

SKILLED**TRADES**<sup>BC</sup>

Personal Record Book  
*Ironworker (Reinforcing)*

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 (REINFORCING)**

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 the 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, 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-reinforcing>*

### 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-reinforcing>

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
- Locate the parts of the occupational health and safety regulations applicable to the ironworker workplace
- Attain confined space awareness qualification
- Recognize a confined space
- Identify various classes of fire
- Attain first aid certification

### LINE B: USE TOOLS AND EQUIPMENT

- Describe and select measurement and layout tools
- Describe how to operate and maintain a cut off saw
- Describe ladders and elevated platforms
- Describe connecting and anchoring tools/equipment and their uses in concrete

### LINE C: ORGANIZE WORK

- Describe types of drawings used in ironwork
- Identify views on a shop drawing
- Describe methods of communication

- Describe considerations when handling, ordering and coordinating materials
- Describe the proper procedures for handling materials

#### **LINE D: USE RIGGING, HOISTING AND LIFTING EQUIPMENT**

- Describe slings and hitches
- Describe fibre and wire rope
- Describe hoisting and rigging equipment
- Describe rigging hardware components appropriate for the task
- Identify auxiliary hoisting equipment
- Describe different types of jacks
- Describe uses for jacks
- Describe how to move a load using jacks and rollers

#### **LINE E: APPLY CRANE WORK PROCEDURES**

- Describe and identify different types of cranes
- Identify the effects of differing crane radiuses
- Describe safe crane set-up and operation

#### **LINE F: APPLY REINFORCING TECHNIQUES**

- Describe the principles of concrete
- Describe where the forces on concrete are manifested in structures
- Describe the properties on reinforcing steel
- Describe the principles of reinforced concrete
- Describe and identify reinforced steel mill-rolled markings

#### **LINE G: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES**

- Describe pre-stressed systems for manufacturing pre-cast members
- Describe placement of strands and accessories
- Describe un-bonded post-tensioning systems
- Describe bonded post-tensioning systems

# PRACTICAL

## LINE A: USE SAFE WORK PRACTICES

- Manage workplace hazards
- Demonstrate emergency procedures
- Interpret the parts of the Occupational Health and Safety Regulations applicable to the ironworker workplace
- Apply a confined space procedure
- 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

## LINE B: USE TOOLS AND EQUIPMENT

- Select hand tools appropriate to the task
- Use hand tools
- Inspect and maintain tools
- Use measurement and layout tools
- Select power tools
- Use power tools
- Inspect and maintain power tools
- Use a cut off saw to cut mesh
- Cut using oxy-acetylene tools
- Select and use ladders and platforms
- Select and use access equipment
- Use a hammer drill to drill vertically or horizontally into concrete

## LINE C: ORGANIZE WORK

- Apply mathematical principles to solve problems
- Interpret drawings for reinforcing, bar placing and post-tension application
- Communicate with others
- Handle materials according to job requirements

## LINE D: USE RIGGING, HOISTING AND LIFTING EQUIPMENT

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

## LINE E: APPLY CRANE WORK PROCEDURES

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

## LINE F: APPLY REINFORCING TECHNIQUES

- Install reinforcing material

## LINE G: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES

- Apply the principles of pre-stressed systems to a given task
- Install an un-bonded tendon to specifications

Supervisor Signature

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## NOTES FROM LEVEL 1

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## LEVEL 2

### **IMPORTANT!**

Download the Program Outline!

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

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

- Identify welding joints

### LINE C: ORGANIZE WORK

- Identify schedules from a structural engineering drawing
- Identify reinforcing requirements based on reinforcing steel drawings
- Identify the types of post-tensioning as shown on drawings
- Identify the post-tensioning anchorage needs as shown on drawings
- Identify the types of post-tensioning concrete construction from structural engineering and post-tension drawings
- Identify and compile the post tensioning requirements from a structural drawing

### LINE D: USE RIGGING, HOISTING AND LIFTING EQUIPMENT

- Identify marine hoisting equipment
- Identify heavy lift rigging
- Describe barge loading and unloading
- Identify safety practices for heavy rigging and marine rigging
- Identify and analyse heavy lift rigging
- Analyse a dual lift rigging plan

## LINE E: APPLY CRANE WORK PROCEDURES

- Identify hazards associated with assembling/disassembling cranes
- Describe types of crane parts
- Describe crane assembly/disassembly
- Describe moving cranes on site

## LINE F: APPLY REINFORCING TECHNIQUES

- Describe reinforcing codes and standards

## LINE G: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES

- Describe reasons for de-stressing
- Analyse a drawing and determine specifications
- Describe preparation of tendons for stressing
- Describe stressing tendons
- Describe cutting and capping tendons
- Describe grouting
- Identify and select bonded post-tensioning components as required, and their purpose



# PRACTICAL

## LINE B: USE TOOLS AND EQUIPMENT

- Use levelling equipment
- Use oxyacetylene equipment
- Use welding equipment
- Recognize welding defects

## LINE C: ORGANIZE WORK

- Apply mathematical principles to solve problems related to the daily tasks of an ironworker
- Interpret shop drawings

## 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
- Calculate a reeve system
- Select equipment based on transfer of load
- Discuss procedures for heavy rigging and marine rigging

## LINE E: APPLY CRANE WORK PROCEDURES

- Determine crane position
- Prepare base for crane set-up
- Set-up a crane and install jib

## LINE F: APPLY REINFORCING TECHNIQUES

- Select the appropriate material for a given task based on the principles and standards of reinforced concrete
- Detail and install reinforcing material using a blueprint or placing sheet

## LINE G: APPLY PRE-STRESSING/POST-TENSIONING TECHNIQUES

- Interpret specification standards

Supervisor Signature

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## NOTES FROM LEVEL 2

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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:

# COMPLETION REQUIREMENTS

## Instructions

Keep a record of each program completion requirement achieved.

## IRONWORKER (REINFORCING)

- Level 1 - Technical Training
- Level 2 - Technical Training
  
- 3,180 Work-Based Training Hours
  
- SkilledTradesBC 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](mailto:customerservice@skilledtradesbc.ca)  
778-328-8700 or toll free (within BC) at 1-800-660-6011*