERECT STRUCTURAL MEMBERS

- Apply installation techniques

LINE G: APPLY REINFORCING TECHNIQUES

- Use reinforcing codes and standards
- Detail, fabricate and install reinforcing material using a blueprint or placing sheet

LINE H: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES

- Install a multi-strand PT system

LINE I: MAINTAIN AND UPGRADE STRUCTURAL STEEL AND COMPONENTS

- Field-fabricate components
- Replace components

Supervisor Signature

NOTES FROM LEVEL 2

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LEVEL 3

IMPORTANT!

Download the Program Outline!

<https://skilledtradesbc.ca/ironworker-generalist>

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

- Interpret structural drawings
- Interpret post-tensioning drawings
- Describe project planning

LINE E: APPLY CRANE WORK PROCEDURES

- Describe assembly/disassembly for tower cranes
- Analyze critical lift plans
- Identify marine hoisting equipment
- Describe marine loading and unloading
- Identify safety practices for heavy rigging and marine rigging

LINE F: ERECT STRUCTURAL MEMBERS

- Describe types of wooden structural components
- Describe types of pre-cast structures and components
- Describe curtain wall components and systems
- Describe curtain wall installation
- Describe conveyance systems and parts
- Describe track adjustments

LINE H: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES

- Describe reasons for de-stressing
- Describe de-stressing requirements

PRACTICAL

LINE B: USE TOOLS AND EQUIPMENT

- Use levelling equipment/theodolite (standard and laser)
- Perform CWB weld

LINE C: ORGANIZE WORK

- Apply mathematical principles to solve problems
- Apply project planning practices

LINE D: USE RIGGING, HOISTING AND LIFTING EQUIPMENT

- Select appropriate slings based on application
- Select equipment based on transfer of load
- Calculate and select highline equipment based on loads
- Calculate a reeve system
- Move a load using jacks and rollers

LINE E: APPLY CRANE WORK PROCEDURES

- Apply procedures for tower crane set up

LINE F: ERECT STRUCTURAL MEMBERS

- Layout and fabricate a structural assembly
- Fabricate a hopper

LINE G: APPLY REINFORCING TECHNIQUES

- Calculate bend allowance and stretch-out

LINE H: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES

- Apply procedures for placing post-tensioning systems
- Layout and place tendons from a PT drawing

LINE I: MAINTAIN AND UPGRADE STRUCTURAL STEEL AND COMPONENTS

- Plan and replace or upgrade a structural member

Supervisor Signature

NOTES FROM LEVEL 3

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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:

COMPLETION REQUIREMENTS

Instructions

Keep a record of each program completion requirement achieved.

IRONWORKER (GENERALIST)

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

- 4,740 Work-Based Training Hours

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

Note: After all other completions 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*