



# PERSONAL RECORD BOOK

**Sprinkler Fitter**



This is your Record Book!

## **DO NOT SUBMIT TO THE ITA**

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:    SPRINKLER FITTER**

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/Journeyman 1:	*TWID #:
	Phone:
	Email:
Supervisor/Journeyman 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:**

- Update Workplace Hours through a [Work-Based Training Hours form](#) for the current reporting period and get signoff by your employer.
- Update Record of Competencies with your supervisor.
- Confirm with your employer that your workplace hours have been reported to ITA, and if possible get a copy of all Work-Based Training Hours reports submitted.
- Notify the ITA of the change in your employment by submitting an [Apprentice and Sponsor Registration form](#) with your new employer.

When re-employed...

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

## 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 ITA.

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 the ITA 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: [www.itabc.ca/program/sprinkler-fitter](http://www.itabc.ca/program/sprinkler-fitter)

### Apprenticeship Toolkit

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

# LEVEL 1

## **IMPORTANT!**

Download the Program Outline!

[www.itabc.ca/program/sprinkler-fitter](http://www.itabc.ca/program/sprinkler-fitter)

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: PERFORM SAFETY RELATED FUNCTIONS

- MANAGE WORKPLACE HAZARDS
- IDENTIFY CLASSES OF FIRES

### LINE B: USE TOOLS AND EQUIPMENT

- DESCRIBE ELECTRICAL TESTING EQUIPMENT

### LINE C: PERFORM ROUTINE TRADE ACTIVITIES

- INTERPRET INFORMATION FOUND ON A SET OF DRAWINGS
- CONVERT BETWEEN ORTHOGRAPHIC AND ISOMETRIC
- IDENTIFY CODES, STANDARDS AND ORGANIZATIONS
- DESCRIBE THE APPLICATION OF CODES AND STANDARDS
- DESCRIBE MANUFACTURER AND SUPPLIER DOCUMENTATION
- DESCRIBE PIPING SYSTEM LAYOUT

### LINE D: INSTALL PIPING AND COMPONENTS

- DESCRIBE PIPING AND TUBING
- DESCRIBE METHODS OF PIPE SUPPORT
- DESCRIBE METHODS OF STRUCTURE PENETRATION
- DESCRIBE VALVES

- DESCRIBE THE INSTALLATION OF VALVES
- IDENTIFY PIPING COMPONENTS

#### **LINE E: INSTALL WATER-BASED SYSTEMS**

- DESCRIBE WET PIPE SYSTEMS
- DESCRIBE DRY PIPE SYSTEMS
- DESCRIBE ANTIFREEZE SYSTEMS
- DESCRIBE PREACTION AND DELUGE SYSTEMS

#### **LINE F: USE COMMUNICATION TECHNIQUES**

- DESCRIBE EFFECTIVE COMMUNICATION PRACTICES

# PRACTICAL

## LINE A: PERFORM SAFETY RELATED FUNCTIONS

- USE WHMIS
- USE AND MAINTAIN PERSONAL PROTECTIVE EQUIPMENT (PPE) AND SAFETY EQUIPMENT
- IDENTIFY AND USE LOCK-OUT AND TAG-OUT PROCEDURES
- SELECT FIRE EXTINGUISHERS FOR CLASS OF FIRE AND RELEVANT CONDITION

## LINE B: USE TOOLS AND EQUIPMENT

- USE HAND, PORTABLE AND STATIONARY POWER TOOLS
- USE MEASURING AND LEVELING EQUIPMENT
- INSPECT AND MAINTAIN TOOLS AND EQUIPMENT
- SELECT AND USE LADDERS AND ELEVATED PLATFORMS
- USE HOISTING, LIFTING AND RIGGING EQUIPMENT
- USE AIR-FUEL AND OXY-FUEL EQUIPMENT TO BRAZE, SOLDER AND CUT

## LINE C: PERFORM ROUTINE TRADE ACTIVITIES

- CALCULATE:
  - PRESSURE
  - FORCE
  - OFFSETS
  - OHM'S LAW
  - LINEAR EXPANSION
  - ELEVATION AND GRADE
  - SPECIFIC WEIGHT
  - DENSITY
  - AREA
  - VOLUME
  - CAPACITY
  - HEAT TRANSFER
  - MASS
  - FITTING ALLOWANCES
  - MECHANICAL ADVANTAGE
- USE DRAFTING SYMBOLS, LETTERING AND LINE CONVENTIONS
- CREATE AN ISOMETRIC DRAWING OF A BASIC ORTHOGRAPHIC PIPING ARRANGEMENT
- SOURCE MANUFACTURER DOCUMENTATION
- APPLY PIPING LAYOUT ACCORDING TO SITE CONDITIONS

## LINE D: INSTALL PIPING AND COMPONENTS

- PREPARE PIPE FOR JOINING AND INSTALLATION
- JOIN PIPING AND TUBING
- INSTALL PIPING
- SELECT FITTINGS
- INSTALL FITTINGS
- SELECT SPRINKLERS

Supervisor Signature

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## NOTES FROM LEVEL 1

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## LEVEL 2

### **IMPORTANT!**

Download the Program Outline!

[www.itabc.ca/program/sprinkler-fitter](http://www.itabc.ca/program/sprinkler-fitter)

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: PERFORM ROUTINE TRADE ACTIVITIES

- DESCRIBE PIPE SCHEDULE SYSTEMS
- DESCRIBE HYDRAULIC SYSTEMS
- INTERPRET DRAWINGS
- PLAN MATERIAL TAKE-OFFS
- INTERPRET THE NATIONAL FIRE PROTECTION ASSOCIATION CODES (NFPA)
- DESCRIBE HAZARD CLASSIFICATIONS AND COMMODITIES

### LINE D: INSTALL PIPING AND COMPONENTS

- DESCRIBE THE INSTALLATION OF HANGERS AND SUPPORTS
- DESCRIBE THE INSTALLATION OF SEISMIC PROTECTION
- DESCRIBE THE INSTALLATION OF DRAINAGE SYSTEMS
- DESCRIBE AND SELECT SPRINKLERS
- DESCRIBE THE INSTALLATION OF SPRINKLERS

### LINE E: INSTALL WATER-BASED SYSTEMS

- DESCRIBE WET PIPE SYSTEMS COMPONENTS
- DESCRIBE WET PIPE SYSTEM DESIGN CRITERIA
- DESCRIBE DRY PIPE SYSTEM COMPONENTS
- DESCRIBE DRY PIPE SYSTEM DESIGN CRITERIA

- DESCRIBE ANTIFREEZE SYSTEM COMPONENTS
- DESCRIBE ANTIFREEZE SYSTEM DESIGN CRITERIA
- DESCRIBE THE INSTALLATION OF ANTIFREEZE SYSTEMS
- DESCRIBE PREACTION SYSTEM COMPONENTS
- DESCRIBE DELUGE SYSTEM COMPONENTS
- DESCRIBE PREACTION AND DELUGE SYSTEM DESIGN CRITERIA
- DESCRIBE THE INSTALLATION OF PREACTION AND DELUGE SYSTEMS
- DESCRIBE STANDPIPE SYSTEMS AND COMPONENTS
- DESCRIBE STANDPIPE SYSTEM DESIGN CRITERIA
- DESCRIBE THE INSTALLATION OF STANDPIPE SYSTEMS

#### **LINE G: INSTALL WATER SUPPLY**

- DESCRIBE UNDERGROUND PIPING AND COMPONENTS
- DESCRIBE UNDERGROUND PIPING LAYOUT
- DESCRIBE HYDRANT APPLICATION AND INSTALLATION
- DESCRIBE THE INSTALLATION OF UNDERGROUND PIPING
- DESCRIBE THE INSTALLATION OF FIRE DEPARTMENT CONNECTIONS
- DESCRIBE CROSS CONNECTION CONTROL

#### **LINE H: INSTALL FIRE SUPPRESSION SYSTEMS AND DEVICES**

- DESCRIBE PILOT LINES AND COMPONENTS
- DESCRIBE THE INSTALLATION OF PILOT LINES
- DESCRIBE ELECTRIC DETECTION SYSTEMS
- DESCRIBE HEAT ACTUATED DEVICES (HADs) AND COMPONENTS
- DESCRIBE THE INSTALLATION OF HEAT ACTUATED DEVICES (HADs)
- DESCRIBE ALARM-INITIATING DEVICES AND COMPONENTS
- DESCRIBE SUPERVISORY-INITIATING DEVICES AND COMPONENTS
- DESCRIBE THE INSTALLATION OF SUPERVISORY-INITIATING DEVICES



## **LINE I: COMMISSION AND MAINTAIN SYSTEMS**

- DESCRIBE WATER SUPPLY TESTING AND PROCEDURES**
- DESCRIBE FIRE PROTECTION SYSTEM TESTING AND PROCEDURES**

# PRACTICAL

## LINE C: PERFORM ROUTINE TRADE ACTIVITIES

- PERFORM SPRINKLER SYSTEM CALCULATIONS
- APPLY MANUFACTURER'S AND SUPPLIER DOCUMENTATION
- LAYOUT PIPING SYSTEMS

## LINE D: INSTALL PIPING AND COMPONENTS

- APPLY CODE REQUIREMENTS FOR THE INSTALLATION OF PIPING AND TUBING
- DESCRIBE NFPA REQUIREMENTS FOR THE INSTALLATION OF:
  - CONTROL VALVES
  - DRAIN VALVES
  - TEST VALVES
  - CHECK VALVES AND BACKFLOW PREVENTERS
  - AIR VENTING VALVES

## LINE E: INSTALL WATER-BASED SYSTEMS

- INSTALL WET PIPE SYSTEMS
- INSTALL DRY PIPE SYSTEMS

## LINE G: INSTALL WATER SUPPLY

- INSTALL CROSS CONNECTION CONTROL COMPONENTS
- TEST CROSS CONNECTION CONTROL COMPONENTS

## LINE H: INSTALL FIRE SUPPRESSION SYSTEMS AND DEVICES

- INSTALL ALARM-INITIATING DEVICES

Supervisor Signature

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## NOTES FROM LEVEL 2

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## LEVEL 3

### **IMPORTANT!**

Download the Program Outline!

[www.itabc.ca/program/sprinkler-fitter](http://www.itabc.ca/program/sprinkler-fitter)

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: PERFORM ROUTINE TRADE ACTIVITIES

- DESCRIBE CONTRACTUAL DOCUMENTS
- DESCRIBE RECORD MANAGEMENT
- INTERPRET THE NATIONAL FIRE PROTECTION ASSOCIATION CODES (NFPA)

### LINE E: INSTALL WATER-BASED SYSTEMS

- DESCRIBE FOAM SYSTEMS AND COMPONENTS
- DESCRIBE FOAM SYSTEM DESIGN CRITERIA
- DESCRIBE THE INSTALLATION OF FOAM SYSTEMS
- DESCRIBE WATER MIST AND HYBRID SYSTEMS
- DESCRIBE WATER MIST AND HYBRID SYSTEM COMPONENTS
- DESCRIBE WATER MIST AND HYBRID SYSTEM DESIGN CRITERIA
- DESCRIBE INSTALLATION OF WATER MIST AND HYBRID SYSTEMS

### LINE G: INSTALL WATER SUPPLY

- DESCRIBE PUMPS AND THEIR OPERATION
- DESCRIBE FIRE PUMPS AND COMPONENTS
- DESCRIBE THE INSTALLATION OF FIRE PUMP UNITS
- DESCRIBE PRIVATE WATER SUPPLY SYSTEMS AND COMPONENTS
- DESCRIBE THE LAYOUT OF PRIVATE WATER SUPPLY PIPING
- DESCRIBE THE INSTALLATION OF PRIVATE WATER SUPPLY SYSTEMS

## **LINE H: INSTALL FIRE SUPPRESSION SYSTEMS AND DEVICES**

- DESCRIBE AIR SAMPLING SYSTEMS AND COMPONENTS
- DESCRIBE ELECTRICAL DETECTION SYSTEMS AND COMPONENTS
- DESCRIBE THE INSTALLATION OF AIR SAMPLING SYSTEMS
- DESCRIBE THE INSTALLATION OF ELECTRICAL DETECTION SYSTEMS
- DESCRIBE DRY AND WET CHEMICAL, CLEAN AGENT AND CARBON DIOXIDE SYSTEMS AND COMPONENTS
- DESCRIBE THE INSTALLATION OF DRY AND WET CHEMICAL, CLEAN AGENT AND CARBON DIOXIDE SYSTEMS
- DESCRIBE THE INSTALLATION OF PORTABLE FIRE EXTINGUISHERS
- DESCRIBE SPARK DETECTION SYSTEMS
- DESCRIBE THE INSTALLATION OF SPARK DETECTION SYSTEMS

## **LINE I: COMMISSION AND MAINTAIN SYSTEMS**

- DESCRIBE WATER SUPPLY COMMISSIONING DOCUMENTATION
- DESCRIBE FIRE PROTECTION SYSTEM COMMISSIONING DOCUMENTATION
- DESCRIBE THE TESTING AND INSPECTION OF FIRE PROTECTION SYSTEMS
- DESCRIBE THE INSPECTION OF PORTABLE FIRE EXTINGUISHERS
- DESCRIBE THE MAINTENANCE AND TROUBLESHOOTING OF FIRE PROTECTION SYSTEMS
- DESCRIBE THE REPAIR OF FIRE PROTECTION SYSTEMS

## **PRACTICAL**

### **LINE C: PERFORM ROUTINE TRADE ACTIVITIES**

- PREPARE A BID**
- LAYOUT PIPING SYSTEMS**
- LAYOUT MULTIPLE AND SINGLE FAMILY DWELLING SPRINKLER SYSTEMS**

### **LINE F: USE COMMUNICATION TECHNIQUES**

- USE MENTORING TECHNIQUES**

Supervisor Signature

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## 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.

## SPRINKLER FITTER

- Level 1 - Technical Training
- Level 2 - Technical Training
- Level 3 - Technical Training
  
- 6,480 Work-Based Training Hours
  
- ITA Interprovincial Red Seal examination
- Recommendation for Certification signed by sponsor

Note: After all other completions requirements have been met, ITA 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 ITA Customer Service at [customerservice@itabc.ca](mailto:customerservice@itabc.ca) 778-328-8700 or toll free (within BC) at 1-800-660-6011***