



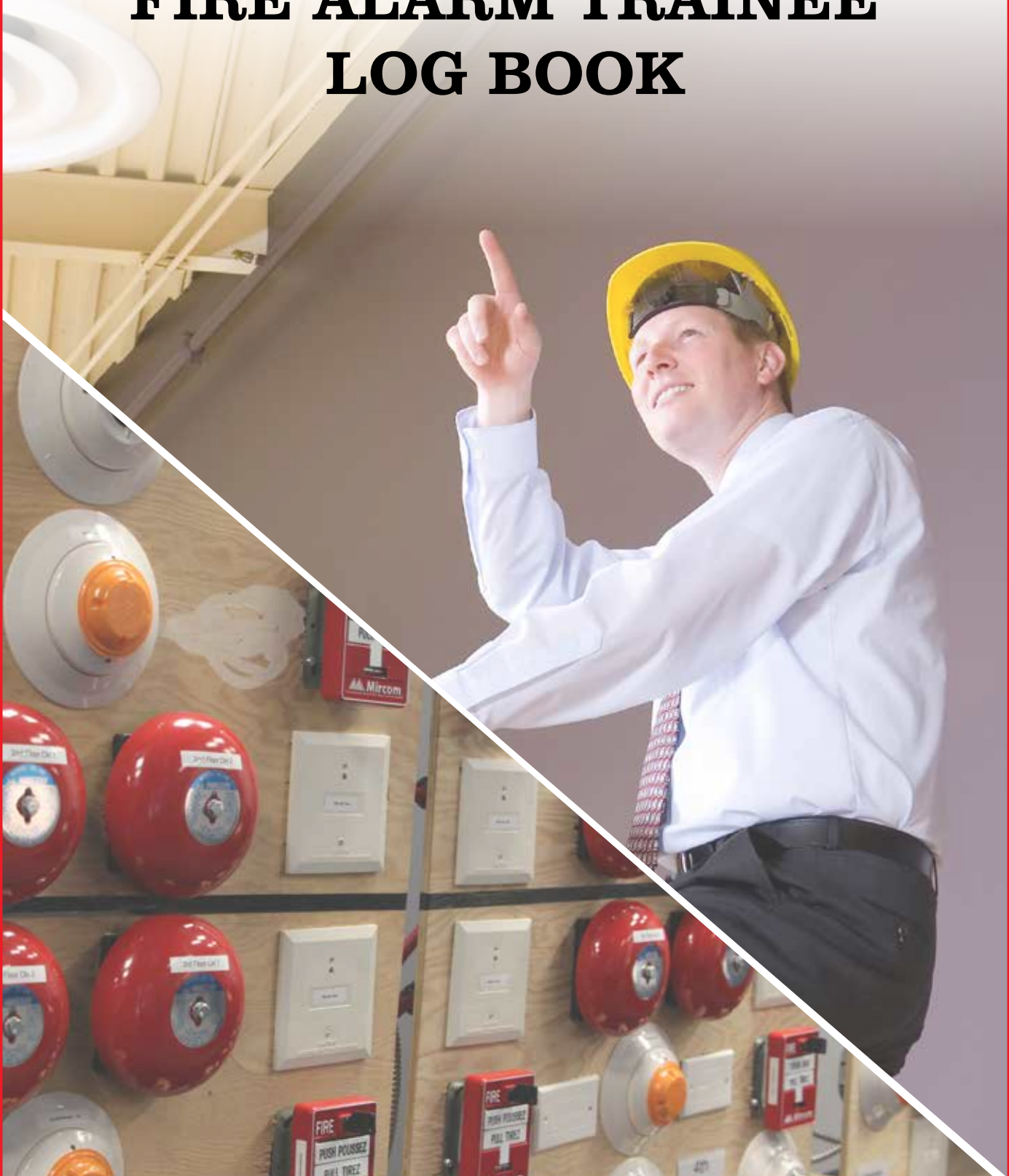
CFAA ACAI

CANADIAN
FIRE ALARM
ASSOCIATION

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D'ALARME INCENDIE



FIRE ALARM TRAINEE LOG BOOK



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PREFACE

This training record document was developed by the Canadian Fire Alarm Association (CFAA) in consultation with representatives from the fire alarm industry.

This document is intended to be used by the CFAA Fire Alarm Trainee, their trainers, supervisors and employers as a “blueprint” for the training and learning required as a prerequisite for successfully completing both of the CFAA Fire Alarm Technician Registration Examinations (Theory and Practical) in the process of obtaining the status of a Registered CFAA Fire Alarm Technician.

The use of this Log Book is meant primarily to be a guide and is only required to be submitted to the CFAA if the Fire Alarm Trainee wishes to attempt the Practical Registration Exam after two (2) previously failed attempts. All Fire Alarm Trainees are encouraged to use and maintain the Log Book to track their progress prior to attempting the Theory and Practical Registration Examinations.

The care and maintenance of this Log Book is the joint responsibility of the Fire Alarm Trainee and their employer. The learning objectives and skill sets were developed specifically for ensuring the Fire Alarm Trainees’ acquisition of skills necessary to perform the role of the Registered CFAA Fire Alarm Technician.

IMPORTANT DIRECTIONS TO EMPLOYERS & TRAINERS

The learning objectives and skill sets have been written in concise statements which describe how a Trainee must perform each skill in order to be deemed competent. Competent means the ability to perform the outlined skill as required on request, without supervision.

By using this Log Book supervisors will be able to ensure that the Fire Alarm Trainee is developing the skills required of a Fire Alarm Technician.

Supervisors are required to be listed in the ‘Supervisor Record Page’ and must daily sign the Daily Training Log to verify the hours and the skills being obtained. To verify hours and skills supervisors are to be a witness to the activities ‘on-site’ while directly supervising the Trainee. Supervision of Trainees must be in compliance with jurisdictional requirements (i.e. maximum number of trainees per supervisor is two (2) in Ontario).

IMPORTANT DIRECTIONS TO THE FIRE ALARM TRAINEE

1. It is the responsibility of the Fire Alarm Trainee to ensure a complete record of their training is maintained.
2. All hours worked each day are to be recorded in the Daily Training Log. All performance objectives and skills completed while working each day are to be verified and signed by the supervisor.
3. The “Supervisor Record Page” is to be completed, and signed by each supervisor verifying hours worked and skills obtained.
4. It is the responsibility of the Fire Alarm Trainee to inform the CFAA within thirty (30) days if there are changes to the Trainees profile on record including but not limited to:
 - a) name (legal documentation will be required)
 - b) address
 - c) phone, email or other contact information
 - d) employer

***Note: these changes can be made and communicated to the CFAA by the Fire Alarm Trainee updating their online profile at www.cfaa.ca

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SECTION / ITEM	PERFORMANCE OBJECTIVES & SKILLS DESCRIPTION	RECOMMENDED HOURS
A	Health and Safety – Obtain recognized training required by the Canada Labour Code Part II, the Canada Occupation Health and Safety Regulations (SOR/86-304) or the OH&S Act applicable for the technician's location of employment.	
1	WHMIS	4
2	Fall Protection	4
3	Electrical Safety and Practices	20
B	Codes and Standards – Instruction in the reading, interpreting, and application of the various codes and standards as well as proven understanding of how to apply them to the role of a Fire Alarm Technician.	
1	CAN/ULC-S524	16
2	CAN/ULC-S536	16
3	CAN/ULC-S537	16
4	CAN/ULC-S561	16
5	CAN/ULC-S552 & CAN/ULC-S553	16
6	National Building Code (or Applicable)	16
7	National Fire Code (or Applicable)	16
C	Fire Alarm Systems – Design and Installation – Demonstrate the skills related understanding the design and installation of a properly installed fire alarm system	
1	Identify proper device selection and location	24
2	Identify proper wiring selection, methods and terminations	24
3	Identify proper device mounting with particular attention paid to heights, clearances, obstructions and methods of securing the device	40
4	Identify locations requiring additional signalling along with selection and specific device locations	24
5	Interpret and/or draw a full riser diagram for multi-zone Fire Alarm System	16
D	Basic Electrical and Electronics – Obtain and demonstrate knowledge related to basic electrical and electronic principles, application and skills as they pertain to the role of a Fire Alarm Technician	
1	Basic Electrical – AC Circuits, Over-Current Protection, Safety, Branch Circuits and their requirements and application to a fire alarm system	24
2	Basic Electrical – Power calculations for branch circuits and fire alarm system requirements	24
3	Basic Electronics – DC Circuits, Power Sources, Safety, Over-Current Protection devices and their requirements and application to a fire alarm system	24
4	Ohm's law and its application to both AC and DC circuits including Fire Alarm Systems and related field devices	32
5	Electronic components (resisters, diodes, etc...) and their application and influence on the behaviour of AC and DC circuits, identification of the components and their application and purpose in Fire Alarm Systems	24
6	Multi-Meter choice, settings and use in measuring various metrics in a fire alarm system including but not limited to resistance, voltage and current.	40
7	Multi-Meter use in identifying, locating and repairing wiring faults including but not limited to "Open", "Short" and "Ground" faults	40
E	Fire Alarm System Service, Testing and Verification – Demonstrate the knowledge and skills to perform system diagnostics, solutions and repairs as well as required inspections, testing and verifications of Fire Alarm Systems	



SECTION / ITEM	DESCRIPTION	RECOMMENDED HOURS
1	Identify and test various Fire Alarm System signaling operations (i.e. single stage, two-stage, modified two-stage, coded systems)	8
2	Identify and Class "A" and Class "B" Circuits, the application, advantages/disadvantages and requirements of both with regards to conventional, addressable and signaling circuit applications	24
3	Identify, test and document input and output correlations including but not limited to field devices, signal circuits, ancillary systems, and annunciation	24
4	Identify proper and improper test apparatus and methods for the purpose of testing heat detectors	8
5	Identify proper and improper test apparatus and methods for the purpose testing smoke detectors including aid-duct mounted detectors	8
6	Identify proper and improper test apparatus and methods for the purpose of testing and cleaning smoke detector sensitivity including various manufacturers, makes and models	8
7	Test various types fire detectors correctly	40
8	Test various signaling devices correctly	24
9	Test various other fire alarm devices correctly	40
10	Test and document Fire Alarm System batteries and chargers, including calculations	24
11	Test and document Fire Alarm Control Units including both conventional and addressable systems	40
12	Properly identify and test ancillary devices and circuits that are tied to the Fire Alarm System (i.e. – elevator recall, fan shutdown, electromagnetic door hold devices, electromagnetic door locks, fire alarm signal receiving centre equipment)	40
13	Properly identify and test Emergency Voice Communication equipment that forms part of the Fire Alarm System	24
14	Show understanding of conventional, addressable and hybrid system capabilities, components, wiring methods, advantages and disadvantages for each	120
15	Verify conventional field devices including system modifications with understanding of requirements based on "tie-in" point	40
16	Verify addressable field devices including system modifications including an understanding of fault isolation devices	40
17	Verify various signaling devices including bells, horns, speakers and visual devices	40
18	Perform a sound pressure level measurement (audibility test) in various locations and situations as required by the applicable codes and standards	16
19	Entirely and correctly complete the documentation required for a CAN/ULC-S537 inspection report and the meaning of each item	24
20	Entirely and correctly complete the documentation required for a CAN/ULC-S536 verification report and the meaning of each item	24
21	Identify and properly categorize issues found during a test, inspection and verification as either Deficiencies, Recommendations or Remarks	24
22	Perform the role of the supervising technician (with a CFAA registered technician on site) to perform a complete CAN/ULC-S536 Annual Inspection including completion of all documentation for multi-zone (16 zone minimum) Fire Alarm System.	100
23	Identify and diagnose various service related issues with conventional Fire Alarm Control Units	40



SECTION / ITEM	DESCRIPTION	RECOMMENDED HOURS
24	Identify and diagnose various service related issues with addressable Fire Alarm Control Units	40
25	Replace Fire Alarm Control Unit boards and components performing any additional tests and documentation in accordance with the applicable codes and standards	40
26	Replace Fire Alarm System field devices with identical and/or comparable replacements per manufacturers' literature and applicable codes and standards, performing any additional tests and documentation in accordance with the applicable codes and standards	40
27	Identify, understand and implement alternative safety measures in accordance with the Approved Fire Safety Plan for the location at which they are working	24
28	Understand and properly apply the Canadian Fire Alarm Association Code of Ethics at all times with customers, employer, other technicians, AHJs and others	40
29	Ability to actively interact with customers to ensure proper and concise understanding of work required, being performed, deficiencies and recommendations	40
	TOTAL	1,500 Hours



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