

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/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 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/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/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: MAINTAIN SAFE AND HEALTHY WORKPLACE

- ☐ Describe non-emergency injury reporting procedures
- ☐ Describe how worksite safety policies are established
- ☐ Interpret OHS Regulations applicable to the Ironworker workplace
- ☐ Identify various classes of fires
- ☐ Follow WHMIS requirements
- ☐ Describe fall protection equipment
- ☐ Describe techniques to manage personal health and well-being
- ☐ Describe aspects of professionalism

LINE B: USE AND MAINTAIN TOOLS AND EQUIPMENT

- ☐ Identify potential power sources
- ☐ Describe connecting and anchoring tools and equipment, and their uses in concrete
- ☐ Describe ladders, scaffolds, and elevated platforms
- ☐ Describe methods of thermal cutting and heat treatment
- ☐ Describe SMAW and FCAW welding

LINE C: ORGANIZE WORK

- ☐ Describe considerations and responsibilities when handling, ordering, coordinating, organizing, and disposing materials
- ☐ Describe regulations and standards

- ☐ Describe types of drawings
- ☐ Identify views on drawings
- ☐ Identify documents

LINE D: USE COMMUNICATION, MENTORING, AND CONTINUOUS LEARNING TECHNIQUES

- ☐ Describe methods of communication
- ☐ Describe the role of a mentor
- ☐ Describe workplace equity, diversity, and inclusion

LINE E: PLAN LIFT

- ☐ Determine centre of gravity of load
- ☐ Determine type of lift
- ☐ Determine rigging factors
- ☐ Describe walk-around inspection
- ☐ Describe procedure to establish a safety perimeter

LINE F: USE RIGGING, HOISTING, AND POSITIONING EQUIPMENT

- ☐ Describe inspection of rigging, hoisting, and positioning equipment
- ☐ Describe removal of damaged rigging, hoisting, and positioning equipment
- ☐ Describe fibre and wire rope
- ☐ Describe hoisting and rigging equipment
- ☐ Describe rigging hardware components
- ☐ Describe post-lift activities

LINE G: PERFORM MOBILIZATION, ERECTION, AND DEMOBILIZATION OF CRANES

- ☐ Identify types of cranes
- ☐ Identify hazards associated with cranes
- ☐ Describe crane components
- ☐ Describe crane assembly and breakdown location

- ☐ Describe moving cranes on site

LINE H: FABRICATE AND INSTALL REINFORCING MATERIALS

- ☐ Describe the fundamentals of concrete
- ☐ Describe where the forces on concrete are manifested in structures
- ☐ Describe the fundamentals of reinforcing systems
- ☐ Describe the fundamentals of reinforced concrete

LINE I: APPLY POST-TENSIONING TECHNIQUES

- ☐ Describe purpose and application of 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

LINE J: INSTALL STRUCTURAL MEMBERS

- ☐ Identify structural components, members, and functions
- ☐ Describe the principles of skeletal construction
- ☐ Describe common building materials
- ☐ Describe general forces/stresses on structural components
- ☐ Describe methods of controlling forces on structures

PRACTICAL

LINE A: MAINTAIN SAFE AND HEALTHY WORKPLACE

- ☐ Manage workplace hazards
- ☐ Participate in workplace health and safety and emergency procedures
- ☐ Apply confined space procedures
- ☐ Apply preventative fire safety precautions
- ☐ Use equipment to prevent various classes of fire
- ☐ Select personal protective equipment
- ☐ Use personal protective equipment
- ☐ Use fall protection equipment and systems

LINE B: USE AND MAINTAIN TOOLS AND EQUIPMENT

- ☐ Select hand tools appropriate to the task
- ☐ Use reinforcing hand tools
- ☐ Use structural hand tools
- ☐ Inspect and maintain tools
- ☐ Use power tools
- ☐ Select bending tools and equipment
- ☐ Use powder-actuated tools
- ☐ Use mechanical cutting equipment
- ☐ Use a hammer drill to drill vertically or horizontally into concrete
- ☐ Use ladders and platforms
- ☐ Select access equipment
- ☐ Use a MEWP to perform elevated work
- ☐ Select material handling equipment
- ☐ Use material handling equipment
- ☐ Select measurement and layout tools
- ☐ Use measurement and layout tools
- ☐ Maintain measurement and layout tools

- ☐ Use thermal cutting tools
- ☐ Perform welding

LINE C: ORGANIZE WORK

- ☐ Handle materials according to job requirements
- ☐ Organize laydown area
- ☐ Perform layout
- ☐ Interpret drawings
- ☐ Use a drawing to prepare a material list
- ☐ Apply mathematical principles to solve problems

LINE D: USE COMMUNICATION, MENTORING, AND CONTINUOUS LEARNING TECHNIQUES

- ☐ Demonstrate the role of the apprentice

LINE E: PLAN LIFT

- ☐ Inspect load
- ☐ Calculate total weight of load
- ☐ Verify total weight of load
- ☐ Perform pre-lift site inspection
- ☐ Perform test lift
- ☐ Select rigging equipment
- ☐ Select hoisting and positioning equipment
- ☐ Secure lift area

LINE F: USE RIGGING, HOISTING, AND POSITIONING EQUIPMENT

- ☐ Identify removal criteria for damaged rigging, hoisting, and positioning equipment
- ☐ Use slings, hitches, and bends for rigging
- ☐ Tie knots, bends, and hitches
- ☐ Use rope for hand lines and load control

- ☐ Identify auxiliary hoisting equipment
- ☐ Select and use hoisting and rigging equipment
- ☐ Use communication procedures for moving and hoisting
- ☐ Use safe lifting procedures
- ☐ Disassemble rigging, hoisting and positioning equipment
- ☐ Maintain rigging, hoisting and positioning equipment

LINE G: PERFORM MOBILIZATION, ERECTION, AND DEMOBILIZATION OF CRANES

- ☐ Set up a mobile crane

LINE H: FABRICATE AND INSTALL REINFORCING MATERIALS

- ☐ Select and use cutting equipment for reinforcing material
- ☐ Select and use bending tools and equipment for reinforcing material
- ☐ Cut and bend a simple shape using reinforcing material
- ☐ Splice reinforcing material
- ☐ Pre-fabricate reinforcing material
- ☐ Install reinforcing material

LINE J: INSTALL STRUCTURAL MEMBERS

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

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 AND MAINTAIN TOOLS AND EQUIPMENT

- ☐ Describe welding processes
- ☐ Describe weld testing and defects

LINE C: ORGANIZE WORK

- ☐ Interpret structural requirements based on erection drawings
- ☐ Interpret welding symbols
- ☐ Identify reinforcing requirements based on reinforcing steel drawings
- ☐ Identify drawing quality control and revision processes

LINE G: PERFORM MOBILIZATION, ERECTION, AND DEMOBILIZATION OF CRANES

- ☐ Describe conventional crane assembly/disassembly for crawler/mobile

LINE J: INSTALL STRUCTURAL MEMBERS

- ☐ Describe metal decking installation and its function
- ☐ Describe falsework components, characteristics, and applications

LINE K: INSTALL ORNAMENTAL, MISCELLANEOUS, AND STEEL CLADDING SYSTEMS AND COMPONENTS

- ☐ Describe installation techniques for ornamental and miscellaneous components

LINE M: MAINTAIN AND UPGRADE STRUCTURAL STEEL AND COMPONENTS

- ☐ Describe the revision process
- ☐ Describe decommissioning process
- ☐ Describe component disassembly and removal process

PRACTICAL

LINE B: USE AND MAINTAIN TOOLS AND EQUIPMENT

- ☐ Use bending tools and equipment
- ☐ Use levelling equipment
- ☐ Perform SMAW
- ☐ Perform oxy fuel cutting
- ☐ Perform carbon arc gouging
- ☐ Perform carbon arc cutting
- ☐ Identify welding joints and positions

LINE C: ORGANIZE WORK

- ☐ Apply mathematical principles to solve problems

LINE F: USE RIGGING, HOISTING, AND POSITIONING EQUIPMENT

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

LINE H: FABRICATE AND INSTALL REINFORCING MATERIALS

- ☐ Cut and bend a complex shape with reinforcing materials
- ☐ Install reinforcing material using drawings and standards

LINE K: INSTALL ORNAMENTAL, MISCELLANEOUS, AND STEEL CLADDING SYSTEMS AND COMPONENTS

- ☐ Apply installation techniques for miscellaneous components and systems

LINE M: MAINTAIN AND UPGRADE STRUCTURAL STEEL AND COMPONENTS

- ☐ Identify current condition of components
- ☐ Field-fabricate 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 D: USE COMMUNICATION, MENTORING, AND CONTINUOUS LEARNING TECHNIQUES

- ☐ Describe the role of mentor
- ☐ Describe mentoring skills and attributes
- ☐ Describe workplace diversity and inclusion
- ☐ Identify continuous learning methods
- ☐ Identify supports and resources for learning
- ☐ Describe personal and professional development plan
- ☐ Identify factors that may impact learning needs and goals
- ☐ Interpret information about latest advancements and emerging technologies
- ☐ Identify information to share with colleagues and management

LINE E: PLAN LIFT

- ☐ Analyze critical lift plans

LINE F: USE RIGGING, HOISTING, AND POSITIONING EQUIPMENT

- ☐ Identify marine hoisting equipment
- ☐ Describe marine loading and unloading
- ☐ Identify safety practices for heavy rigging and marine rigging
- ☐ Describe types of mechanical moving equipment
- ☐ Describe uses for mechanical moving equipment

LINE G: PERFORM MOBILIZATION, ERECTION, AND DEMOBILIZATION OF CRANES

- ☐ Describe tower crane assembly
- ☐ Describe demobilization and disassembly of mobile cranes
- ☐ Describe demobilization and disassembly of tower cranes

LINE I: APPLY POST-TENSIONING TECHNIQUES

- ☐ Describe bonded post-tensioning systems.
- ☐ Describe the placing 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 J: INSTALL STRUCTURAL MEMBERS

- ☐ Describe types of wooden structural components
- ☐ Describe types of pre-cast structures and components

LINE K: INSTALL ORNAMENTAL, MISCELLANEOUS, AND STEEL CLADDING SYSTEMS AND COMPONENTS

- ☐ Identify types of building envelope
- ☐ Describe components of curtain wall and window wall
- ☐ Describe building envelope installation procedures
- ☐ Describe steel cladding and roofing systems
- ☐ Describe the installation of steel cladding, roofing, and metal decking

LINE L: INSTALL, MAINTAIN, AND DISASSEMBLE MECHANICAL SYSTEMS

- ☐ Describe mechanical systems
- ☐ Describe adjustments for mechanical systems
- ☐ Describe mechanical conveyance systems
- ☐ Describe adjustments for mechanical conveyance systems
- ☐ Describe fabricating a hopper
- ☐ Describe maintenance of mechanical systems

PRACTICAL

LINE B: USE AND MAINTAIN TOOLS AND EQUIPMENT

- ☐ Use offset lines to layout around an existing object
- ☐ Perform CWB weld

LINE C: ORGANIZE WORK

- ☐ Verify as-built dimensions
- ☐ Apply project planning practices
- ☐ Apply mathematical principles to solve problems

LINE F: USE RIGGING, HOISTING, AND POSITIONING EQUIPMENT

- ☐ Inspect hoisting and positioning 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
- ☐ Use mechanical moving equipment
- ☐ Move a load using jacks and rollers
- ☐ Conduct post-lift activities

LINE H: FABRICATE AND INSTALL REINFORCING MATERIALS

- ☐ Apply reinforcing codes and standards
- ☐ Calculate bend allowances
- ☐ Detail reinforcing materials

LINE I: APPLY POST-TENSIONING TECHNIQUES

- ☐ Apply procedures for placing post-tensioning systems

LINE J: INSTALL STRUCTURAL MEMBERS

- ☐ Layout and fabricate a structural assembly
- ☐ Use levelling, plumbing and alignment techniques for structural assemblies
- ☐ Pre-tension bolts
- ☐ Apply quality assurance

LINE K: INSTALL ORNAMENTAL, MISCELLANEOUS, AND STEEL CLADDING SYSTEMS AND COMPONENTS

- ☐ Lay out steel cladding and roofing

LINE M: MAINTAIN AND UPGRADE STRUCTURAL STEEL AND COMPONENTS

- ☐ Plan procedure to remove a structural member
- ☐ Remove a structural component from an existing structure

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 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*