Content Community Connection

United States
The Electricity Forum Inc.
742 Pre Emption Road
Geneva, NY 14456
Tel 289-387-1025

Canada
The Electricity Forum
1885 Clements Rd, Unit 218
Pickering, ON L1W3V4
Tel 905-686-1040
Fax 905-686-1078
Toll Free 855-824-6131

Fire Alarm Training - Canadian Installation, Inspection, Testing and Maintenance

View Course Details

COURSE DATES AND TIMES

Canadian Fire Alarm Training Overview

Rather than simply reciting code numbers, you'll explore *why* the codes exist, *how* they are applied in practical design and installation scenarios, and *what* you need to know to avoid inspection failures, costly rework, false alarms and non-compliant installations.

The curriculum is tailored to Canada's regulatory environment, encompassing federal and provincial jurisdictions, Canadian fire alarm installation and verification standards, and emerging technologies such as wireless and addressable fire alarm devices. The workshop helps you transition from standard compliance to confident system design and oversight.

This course qualifies for six (6) hours of CFAA Technician Renewal Credits (Category 2 Course) if you're renewing an annual Technician Registration, as per the CFAA website at http://www.cfaa.ca/cecreditform.aspx. If you're renewing a two-year Technician Registration, the course qualifies for twelve (12) hours (Category 2 Course). To qualify for these credits, you must submit the EFTI Certificate of Completion, along with the course outline and the course schedule to the CFAA.

Why This Course Matters

Fire alarm systems are crucial for ensuring life safety, protecting property, meeting regulatory requirements, and maintaining a positive reputation. Too often, installations fail due to misunderstood code requirements, poorly documented designs, inadequate verification, or overlooked integration with other building systems (e.g., sprinklers, elevator recall, emergency lighting). This course empowers you to:

- Understand the *intent* behind Canadian codes and standards, not just the text.
- Design systems that comply and perform reliably when they matter most.
- Coordinate between designers, contractors, verifiers and authorities having jurisdiction to ensure smoother project delivery.
- Stay ahead of technology trends and evolving regulatory expectations—so you are equipped for both current and upcoming standards.
- Minimize liability, inspection delays and system failures through knowledgeable oversight and design review.

This isn't just about "passing an inspection"—it's about ensuring the fire alarm system fulfills its purpose: detecting a fire early, alerting occupants and effecting control actions so that evacuation, suppression and safety systems all work together.

Learning Outcomes

By the end of the course, participants will be able to:

- Interpret and apply Canadian fire alarm design, installation, verification, and maintenance standards.
- Navigate building code and life safety code references across Canadian jurisdictions.
- Design or review fire alarm layouts for various occupancy types and building classifications.
- Select appropriate detectors, notification devices, and control panels for specific applications.
- Determine proper device spacing, mounting heights, zoning, and interconnection requirements.
- Prepare compliant documentation and drawings for permitting, inspection, and acceptance.
- Apply verification, inspection, and maintenance procedures to meet AHJ expectations.

- Integrate fire alarm systems with suppression, evacuation, and emergency lighting systems.
- Identify and correct common design and installation errors.
- Communicate effectively with engineers, installers, verifiers, and authorities having jurisdiction.

Course Experience & Benefits

Our instructor-led format encourages interaction, problem-solving, and practical application in real-world settings. Through group discussion, case-studies and hands-on thinking, you won't just learn the theory—you'll gain the practical insight to apply it on-site the next day.

When you complete the course, you'll walk away with:

- A certificate of completion (and CFAA-qualifying hours)
- Enhanced confidence in your role as designer, contractor, verifier or facility manager
- A sharper eye for code compliance and system performance
- Improved ability to pre-empt inspection issues, false alarms or system failures
- An understanding of how evolving technologies are reshaping fire alarm design and maintenance

WHO SHOULD ATTEND

This course is designed for individuals and teams involved in fire alarm systems throughout their lifecycle. Ideal participants include:

- Fire alarm system designers, engineers and specialists
- Electrical and fire protection contractors who install or service alarm systems
- Building code officials, plan reviewers and inspectors

- Facility managers, property managers and physical-plant directors (commercial, institutional, industrial)
- Maintenance supervisors, testing and service technicians
- Consultants, architects and engineers responsible for specifying or overseeing life-safety systems
- Anyone seeking to deepen their knowledge of Canadian fire alarm standards and best practices

STUDENTS RECEIVE

- Fire Alarm Training Certificate of Course Completion
- 1.2 Continuing Education Unit (CEU) Credits (12 Professional Development Hours)
- $100 Coupon Toward Any Future Electricity Forum Event (Restrictions Apply)
- FREE 100-Page Digital Handbook (Value $20)
- FREE Magazine Subscription (Value $25.00)
- Course Materials In PDF Format

COURSE OUTLINE

Fire Alarm Training - Installation, Inspection, Testing and Maintenance - Course Outline

Course Instructor:

Frank Kurz, *Executive Director of the Fire Protection Technicians Network.*

Frank is Chair of the ULC Working Groups responsible for developing both the Verification and Inspection Standards for Canada and is a committee member of the following standards: CAN/ULC-S561, CAN/ULC-S524, and CAN/ULC-S1001.

DAY ONE

CANADIAN BUILDING CODE

- Fire alarm minimum requirements Classification of buildings
- Requirements for high rise buildings

GOVERNING DOCUMENTS

- CODES AND STANDARDS
- CAN/ULC-S524 STANDARD
- CEC

DESIGN DOCUMENTS

- Plans and Specifications
- Riser drawing
- Criteria for system acceptability

WORKSHOP 1: ELEMENTS OF DESIGN AND INSTALLATION AFFECTING LIFE SAFETY SYSTEMS

- CAN/ULC -S524, CEC, & NBC Building Code Requirements
- “Good Engineering Practice”
- Layout
- Manual Initiating Devices
- Automatic Initiating Devices
- Supervision
- Addressable versus Conventional
- Zoning & Annunciation

AUTOMATIC INITIATING DEVICES

- TYPES
- SMOKE
- BEAM
- HEAT
- AIR SAMPLING
- FIRE SIGNATURE

- HEAT
- INSTALLATION
- ENVIRONMENTAL CONSIDERATIONS

WORKSHOP 2: SIGNALLING DEVICE INSTALLATION

- Audible & Visible Signal Appliances
- Sound Principals
- Audibility
- Intelligibility
- Candela
- Specific Applications & Design Criteria
- Mass Notification
- Building Owners/Management Responsibilities

WORKSHOP 3: CONTROL PANELS

- Supervision
- Signalling Stages
- Class A Circuits
- Class B Circuits
- Hybrid Circuits
- Data Communication Loops
- Power Buss Risers
- Conventional Systems
- Addressable Systems
- Hybrid Systems
- Zoning
- Building Systems Integration – Elevator
- Recall, Dampers, Fan & Smoke Control
- Power Supply Requirements (Primary & Emergency) – Batteries, UPS's, & Generators

WORKSHOP 4: OPEN SESSION AND GROUP DISCUSSION

- New Installations
- Upgrades
- Retrofits
- Replacement of Components
- Replacement of Control Equipment
- Replacement of Field Devices

DAY TWO

Review of Day One Workshops & Questions

NETWORKED SYSTEMS

- Transponders
- Networking Methods
- Large Scale Networks
- Style “A”
- Style “B”
- Style “C”
- Isolators

SPRINKLERS

- Alarm Devices
- Supervisory Devices
- Zoning

COMMAND AND CONTROL FACILITY

- Requirements
- Remote Monitoring Requirements
- CAN/ULC-S561
- Building Code Requirements

WORKSHOP 5: SYSTEM TROUBLESHOOTING

- Ground Faults
- Power Supply Faults
- Supervision Faults
- End – of – Line Devices

WORKSHOP 6: VERIFICATION & COMMISSIONING, PERIODIC TESTING REQUIREMENTS AND THE FIRE CODE

- Building Code Requirements
- CAN/ULC-S537 Appendix “C”
- CAN/ULC-S1001 Report
- Fire Code Requirements
- CAN/ULC-S536 Appendix “E”
- Daily Testing
- Monthly Testing
- Documentation & Forms

WORKSHOP 7: DEVELOPING A PREVENTIVE MAINTENANCE PROGRAM

- Implementing a Fire Safety Plan

COURSE REVIEW AND QUESTIONS

COURSE TIMETABLE

Both days:

Start: 10:00 a.m. - Eastern Time
Finish: 4:30 p.m. - Eastern Time

Contact us Today for a FREE quotation to deliver this course at your company's location.

Request Quote