CFSA NEWS
CANADIAN FIRE SAFETY ASSOCIATION
Fire Safety is Everybody's Business
WINTER 2018

Let's Talk about Standards

CFSA NEWS

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Editor: Lesley-Anne Coleman
The CFSA News Magazine is published 4 times per year: Winter, Spring, Summer and Fall.

Advertising Rates
Membership has its benefits, and advertising is a key advantage to getting your company and product information out to other members in the industry.
The CFSA has decided to make advertising in the CFSA Newsletter a definite advantage for members.

Pricing has been revised to include the following rates:

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For more information regarding advertising in the CFSA News please contact Mary Lou Murray at (416) 492-9417 or MaryLou@associationconcepts.ca

All general inquiries and advertising materials should be directed to the CFSA Office.

We welcome your comments, suggestions and articles. To submit information, please contact us at MaryLou@associationconcepts.ca attention of The Editor.

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President's Message

Welcome to our winter newsletter and thank you for taking the time to check it out. I trust you will find it to be another one of interest.

The CFSA has been actively working on meeting and organizing sessions for the upcoming year that are of interest to our members and other individuals or corporations that wish to attend. Our longevity is in part from the great efforts of individuals of the CFSA board that have assembled and arranged technical sessions over the last 45 years or so. We are certainly known for our training seminars as well as our dinner meetings over the years. We hope you will find the time to join us at one of our 2018 sessions.

I would like to take a moment to recognize the companies that have supported the CFSA's long standing scholarships awards. The CFSA's commitment to rewarding students for their hard work has become a staple part of our association and highlight to our Annual Education Forum (AEF). Each year, nearly ten thousand dollars in scholarship money is handed out to recognize top individuals. This would not have been possible if it wasn't for a few key dedicated supporters such as LRI Inc. formally Leber Rubes, Jenson Hughes, Randal Brown and Associates, Nadine International, ULC, the City of Markham, Siemens and recently Mircom and FCS. The financial support you provide is greatly appreciated.

The codes are forever changing and becoming more specific as we continue to grow and evolve in the fire protection industry. We must continue to keep our ears to the ground and stay as current as possible while continuing to support one another and sharing ideas and solutions. Education is key in the prevention of fires. The more we know will help us to create systems, materials and solutions to assist our first responders prior to risking their lives when it's potentially too late.
Thank you for your continued support of the CFSA.

Kindly,

David Morris
CFSA President

CANADIAN FIRE SAFETY ASSOCIATION
ASSOCIATION CANADIENNE DE SÉCURITÉ INCENDIE

What is The CFSA?

The Canadian Fire Safety Association is a non-proit organization established in 1971, to promote fire safety through the use of seminars, safety training courses, information newsletters, scholarships, and regular meetings.

Our Mission Statement

"To disseminate fire and life safety information and promote a fire safe environment in Canada."

www.canadianfiresafety.com

CFSA CANADIAN FIRE SAFETY ASSOCIATION NEWS

The Canadian Fire Safety Association (CFSA) produces a quarterly News magazine which is distributed electronically to all members and is available for download from the CFSA website.

The CFSA News provides articles on industry related information, updates on codes & standards and overviews of various CFSA educational seminars provided throughout the year. In addition, Corporate Members and their selected representatives are recognized.

Click on a cover below to view that issue online ...

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NOVEMBER TECH SESSION

Ontario Building Code for Retirement Homes

A CFSA – Canadian Fire Safety Association technical session was held at ULC's Toronto office on November 14, 2017. We had 26 people in attendance. It was a great opportunity to meet and connect with a number of our Canadian engineers and local authorities having jurisdiction during the two-hour presentation.

Matteo Gilfillan, LET, B.A.S., C.E.T., CFPS has over 15 years of experience in fire and life safety consulting working on a variety of projects and occupancies providing building and fire code consulting on building designs and concepts, preparing Alternative Solution proposals and conducting building inspections/ audits. Matteo is the Past President of the Canadian Fire Safety Association (CFSA), is an active member in the SFPE, southern Ontario Chapter and the International Code Council (ICC). He is involved with various fire and life safety committees, including the Technical Advisory Committee that reviewed the recently enacted Code changes regarding retirement homes.

The objective of the seminar was to review the changes to the Ontario Building Code relating to retirement homes. On May 17, 2017, the Ontario government filed O.Reg. 139-17 to amend the 2012 Ontario Building Code. The amendments include new design requirements relative to retirement homes, requirements for newly defined "houses", and requirements to support climate change initiatives.

The presentation was specific to the recent retirement home changes which came into effect as of July 1, 2017. The presentation reviewed the reasoning behind the recent fire and life safety changes to the Ontario Building Code related to retirement homes as well as the impacts and implementation of these new requirements, and provided an overview of critical changes to retirement home design requirements. ◆

Upcoming Events

Tech Sessions:

Topic TBA
March, 2018
Seneca College

UL Cybersecurity Program
May, 2018
ULC

Trade Shows:

School of Fire Protection Career Fair
March 15th, 2018
Seneca College Newnham Campus
Toronto, On

FPSA Annual Industry Dinner
March 15th, 2018
Seneca College Newnham Campus
Toronto, On

CFSA Annual Education Forum
Thursday, April 5, 2018
Paramount Conference Centre
Woodbridge, ON

FDIC International
April 23 - 28, 2018
Indianapolis, IN
Indiana Convention Center &
Lucas Oil Stadium

ISC West – International Security Conference West
April 11 -13, 2018
Sands Expo Center
201 East Sands Avenue
Las Vegas, NV 89109

International Security Conference West SandsExpo & Venetian
April 11 -13, 2018

ASIS – American Society for Industrial Security
September 24 - 27, 2018
Convention Center, Las Vegas, NV

More information regarding events and registration can be found by visiting:
http://canadianfiresafety.com

2800 14th Avenue, Suite 210, Markham, ON L3R 0E4 • Tel: 416-492-9417 • Fax: 416-491-1670 • www.canadianfiresafety.com

Thursday, April 5, 2018
7:45 am - 4:30 pm

Paramount Conference & Event Venue
222 Rowntree Dairy Road, Woodbridge
NW corner of Hwy 407 and Hwy 400

Who is this Forum For?
This forum should appeal to property owners, managers, designers and consultants, and those in the building and fire safety industry.

Enquiries
Please contact Mary Lou Murray
Email: marylou@associationconcepts.ca | Tel: 416-492-9417

- Sponsorship Opportunities available
- Advance Table Booking
- Door Prize Donations

Grand Draw
at Closing Ceremonies!!!
DOOR PRIZES

Early-Bird Draw
Register by March 2, 2018 and be eligible for an early bird draw.

Early-Bird Discount!
$25 off per person if registered by March 2, 2018!
(See pricing on reverse)

This symposium qualifies for professional development towards NFPA/CFPS Recertification. This Symposium also counts for Self-Directed Learning.

SEE OVER TO REGISTER...

PRELIMINARY PROGRAM AT A GLANCE

KEYNOTE SPEAKER: FIRE CHIEF TIM BECKET, MISSISSAUGA FIRE AND EMERGENCY SERVICES

7:30 am - 8:00 am	**Registration and Breakfast**
7:45 am - 8:00 am	**Annual General Meeting** Speaker: David Morris, CFSA President
8:00 am - 8:15 am	**Welcome Address** Speaker: Fire Chief Larry Bentley Vaughan Fire and Rescue Services
8:15 am - 9:30 am	**Keynote Address** Speaker: Fire Chief Tim Becket Mississauga Fire and Emergency Services
9:30 am - 10:15 am	**Fire-Protected Membrane Ceilings** Speaker: Megan Nicoletti, Code Next
10:15 am - 10:30 am	**Refreshment Break**
10:30 am - 11:15 am	**Proposed Changes to the CAN/ULC Fire Alarm and Commissioning Standards** Speaker: Simon Crosby, Jensen Hughes
11:15 am -12:00 pm	**Updates to the Ontario Fire Code** Speaker: Gord Yoshida, VP Product Development Ontario Fire Marshal Office
12:00 pm - 1:00 pm	**LUNCHEON** Scholarship Awards
1:00 pm - 1:45 pm	**Flexible Sprinkler Piping** Speaker: John Noel, Flexhead Industries
1:45 pm - 2:30 pm	**Sprinkler & Fire Protection Installers Compulsory Trade Classification** Speaker: Diego Savone, Ontario College of Trades
2:30 pm - 2:45 pm	**Refreshment Break**
2:45 pm - 3:30 pm	**Case Study Fire Modeling and Egress** Speaker: Jack Keays, Vortex Fire
3:30 pm - 4:15 pm	**Updates to the Ontario Building Code**
4:15 pm - 4:30 pm	**Closing Comments & Grand Prize Draw**

CANADIAN FIRE SAFETY ASSOCIATION

ANNUAL EDUCATION FORUM

Thursday, April 5, 2018 • Paramount Conference & Event Venue, 222 Rowntree Dairy Road, Woodbridge

Registration Form

HOW TO REGISTER:
MAIL to the address listed below, or scan completed form and
FAX to: 416-491-1670 or EMAIL to: cfsa@associationconcepts.ca

Name: _____

Title: _____

Company: _____

Address: _____

City: _____

Province: _____ Postal Code: _____

Business Phone: _____

Fax: _____

Email: _____

Please advise of any special dietary needs:

_____

Enquiries:

Please contact Mary Lou Murray
Email: marylou@associationconcepts.ca
Tel: 416-492-9417 Ext. 228

- Sponsorship Opportunities available
- Advance Table Booking
- Door Prize Donations

REGISTRATIONS	FEE	TOTAL
Corporate Member Early Bird	$230.00	
Corporate Member	$255.00	
Corporate Table (6 registrations)	$1,200.00	
Member Early Bird	$230.00	
Member Rate	$255.00	
Member Table (6 registrations)	$1,200.00	
Non-Member Early Bird	$290.00	
Non-Member	$315.00	

OTHER OPTIONS		
Lunch only	$85.00	
Students	$70.00	
HST Registration #12620 8610 RT0001	+ 13% HST	
	TOTAL $	

Cancellations will be accepted until March 2, 2018.
After March 2, 2018, only substitutions will be permitted.

☐ Please send me membership information on the Canadian Fire Safety Association

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www.canadianfiresafety.com

This symposium qualifies for professional development towards NFPA/CFPS Recertification. This Symposium also counts for Self-Directed Learning.

Announcing Two New CFSA Awards

By Anthony H. Van Odyk,
CFSA First Vice President and Membership Chair

We would like to welcome **FCS Fire Consulting Services** and **The Mircom Group** to the CFSA Scholarship Program. This now brings the number of awards presented at our Annual Education Forum to 11. Both Awards will be presented to a top Year 2 Student in a Fire Safety/Fire Protection Program. The CFSA is very proud and each year Sponsoring Donor Companies and CFSA present financial awards to serving post-secondary students enrolled in a Fire Safety program.

FCS Fire Consulting Services and the Mircom Group join the City of Markham - Building Standards Department, Firetronics 2000 Inc., Jensen Hughes Consulting Canada, LRI Engineering Inc., Nadine International Inc., Siemens Canada Ltd., and Underwriters' Laboratories of Canada in providing generous assistance to leading Fire Safety students.

The following details each of these new Companies and their awards:

The CFSA FCS Fire Consulting Services Award

This award has been graciously provided by FCS Fire Consulting Services. FCS are experts in the Fire Code provide services that include solutions through audit, evaluation, reporting and training in order to achieve sustainable Fire Code compliance. Included are Fire Safety Suite Assessment (risk such as hoarding situations) and Smoke/Odour Migration Diagnostic Testing (risk of breach in fire separation between units).

This $ 500.00 award will be presented to Year 2 student of a 3 year Fire Protection Technology program with exceptional skills in Fire Code and Retrofit courses.

The CFSA Mircom Group Award

This award has been graciously provided by The Mircom Group. Mircom provides a variety of life safety and security services as well as selling all Mircom equipment. Their technicians are certified with either the Canadian Fire Alarm Association (or NICET) and will ensure that your equipment meets all relevant codes and standards and is well maintained. Included are Preventative Maintenance Agreements, Monthly and Annual inspections and Site monitoring services.

This $ 500.00 award will be presented to Year 2 student of a Technician or Technology program with exceptional skills focused on Fire Alarm Systems – Codes, Design and Practical Lab Skills.

We extend our appreciation to these forward thinking companies on behalf of all Fire Safety students. Their contribution is making a difference. Graduating students hold the potential for helping us achieve our mission of providing fire safe communities.

We continue to look for new financial donations from CFSA Individual and Corporate members. $500.00 or $1,000.00 tax deductible dollars leads to scholarship fund in your name. When you create a scholarship, you help a deserving student and make a difference. For more information, contact us at, Scholarship Initiative, Canadian Fire Safety Association, 2800 14th Avenue Suite 210, Markham, ON L3R 0E4. ◆

Let's Talk About Standards

Tess Espejo / ULC Standards

Recently, as I lingered in an international airport in Hong Kong due to a long layover, I occasionally looked up intently at the ceiling and beams. At one point, I found a running man exit sign directly above me and stopped to look more closely at the back, looking for a mark. A young lady with me could not help herself any longer and finally asked me what I was doing. I caught myself and realized, it might seem weird for other people that I am making sure there are smoke detectors, sprinklers and other necessary devices for fire safety around the building, and that the devices have the proper "labels" verifying that they conform to standards. After explaining this, she then asked, "What are standards? Is that what you do?"

Yes, it is what I do. And you, yes, you who are reading this, would probably admit that you did stop at one time or another to look more closely at a control panel or a smoke alarm or even a manual station, looking for the brand and hopefully, a listing mark as well. Do I know this equipment? Is the device "listed"? Is it installed properly?

Because that is what we do.

But let us go back to the young lady's question. What is a standard?

To put it simply, a standard provides a benchmark to be met. A standard document aims to achieve an optimum degree of order in a given context. In the case of fire alarm system devices and components, the ULC Technical Committee (TC) on Fire Alarm and Life Safety Equipment and Systems has the mandate to develop, for repeated use, the rules, guidelines or characteristics that every fire alarm system device, component, service or system installed or performed in Canada is required to comply with.

The ULC TC has been doing this task for almost four decades now, and it never ceases to amaze me every time this group meets that we might have collectively assembled the greatest amount of knowledge, expertise, experience and passion about fire alarm and life safety per square meter around the globe. These individuals come from disparate backgrounds, government, consultancy firms, academia, code centres, testing laboratories, building construction, design desks, monitoring stations or the production line, but they are united by one singular purpose – ensuring the safety of Canadians from fire through the proper design, installation, use, maintenance and service of fire detection and alarm systems.

Some fire alarm technicians might not necessarily agree with certain requirements in a standard, but as project manager for the ULC TC, including its Subcommittees and Working Groups, I can assure anyone who asks, that ULC standards are developed diligently by a balanced representation of interest groups in the industry (commonly includes users, regulators, manufacturers and general interest), subjected to review by the public, and approved by consensus.

ULC Standards is the Standards Development Organization (SDO) accredited by the Standards Council of Canada

continued…

ULC Technical Committee on Fire Alarm and Life Safety Equipment and Systems

Let's Talk about Standards Cont'd

(SCC) to administer this process in accordance with SCC's requirements and guidelines. We organize and manage technical committees whose membership reflect the collective expertise and specialty on a specific subject area and who uphold the core values of consensus, respect, integrity and professionalism.

SCC is a federal crown corporation reporting to Parliament. Established in 1970, it aims to promote Canada's competitiveness and well-being and improve Canadians' quality of life by leading Canada's standardization network and facilitating the development and use of standards and accreditation services. SCC approves each national standard of Canada (CAN/ULC standards) and ensures that each document was subjected to public review and went through the consensus process. It also conducts regular audit of our systems, records and procedures. To learn more about standards and standardization in Canada, go to the SCC website at: https://www.scc.ca/stakeholder-participation/orientation-modules

I often receive this question from the public: *If a new standard or new edition standard is published, are the new requirements immediately binding and in effect*? Short answer: NO. Standards are voluntary documents that have no legal effect…. yet. There are two drivers that promote the acceptance of the requirements within a standard: industry demand and regulation. ULC product standards (example: S527 (control units), S528 (manual stations), S531 (smoke alarms), etc.) are used for conformity assessment that allow manufacturers to use the UL or ULC logo to be marked on their product as evidence of compliance to a standard. If not prescribed by regulation, manufacturers would normally submit their products for conformity assessment as a marketing edge or to provide their customers some level of assurance of safety or performance. If a certification organization has a program to list products under this category, they would prescribe the effective date of the requirements of a new standard or new edition for conformity assessment purposes.

Some standards developed by the ULC Technical Committee on Fire Alarm and Life Safety Equipment and Systems

Once a standard is referenced in codes and regulations, the requirements are no longer voluntary and become mandatory. In Canada, ULC fire alarm and life safety product and service standards are highly regulated and covered by this additional legal mandate since they are required by law. What is the difference between standards, codes and regulations? A Code is broad in scope and is given the force of law through adoption by a provincial, territorial or municipal authority. A code may include any number of referenced standards. For example, the National Building Code of Canada 2015 requires installation of fire alarm systems to comply with the requirements of CAN/ULC-S524:2014. However, as of this writing, only the Yukon Territories, North West Territories, and Nova Scotia have adopted the 2015 NBC model code. Hence, other jurisdictions are still mandated to comply with earlier versions of S524. My mantra to those who ask: check with your AHJ (authority having jurisdiction) which edition of the standard is in effect.

A regulation is a statutory instrument made by exercising a legislative power conferred by an Act of parliament. Regulations have a binding legal effect and if a voluntary standard is referenced in regulation, it becomes mandatory. For instance, regulations promulgated by Health Canada under the Canada Consumer Product Safety Act reference a number of ULC standards on initiating devices, notification appliances and fire alarm control unit.

Trick question: *I don't see CAN/ULC-S529 (smoke detectors) referenced in the National Building Code of Canada. Does that mean it is not mandatory? Can I use a smoke detector that is not "listed"*? Answer: No. Meaning, smoke detectors are required to comply with CAN/ULC-S529 because it is required by CAN/ULC-S524, which is referenced in codes and regulations. This is called indirect reference. If you look at Clause 4.1.4 of CAN/ULC-S524, it lists the standards that devices and equipment used in a fire alarm system are to comply with.

Over the years, the ULC Technical Committee has grown in breadth and scope. Its official mandate is to develop standards, guidelines, methods of tests, installation, building/facility commissioning, and other pertinent requirements for life safety related to fire protection, detection and signaling equipment and systems, and to interact with other ULC TCs as applicable. It currently has 40 projects in its work program, 24 of which are active. The Committee, chaired by Fred Leber (AML Encore Inc.), oversees six standing sub-

Let's Talk about Standards Cont'd

committees: 1 - Installation, Inspection and Testing chaired by Randy de Launay (Office of the Ontario Fire Marshal & Emergency Management); 2 – Control Units, chaired by Ken Baird (LRI Fire Engineering); 3 – Smoke / Heat Detectors and Alarms chaired by David Goodyear (D. Goodyear Fire Consulting); 4 – Audible and Visible Signal Devices chaired by Don Boynowski (D. Boynowski Fire Consulting); 5 – Accessory Devices chaired by Don Boynowski; and 6 – Commissioning chaired by Simon Crosby (Jensen Hughes Consulting Canada Ltd.). These Subcommittees in turn, oversee the development of standards by ad-hoc Working Groups. You can peruse the Work Program of the committee at: http://canada.ul.com

From "just" the fire alarm system, this committee now covers other life safety systems and activities like mass notification systems, safety way guidance systems, ancillary devices, integrated systems testing and commissioning. It is currently completing 1st edition CAN/ULC-S573 (Installation of Ancillary Devices) that will cover the installation of devices that are connected to the fire alarm system but is not part of the fire alarm system, like elevator recall, emergency power generators, lighting control systems and audio/visual control systems. 1st edition CAN/ULC-S590 (Safety Way Guidance System) is intended to cover the design and application of visual components of a safety way guidance system, including exit signs and path markers, regardless of technology used. The equipment standard for mass notification systems, S576 is now going to the 2nd edition. There is a plan to develop a guideline document for the installation and use of this increasingly vital system.

Finally, many fire alarm technicians would be interested to know about a major activity of the committee, to synchronize the requirements in the next editions S524 (Installation of Fire Alarm Systems), S536 (Inspection and Testing) and S537 (Verification), along with S527 (control units). It is a major undertaking that have already necessitated hundreds of work-hours performed by dozens of volunteers, some in their spare time, to ensure that the next documents are consistent, more robust, more user-friendly and will improve the safety of Canadian lives and properties.

ULC Standards is always looking for more volunteers who wish to participate in the development of standards. If you are interested, please visit the *ULC Standards website* > *Become a Technical Committee Member* at the link: http://canada.ul.com/ulcstandards/technicalcommittees/becomeatechnicalcommitteemember/

Or email me directly at Theresa.Espejo@ul.com and indicate your area of interest.

Who knows, the next time someone catches you looking at a fire alarm equipment, you would be better equipped to explain what a standard is. ◆

High Standards

UL 2900-2-3 Helps Mitigate IoT Cybersecurity Risk

Louis Chavez
UL, Life Safety and Security

Smart electric meters, commercial security cameras, process sensors and ATMs make up a fraction of the devices connected to the internet of things (IoT).

According to Gartner, Inc., a business research and advisory organization, 8.4 billion connected "things" will be in use in 2017 with an expected 20.4 billion by 2020. The exponential growth of IoT devices, such as smart TVs, digital cable boxes, smart meters and security cameras, offers business to business (B2B) and business to consumer (B2C) users numerous opportunities such as responsive services, enhanced experiences and convenience, to name a few.

For electronic physical security systems, the IoT allows organizations to remotely monitor, identify and respond to safety and security issues. Digital keys can be quickly changed, for example, to limit or allow access, adding an extra layer of security to the system. But with interconnected technology comes cyberthreats in the form of phishing, worms, bots, ransomware and malware techniques used by attackers who manipulate vulnerabilities within network administration software and operating systems.

What's at stake?

Symantec, in its 2017 Internet Security Threat Report, offers these sobering statistics from its analysis of 2016 data:

- 1 in 2,596 emails contained phishing attempts
- 357 million new malware variants introduced
- 98.6 million bots
- 229 thousand web attacks blocked, on average, per day
- IoT devices were attacked on average once every two minutes

To put the numbers into context, an October 2016 attack made headlines when hacked cameras led to a massive distributed denial of service (DDOS) attack against websites like Amazon, Twitter, Spotify, Yelp, Netflix and Reddit. An army of botnets, known as Mirai, wreaked havoc by either knocking the targeted websites offline or severely decreasing a site's operational bandwidth.

News articles reported that the traffic was drawn from multiple types of IoT devices, including unsecured routers, DVRs and cameras. Connected devices like these are used as a backdoor to hack into legitimate networks, acting as a ready platform for individuals, groups and even states, to launch large-scale, botnet/DDOS incidents.

Security by design

The Federal Communications Commission (FCC) warned IoT manufacturers in early 2017 to address cybersecurity risks soon or face more government oversight and mandatory regulations.

At the center of the issue are DDOS attacks by botnets such as Mirai and a growing scrutiny of unsecured channels that can be easily intercepted by hackers. Many manufacturers produce devices that are simple to "break" as shown by New York State's investigation into the QuickLock Padlock and QuickLock Doorlock sold by SafeTech in Utah.

The FCC proposed in its Cybersecurity Risk Reduction White Paper (January 18, 2017) the implementation of intelligent cyber design practices, such as authentication safeguards and adherence to best practices, prior to a product's release. The FCC prefers to utilize collaborative private/public partnerships, but adds that "the Commission has the tools available to make adjustments to restore the balance if necessary."

The solution

To help improve the security of critically connected electronic physical security systems, UL 2900-2-3, the newest addition to the UL 2900 series of cybersecurity standards, developed with industry input, provides a foundational set of cybersecurity performance and evaluation requirements that manufacturers of network connectable products can use to establish a baseline of cyberprotection against known vulnerabilities, weaknesses and malware.

UL's Cybersecurity Assurance Program (UL CAP) can now test and evaluate a product's software for the presence of malware, vulnerabilities and weaknesses, and certify the product's software architecture and design to the specifications enumerated in the Outline of Investigation.

The Federal Communications Commission (FCC) warned IoT manufacturers in early 2017 to address cybersecurity risks soon or face more government oversight and mandatory regulations.

Electronic physical security infrastructures include emergency communications systems, fire alarm systems, alarm receiving systems, automated teller machine systems, access control systems, surveillance cameras, DVRs, NVRs and the like.

For UL 2900-2-3, a three-tiered security approach was developed with an increasing level of security for each tier. Tests include fuzz testing, known vulnerability detection, code and binary analysis, risk control analysis, structured penetration testing and security risk controls assessment.

Level 1 (L1) includes the foundational cybersecurity testing requirements for security risk assessment of software in products covered in the Outline of Investigation. L1 is recommended as a minimum level of assessment.

Level 2 (L2) includes all of the L1 assessment and testing requirements and additional supplemental requirements for security risk assessment of software in products. L2 also provides an assessment of the security capabilities of a product with knowledge of internal security controls of the product.

Level 3 (L3) includes L1 and L2 assessment and testing requirements and additional supplemental requirements of the vendor process and management. It also provides an assessment of security capabilities of a product with knowledge of internal security controls of the product and knowledge of the business practices of the vendor to support the lifecycle of the product.

In today's connected world, the variety of devices available offer numerous points of entry for cyberattacks. Now is the time for software developers and manufacturers to understand a system's vulnerabilities and to harden their product against attack. UL 2900-2-3 can help ensure the performance and reliability of a product's software to decrease downtime and mitigate cyber risks.

Originally published at www.ul.com/inside-ul/ul-2900-2-3-helps-mitigate-iot-cybersecurity-risk/ – © 2017 UL LLC

Louis Chavez; Principal Designated Engineer with UL's Life Safety and Security business, Louis is recognized by UL as a Distinguished Member of Technical Staff and is a member of UL's William Henry Merrill Society ◆

NFPA 13, 2019 Edition

Janet O'Carroll,
Vice-President of IFI Inc.

This article reflects proposed changes to NFPA 13, 2019 edition as presented in the January technical session.

On January 17, 2018, Larry Keeping (P.Eng.) a Senior Technical Specialist at PLC Fire Safety Solutions presented proposed changes to NFPA 13 "Standard for the Installation of Sprinkler Systems", 2019 edition.

Larry reviewed NFPA's revision cycle process, the technical committees involved and identified that NFPA 13 is undergoing a major re-organization in order to improve usability of the standard. The technical correlating committee initiated an initiative to re-organize the standard in order to provide a more logical sequence, address redundancies and gaps, address dispersal of requirements with common subjects, reorganize Chapter 8 and reorganize the provisions for the protection of storage.

Larry discussed numerous changes in the various chapters and selected examples of those changes as follows:

- Chapter 3: Definitions – There is a new definition for Automated Inspection and Testing – The performance of inspection and tests at a distance from the system or component being inspected or tested through the use of electronic devices or equipment installed for the purpose. (3.3.9).
- Chapter 4: General Requirements – Water supply information as identified in 5.2.2.2.1 would be required to be included in the owner's certificate. (4.2)
- Chapter 5: Water Supplies – Where conditions contribute to unusual corrosive properties, two additional items have been added including "Fill dry-pipe or preaction systems with nitrogen as a supervisory gas to mitigate against corrosion." And "When using a generator, use an approved nitrogen generator". (5.1.5.2).
- Chapter 6: Installation of Underground Piping – "Private fire service mains shall not be permitted to extend more than 10 ft (3m) under the building, except as allowed in 6.4.3.2.1 (which includes a list of requirements that would need to be met, including: run in a covered trench; accessible within the building; rigid walls and base; non-combustible materials, provisions for draining, etc. (6.4.3.2).
- Chapter 8: System Types and Requirements – Addition of "A single pressure gauge shall be permitted to be installed on a manifold below multiple riser check valves or alarm check valves. (8.1.1.2.1).
- Chapter 9: Sprinkler Location Requirements – An additional requirement added to "Sprinkler shall be permitted to be omitted above cloud ceilings where all of the following apply: Spaces above cloud ceilings contain either non-combustible or limited-combustible construction with minimal combustible loading". (9.2.7).
- Chapter 10: Installation Requirements for Standard Pendent, Upright and Sidewall Spray Sprinklers – New requirement "The bottom of light fixtures and similar obstructions located less than 4ft (1.2m) from the sprinkler shall be above the plane of the sprinkler deflector." (10.3.6.1.2.2).
- Chapter 11: Installation Requirements for Extended Coverage Upright, Pendent, Sidewall Spray Sprinklers – New requirement "For obstructions located 4 in. or greater above the plane of the sprinkler deflector the sprinkler shall be permitted to be located less than 8ft. (2.4m) from the obstruction." (11.3.6.1.2.2).
- Chapter 12: Installation Requirements for Residential Sprinklers – New requirement "Concealed sprinklers shall be permitted to be installed in beams not greater than 4 in. (100mm) in depth.
- Chapter 14: Installation Requirements for Early Suppression Fast-response Sprinklers – Requirement modified "ESFR sprinklers shall be used only in wet pipe systems unless specifically listed for use in dry systems or preaction systems. (14.2.2).
- Chapter 15: Installation Requirements for Special Sprinklers – New requirement "Dry sprinklers shall only be installed in fittings as specified by the manufacturer." (15.3.4).
- Chapter 16: Installation of Piping, Valves and Appurtenances – New requirement "The arrangement required in 16.14.5.1. shall be serviceable, without requiring the owner to modify the system to perform the test." (16.14.5.1.1).
- Chapter 17: Installation Requirements for Hanging and

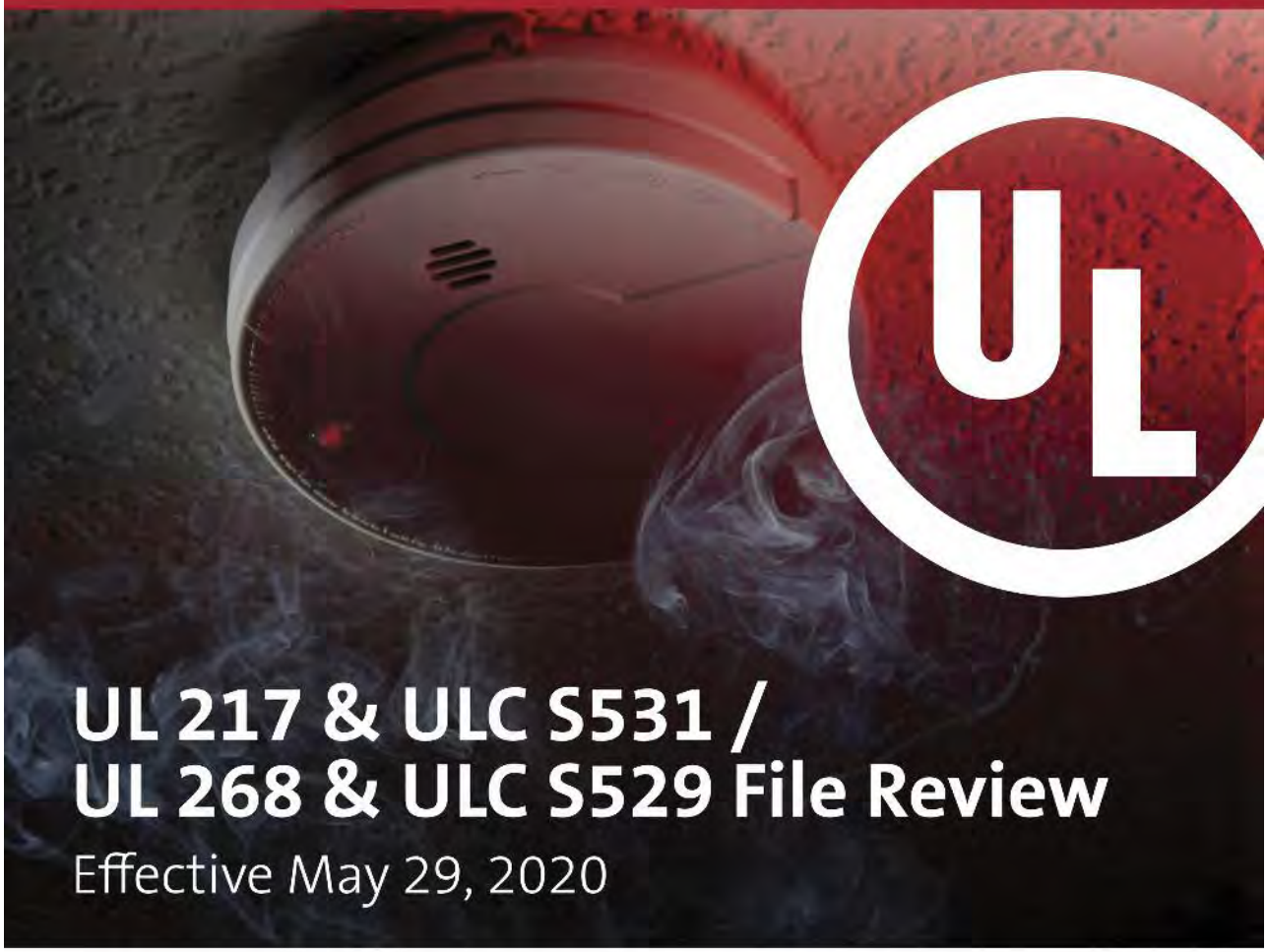
Support of System Piping – New requirement "Unless permitted by 17.1.7.2 or 17.1.7.3, hangers and their components shall be ferrous metal. (17.1.7.1).

- Chapter 18: Installation Requirements for Seismic Protection – Appendix information added "Penetrations with or without clearance for seismic protection also need to meet building code requirements for fire resistance ratings as applicable." (A.18.4.1).
- Chapter 19: Design Approaches – New requirement "For a deluge system water curtain providing proscenium opening protection in accordance with 19.15.17.2, the water curtain shall be calculated to supply all of the open sprinklers attached thereto." (19.4.3.3.).
- Chapter 20: General Requirements for Storage – ESFR water supply duration modified for storage up to 12 feet and over 12 to 20 ft.
- Chapter 27: Plans and Calculations – Modified the requirement for working plans.
- Chapter 28: System Acceptance – New requirement regarding hydrostatic testing at 200 psi for 2 hours "Loss shall be determined by a drop in gauge pressure or visual leakage." (28.2.1.2).

Larry Keeping, P.Eng. is a Senior Technical Specialist at PLC Fire Safety Solutions with extensive experience in the design and installation of automatic sprinkler systems, foam-water fire protection systems, standpipe systems, water supply and fire pump systems. He currently represents PLC as a special expert on the NFPA 13 Technical Committee on Sprinkler Systems Installation Criteria, the NFPA 13 Technical Committee on Sprinkler Systems Discharge Criteria and the NFPA 24 Technical Committee for the Installation of Private Service Mains. Larry also serves on the NFPA 25 Technical Committee on Inspection Testing and Maintenance of Water Based Systems.

The CFSA would like to thank Larry for this informative presentation. A copy of the entire presentation is available on the CFSA website at http://canadianfiresafety.com/wp-content/uploads/2018/02/2019-Edition-of-NFPA-13-CFSA-Handout.pdf. ◆

BE PREPARED TO MEET NEW REQUIREMENTS FOR SMOKE ALARMS AND DETECTORS



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Effective May 29, 2020

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All There Is To Know About Magnetic Locking Devices (A.K.A. Mag-Locks) – AHJ Perspective

By Evgenia Golovatenko / Fire Protection Technologist

In the industry of fire protection, it is very well known that fire safety is paramount inside and around every building. As building owners, engineers, insurance underwriters, authority having jurisdiction (AHJ) staff and service technicians for fire protection systems, we all shall comply with locally adopted building and fire codes to ensure occupant safety in buildings is achieved. One of many required methods of achieving safety in a building, and ensuring safe and efficient egress of all occupants at all times, is to ensure all doors in the access to exit, including exit doors, are in good operating condition, are unobstructed, and can be readily opened from the inside with not more than one releasing operation and without requiring any keys, any special devices, or require any specialized knowledge of the door opening mechanism. In Ontario, the Ontario Building Code (O.Reg. 332/12 as amended) imposes this requirement, among many others when it comes to exit doors. The bottom line is, each occupant shall be able to exit the building quickly and safely.

Now, imagine, what if these exit doors, including access to exit doors, that require to be readily opened at all time, are leading through areas of the building where access is desired to be restricted for various reasons? Or what if the exiting is not permitted via certain doors unless authorized, for an example, in police interview rooms? Shouldn't the building operator be able to keep these doors locked? Absolutely, but, on one condition: these doors shall be equipped with magnetic locking devices, known as mag-locks.

This article will explain what the mag-lock is; summarize the Ontario Building Code requirements for mag-lock installation, what should be shown on the building permit when proposing to install these, and what should be expected at commissioning.

Mag-lock is a door hardware that keeps the door locked. Mag-lock consists of electromagnet (an energized magnet) and armature plate (a metal plate to which the energized magnet is attracted). Mag-locks are fail-safe devices, meaning they are designed to unlock the door should there be any trouble with any of the mag-lock components.

The armature plate is typically installed at the top corner of the door on the latch side. The electromagnet is installed right below the casing and is facing the armature plate (Figure 1).

The electromagnet contains a 24 Volt power supply, and once energized, it attracts to the armature plate with a holding force as high as 1800 pounds.

Other critical components of the mag-lock are; control panel – controls operation of all mag-locks in the building (Figure 4) usually is located in electrical or IT room, master key switch – allows disengaging or energizing mag-locks manually by authorized personnel, and shall be located near principle entrance or central alarm and control facility of the building (Figure 5). The card reader – once authorized, will disengage and allow access (Figure 3).

The requirements for magnetic locking devices are found in Division B Sentence 3.4.6.16.(4) of the 2012 Ontario Building Code.

The very first requirement is that the mag-lock cannot incorporate any latches, pins or other devices which could con-

Figure 1 - Electromagnet and Armature Plate

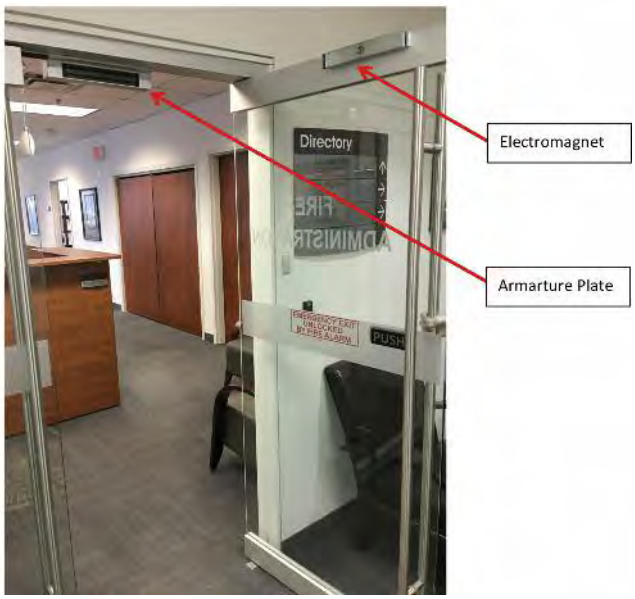
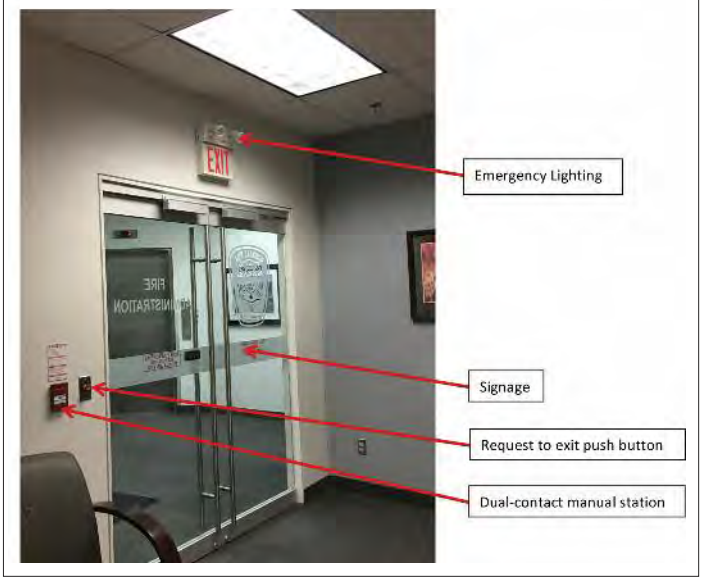


Figure 2 - Critical Components - Secured Side



tinue to hold the door closed even when mag-locks are disengaged. And second is that in order to install mag-locks, the fire alarm system shall be provided throughout the building, regardless of occupancy and occupant load. The mag-lock controller shall be interconnected with the fire alarm system, and **immediately** release the door upon fire alarm activation.

Where the building is equipped with a two-stage system, all mag-locks shall release the doors at the first-stage of alarm (alert condition). The exception to this rule is if the building is classified as a care, care and treatment, detention occupancies or retirement homes, it is permitted to release mag-locks on the second stage of alarm (alarm condition).

Mag-locks shall also be released **immediately** upon many other conditions, such as loss of power to mag-locks or its associated auxiliary controls, as well as loss of power to fire alarm panel. Should there be any circuit fault between the mag-lock controller and the fire alarm control panel; all mag-locks shall be released **immediately**, as well. Likewise, manually disengaging mag-locks at key-switch shall cause mag-locks to release **immediately**. Last but not least, mag-locks shall release the door upon activation of a fire alarm manual station that shall be located not more than 600 mm from the door (measured diagonally from latch to manual station). The manual station shall be located on secured side of the door. Double contact manual station shall be used, and by activating the manual station, first and immediate action shall disengage the mag-lock and activate fire alarm system throughout the building, and eventually cause the rest of the mag-locked doors to disengage (Figure 2).

Word **"immediately"** is seen quite often in this article. What does **"immediately"** mean to you? Does it mean right this

Figure 3 - Critical Components - Non-secured Side

Figure 4 - Electromagnetic Control

Figure 5 - Master Key-switch

All there is to Know about Magnetic Locking Devices Cont'd

second? Does it mean 2 seconds later? Or maybe 5 seconds later? The Ontario Building Code does not define the word "immediately", therefore, any definitions of words or phrases used in the Code shall have meanings that are commonly assigned in the context in which they are used. As an Authority Having Jurisdiction (AHJ), it is my interpretation that upon any of the activations or failures that were listed earlier, the door will be released open **now**, right this second.

An exception to immediate release rule lies in Division B Sentence 3.4.6.16.(7), where it is permitted to install mag-locks where the door can be released, within not more than 15 seconds, of gaming premises which are sprinkler protected, and smoke detectors are installed in each room and corridor accessible to the public. The intent of this exception is to prevent high risk of theft in gaming premises for obvious reasons. This set-up can also be seen in other premises, such as department stores. Signs advising occupants that the door will open in 15 second must be provided at the door.

Alright, it is understood how the door will be unlocked during the fire alarm or trouble conditions, but how are mag-locks being used daily? Well, first off, access is restricted to authorized personnel, therefore the card reader is installed on the non-secure side of the door, and once the card is applied, an electric signal is then sent to building security system and access to the secured area is granted. Also, there could be a door release button, which can be used to request to open the secured door, and that button is also interconnected with building security system. Restricted access and request to use the door can be set up in various ways, as needed by building operators.

It is important to notify occupants that the secured exit door is in fact an exit, and even though it is locked under normal conditions, it will unlock upon fire alarm condition. The Ontario Building Code requires mounting an legible sign on the door with phrase "EMERGENCY EXIT UNLOCKED BY FIRE ALARM SYSTEM". The letters shall have specific height and stroke. Emergency lighting shall be provided at secured door to illuminate the signage during power shutdowns. Electrical Safety Authority (ESA) Inspection Certificate shall be obtained for mag-lock entire installation. (See Figure 2 and 3) One can ask, can mag-lock systems be used anywhere to restrict access? The answer is "No", it can't. Mag-locks cannot be installed on exit doors serving elementary or secondary schools, assembly occupancies having an occupant load more than a 100, and high hazard industrial occupancies such as flour mills, for further safety concerns that may be associated with mag-lock system in these sensitive and high risk occupancies.

So, now that you are clear with requirements, you have decided to install mag-locks in your building. First, a building permit shall be obtained prior to installation. The building permit shall contain all of the information that is specified in Division B Sentence 3.4.6.16.(4), including but not limited to floor plans, single line diagrams, location of all associated equipment to demonstrate compliance with the Sentence. Once the building permit is approved, the installation may begin.

Once the installation is complete, it is time to close off the permit, and call for an inspection. So what can be expected from the inspection? Well first of all, the inspector will most likely request ESA Inspection Certificate and Fire Alarm Verification Report prior to conducting the inspection. Once documentation reviewed, it is time to attend the site and witness the operation test of entire mag-lock system. The mag-lock, however, shall not be engaged until it is permitted to do so by the Inspector.

When commissioning a mag-lock system, it is AHJ's expectation that upon any of the fire alarm activations, including the manual station near the mag-locked door, or failures and troubles that were listed earlier, the test door will be released **now**, right this second. It is a common practice to have one witness located where the fault is performed (e.g. electrical room at power supply) and another witness located at the test door who would be opening the door to test the release. A communication device is used between witnesses to confirm that the door is released the second the fault is created. After the mag-lock has been released, a key-switch, located in principle entrance to the building or in central alarm and control facility will be used to reset the mag-lock.

Once the test is successful, the permit is now successfully closed; electromagnetic locking devices may be engaged.

Questions and Answers:

1. Is there a limit on how many mag-locks can be installed inside the building?
    a. The Ontario Building Code does not provide restrictions on how many doors are allowed to be mag-locked. This implies that as many doors are allowed to be mag-locked as needed.

2. Can mag-lock key-switch be located anywhere else in the building other than principle entrance of central alarm and control facility?
    a. 1990 Ontario Building Code did have provisions to install mag-lock key switch in location accessible only to authorized personnel, therefore, where the mag-lock was installed at the time when 1990 Ontario Building Code was in effect, it is possible to find mag-lock key-switch elsewhere.

3. Can mag-lock system be connected to back-up power?
    a. No, it cannot. Mag-lock devices shall disengage upon power failure to mag-lock control system, meaning the primary power supply. ◆

Safety in Places of Public Assembly

Every day, millions of people wake up, go to work or school, and take part in social events. But every so often the unexpected happens: an earthquake, a fire, a chemical spill, an act of terrorism or some other disaster. Routines change drastically, and people are suddenly aware of how fragile their lives and routines can be. Each disaster can have lasting effects — people may be seriously injured or killed, and devastating and costly property damage can occur. People entering any public assembly building need to be prepared in case of an emergency.

BEFORE YOU ENTER

- **Take a good look.** Does the building appear to be in a condition that makes you feel comfortable? Is the main entrance wide and does it open outward to allow easy exit? Is the outside area clear of materials stored against the building or blocking exits?
- **Have a communication plan.** Identify a relative or friend to contact in case of emergency and you are separated from family or friends.
- **Plan a meeting place.** Pick a meeting place outside to meet family or friends with whom you are attending the function. If there is an emergency, be sure to meet them there.

WHEN YOU ENTER

- **Take a good look.** Locate exits immediately When you enter a building you should look for all available exits. Some exits may be in front and some in back of you. Be prepared to use your closest exit. You may not be able to use the main exit.
- **Check for clear exit paths.** Make sure aisles are wide enough and not obstructed by chairs or furniture. Check to make sure your exit door is not blocked or chained. If there are not at least two exits or exit paths are blocked, report the violation to management and leave the building if it is not immediately addressed. Call the local fire marshal to register a complaint.
- **Do you feel safe?** Does the building appear to be overcrowded? Are there fire sources such as candles burning, cigarettes or cigars burning, pyrotechnics, or other heat sources that may make you feel unsafe? Are there safety systems in place such as alternative exits, sprinklers, and smoke alarms? Ask the management for clarification on your concerns. If you do not feel safe in the building, leave immediately.

DURING AN EMERGENCY

React immediately. If an alarm sounds, you see smoke or fire, or some other unusual disturbance immediately exit the building in an orderly fashion.

Get out, stay out! Once you have escaped, stay out. Under no circumstances should you ever go back into a burning building. Let trained firefighters conduct rescue operations.

FACT

A fire at The Station nightclub in W. Warwick, RI, on February 20, 2003, claimed 100 lives and is the fourth-deadliest nightclub fire in U.S. history. Since the fire, NFPA has enacted tough new code provisions for fire sprinklers and crowd management in nightclub-type venues. Those provisions mark sweeping changes to the codes and standards governing safety in assembly occupancies.

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Carbon Monoxide Safety

Carbon monoxide is often called the “silent killer” as it’s victims cannot see it, smell it or taste it. It is an invisible, odorless gas that can poison you and kill you.

Symptoms of carbon monoxide poisoning include feeling sick as if you have the flu. You may experience headaches, nausea, dizziness and shortness of breath. The people that are most at risk are infants, small children, pregnant women, elderly people, and people with heart or lung problems.

Carbon monoxide can be released by fuel fired appliances and equipment such as gas furnaces, hot water heaters, cars, fireplaces, wood stoves and kerosene heaters.

To avoid the production of CO, you should have your chimney, furnace and gas-fired appliances checked by professional technicians every year.

Make the maintenance of your furnace, fireplace, and all fuel-burning appliances an absolute priority. Have them checked and cleaned each year.

A carbon monoxide detector is the best way to protect you and your family from this potentially deadly threat. CO alarms are to be installed where they can be easily heard, outside each sleeping area and even on every level of the home. Install CO alarms in accordance with the manufacturers installation instructions. Similar to smoke alarms, test your CO alarms at least once a month and replace the batteries according to the manufacturer’s instructions.

Install a certified carbon monozide alarm in your home and check it regularly to make sure the battery is working.

Here are some safety tips to reduce the chances of getting carbon monoxide poisoning:

- Check your CO alarm to ensure it hasn’t been recalled.
- Replace any expired CO alarms with a listed new device.
- Eliminate CO at the source. Make the maintenance of your furnace, fireplace, and all fuel-burning appliances an absolute priority. Have them checked and cleaned each year.
- Install a certified carbon monoxide alarm in your home and check it regularly to make sure the battery is working.
- Know the symptoms of CO poisoning. If they appear, it is important to get everyone, including pets, outside to fresh air immediately.
- Never heat your home with a gas stove.
- Never use a barbeque, charcoal or hibachi grill in the home or in an enclosed area.
- During and after a snowstorm, make sure vents for the dryer, furnace, stove and fireplace are clear of snow.
- Never use a gas-powered generator inside your home.

If your CO alarm sounds, get everyone out of your home immediately and call 911 from a safe location. ◆

Kidde Recalls Talking Combination Smoke and CO Alarms

Starting date:	November 10, 2016
Posting date:	November 10, 2016
Type of communication:	Consumer Product Recall
Subcategory:	(Product category)
Source of recall:	Health Canada
Issue:	Product Safety
Audience:	General Public (GP)
Identification number:	(Generated by system number)

Report a Concern

- Affected products
- What you should do

Joint Recall

Joint recall with Health Canada, the United States Consumer Product Safety Commission (US CPSC) and Kidde.

Affected product

Kidde Nighthawk KN-COSM-IBCA and KN-COSM-ICA Combo Smoke and Carbon Monoxide ("CO") Alarm

Product description

This recall involves Kidde NightHawk talking combo smoke/CO Alarm KN-COSM-IBCA and KN-COSM-ICA models with manufacture dates between June 1, 2004 and March 2011. The alarms are hard-wired into a home's electric power.

The alarms are white, round and measure about 5 to 6 inches in diameter. "Kidde" is engraved on the front of the alarm. "Kidde", the model number and manufacture dates are printed on a label on the back of the alarm. Model KN-COSM-IBCA has a compartment on the back for the installation of a replaceable 9V backup battery, while model KN-COSM-ICA does not have a battery backup.

Hazard identified

The alarm can fail to continue to chirp when it reaches its seven year end of life if the batteries are replaced or, for the model without a battery backup, if power is removed and then restored to the alarm. This could lead consumers to believe it is still working, which poses a risk to consumers not being alerted to a fire or carbon monoxide incident in their home.

Neither Health Canada nor Kidde has received any reports of consumer incidents or

continued…

injuries related to the use of this product. In the United States, Kidde has received eight reports of incidents with no reported injuries.

Number sold

Approximately 1.5 million units were sold in Canada at various wholesalers and retailers and 3.6 million units were sold in the United States.

Time period sold

The recalled products were manufactured from June 2004 to March 2011.

Place of origin

Manufactured in China.

Companies

Distributor	Kidde Canada Inc. Vaughn Ontario Canada
Manufacturer	Fyrnetics Ltd. Hong Kong China

What you should do

Consumers should immediately stop using the recalled alarms and contact Kidde directly for a free replacement alarm based on date of manufacture or a discount on a new alarm.

For additional information, consumers should contact Kidde Canada toll-free at 1-855-239-0490 between 8:00 a.m. - 5:00 p.m. ET Monday through Friday or online (www.kiddecanada.com)and click on "Product Alerts."

Consumers may view the release by the US CPSC on the Commission's website (US CPSC to provide link).

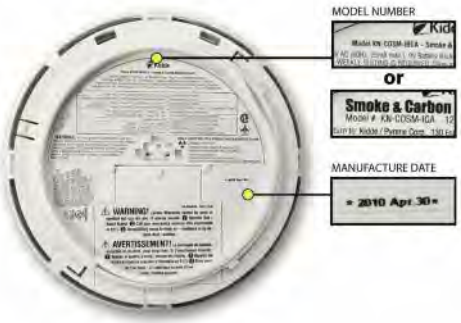
Please note that the *Canada Consumer Product Safety Act* prohibits recalled products from being redistributed, sold or even given away in Canada.

Health Canada would like to remind Canadians to report any health or safety incidents related to the use of this product or any other consumer product or cosmetic by filling out the Consumer Product Incident Report Form (http://www.hc-sc.gc.ca/cps-spc/advisories-avis/incident/index-eng.php).

This recall is also posted on the OECD Global Portal on Product Recalls website (http://globalrecalls.oecd.org/Search.aspx?lang=en). You can visit this site for more information on other international consumer product recalls.

continued...

Front of unit with wire connectors.



Back of model KN-COSM-IBCA

Back of model KN-COSM-ICA.

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senecacollege.ca/fire

Public Consultation on Proposed Regulations for Mandatory Training and Certification and Conducting Community Risk Assessments

This article was obtained by the Ontario's Regulatory Registry located on the Ontario.ca website and reflects the opportunity for public consultation on proposed regulations for mandatory training and certification and conduction community risk assessments.

http://www.ontariocanada.com/registry/view.do?postingId=26546&language=en

Regulation Number(s):
N/A

Bill or Act:
Fire Protection and Prevention Act, 1997

Summary of Proposal:
The Ministry of Community Safety and Correctional Services (MCSCS) is seeking public input on proposed regulations under the Fire Protection and Prevention Act, 1997 related to new requirements for:

1. Mandatory training and certification for firefighters, and
2. Mandatory risk assessments to inform the delivery of fire protection services.

1. Mandatory Certification

MCSCS is proposing to establish mandatory certification requirements set out by the National Fire Protection Association (NFPA) for all new firefighters employed or appointed to a fire department for the following positions:

- Suppression firefighters,
- Pump operators,
- Technical rescuers,
- Fire officers, and
- Fire educators.

These requirements are proposed to come into force January 1, 2019 with the exception of technical rescuers which would come into force January 1, 2020. An additional year for technical rescuers to achieve certification is being proposed to allow for sufficient time to develop training and certification examination materials.

In addition, MCSCS is proposing that mandatory certification requirements also set out by the NFPA apply to existing firefighters currently employed or appointed in fire departments across Ontario, including:

- Fire inspectors,
- Fire investigators,
- Fire instructors,
- Hazardous materials personnel, and
- Fire dispatchers.

It is proposed that these mandatory certification requirements apply to existing firefighters given these roles are exposed to increased risk, including risk to the individuals performing these roles. These requirements are proposed to come into force January 1, 2020 to give fire departments additional time to train and certify their staff.

2. Mandatory Community Risk Assessments

MCSCS is proposing to require that municipalities conduct a standard risk assessment every five years focusing on key profiles in their communities (e.g., demographics, geography, past fire loss and event history, critical infrastructure, building stock profile within the community, etc.).

Municipalities would be responsible for reviewing their risk assessment annually to ensure that any significant changes in the mandatory profiles are identified. If there are any significant changes (e.g., addition of retirement homes or care facilities) the municipality will be responsible for updating their assessment. This information will be used to inform decisions about fire protection services in their community.

This requirement is proposed to come into force January 1, 2019.

These two new proposed regulations are based on expert advice MCSCS received from a Fire Safety Technical Table (the Table). The Table was established in January 2017 to

Public Consultation on Proposed Regulations for Mandatory Training and Certification and Conducting Community Risk Assessments Cont'd

help develop recommendations to the Minister of Community Services and Correctional Services regarding modernization of fire service delivery in Ontario. The Table included representatives from municipalities, firefighter associations and fire departments, including composite and volunteer fire departments.

For additional details on both of these proposals, please see the below attachments.

MCSCS welcomes your comments and feedback.

Further Information:
Firefighter Certification (Download Adobe Reader)
Community Risk Assessments (Download Adobe Reader)

Proposal Number:
18-CSCS002

Posting Date:
January 25, 2018

Comments Due Date:
March 11, 2018

Contact Address:
Ministry of Community Safety and Correctional Services
Strategic Policy, Research and Innovation Division
25 Grosvenor Street
Toronto, ON M7A 1Y6 ◆

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★ **$1,000.00 CFSA Fire Safety Award 2015 In Memory of Rich Morris**
Presented to the TOP STUDENT having completed year 2 of a 3 year full-time Fire Protection Technology Course with outstanding leadership, motivational and technical skills and overall academic proficiency ≥ 3.3 GPA.

★ **$1,000.00 CFSA LRI Engineering Inc. Award**
Presented to a TOP YEAR 2 STUDENT of a 3 year fulltime Fire Protection Technology Course with exceptional overall skills in Fire Alarm System Technology and an academic proficiency ≥ 3.3 GPA.

★ **$1,000.00 CFSA JENSEN HUGHES Consulting Canada Award**
Presented to a TOP YEAR 2 STUDENT of a 3 year fulltime Fire Protection Technology Course with exceptional overall skills in Codes/Standards Technology and an academic proficiency ≥ 3.3 GPA.

★ **$1,000.00 CFSA Nadine International Inc.**
Presented to a TOP YEAR 2 STUDENT of a 3 year fulltime Fire Protection Technology Course with exceptional overall skills in Fire Suppression Technology and an academic proficiency ≥ 3.3 GPA.

★ **$500.00 CFSA Underwriters' Laboratories of Canada Award**
Presented to a TOP YEAR 2 STUDENT of a 3 year fulltime Fire Protection Technology Course, with exceptional academic skills in Codes and Standards and an overall proficiency ≥ 3.3 GPA.

★ **$500.00 CFSA Underwriters' Laboratories of Canada Award**
Presented to a TOP YEAR 1 STUDENT of a 3 year full-time Fire Protection Technology Course, with exceptional academic skills in all subjects and an overall proficiency ≥ 3.3 GPA.

★ **$500.00 CFSA City of Markham, Buildings Standards Department Award**
Presented to a TOP YEAR 1 STUDENT in Fire Protection Engineering or related Fire and Life Safety Diploma Program and an academic proficiency ≥ 3.3 GPA.

★ **$1,000.00 CFSA Siemens Canada Ltd. Award**
Presented to a TOP YEAR 1 or 2 STUDENT in a Technician or Technology Program with a primary focus on Fire Alarm – Code and Design and an academic proficiency ≥ 3.3 GPA.

★ **$500.00 CFSA FCS Fire Consulting Services LTD Award**
Presented to a TOP YEAR 2 STUDENT in a 3 year full-time Fire Protection Technology program with exceptional overall skills in Fire Code and Retrofit Courses and an academic proficiency ≥ 3.3 GPA.

★ **$500.00 CFSA Mircom Group Award**
Presented to a TOP YEAR 2 STUDENT in a Technician or Technology Program with exceptional overall skills focused on Fire Alarm system – Code, Design and Practical Lab Skills and an academic proficiency ≥ 3.3 GPA.

QUALIFICATIONS AND RULES:

1) The recipients must be enrolled in a Fire Protection Technology Course at a Canadian college or university.

2) All CFSA Scholarship Award entries (c/w academic grades) must be submitted **by March 20th** to:

   Attention: 2018 Scholarship Form, Canadian Fire Safety Association, 2800 14th Avenue Suite 210, Markham, ON L3R 0E4

3) Submit a written response of up to 300 words in paragraph form, providing a brief description of:
   a. Your interest in fire safety and knowledge of CFSA and the donor organization,
   b. The course you are enrolled in and how you would like to utilize your education (ie. fire service, consulting, sales etc.)
   c. Any experience you have in fire safety either work related, attendance at conferences, CFSA functions etc. and a statement on your extracurricular involvement (i.e. student clubs, mentoring, tutoring, athletics & community volunteering)
   d. Letter of Reference from faculty about individual.

4) All entries become the property of the CFSA. The awards ceremony will take place on April 5, 2018 at the CFSA Annual Education Forum. All award recipients are encouraged to attend the full day CFSA Education Forum, as a guest of the CFSA and its distinguished Scholarship Sponsors.

CANADIAN FIRE SAFETY ASSOCIATION
ASSOCIATION CANADIENNE DE SÉCURITÉ INCENDIE

CFSA Scholarship Program

Your Opportunity to Support Our Students

The CFSA is very proud of its scholarship program and each year we present financial awards to deserving post-secondary students enrolled in a Fire Safety program.

It is important to recognize the achievements of those students who stand out amongst their peers and to assist them with the cost. Completing this 3-year program can be as high as $24,000.

As a scholarship sponsor, you will:

- provide the criteria for your award
- present the award at our Annual Education Forum
- be recognized in the CFSA Newsletter and on the CFSA website
- help a deserving student in their quest to become a fire safety professional

The following corporations have generously signed on to provide annual scholarships:

- LRI Engineering Inc.
- Jensen Hughes Consulting Canada
- Nadine International Inc.
- Underwriters' Laboratories of Canada Award
- City of Markham, Buildings Standards Department
- Siemens Canada Ltd.
- Firetronics 2000 Inc.
- FCS Fire Consulting Services
- The Mircom Group

Please add our company's name to this prestigious list of scholarship sponsors:

Name _____

Company _____

Email _____ **Phone** _____

Scholarship Committee Chair, Jim Stoops, will contact you to discuss opportunities for your company's participation.

SEND TO: 2800 14th Avenue, Suite 210, Markham, Ontario L3R 0E4
Tel: 416-492-9417 Fax: 416-491-1670 Email: cfsa@associationconcepts.ca Website: www.canadianfiresafety.com

CFSA

Membership Application Form

Why Corporate Membership?

Corporate Membership is cost effective because it allows any number of individuals from your organization to participate in the many functions provided by CFSA throughout the year. Any number of persons can attend our monthly dinner meetings/ technical sessions or our annual conference at the preferred member's rate. Your advertisement in the CFSA journal is circulated to CFSA's membership of over 250 professionals in the Fire Safety Industry.

Corporate
Includes 5 individual memberships; Company recognition in each of the four issues of the CFSA journal.

Corporate Plus
Includes 10 individual memberships; Company recognition and a 1/2 page advertisement in each of the four issues of the CFSA journal.

Individual Member:
Includes four issues of the CFSA journal and discounted rates at Association functions.

Student Member:
Includes four issues of the CFSA journal and discounted rates at Association functions.

Associate Member:
For individuals and companies located beyond a radius of 150 km from the Greater Toronto Area. Includes four issues of the CFSA journal and discounted rates at Association functions.

Provincial/Territorial Chapter:
For groups of members within a province or territory. Includes 4 individual memberships; member rate for all staff at dinner meetings, technical seminars and Annual Education Forum; Recognition in each of the four issues of the CFSA journal. Contributes articles in CFSA journal.

canadianfiresafety.com

CFSA Application for Membership

Name _____

Company/Affiliation _____

Title _____

Address _____

City _____

Prov. _____ Postal Code _____

Business Phone _____

Business Fax _____

e-mail _____

Web site _____

Please indicate how you first heard about CFSA

Please indicate in the appropriate box the category that best describes your vocation:

- ○ Architect
- ○ Building Official
- ○ Insurance Industry
- ○ Fire Protection Manufacturer/Supplier
- ○ Building Owner/Developer/Manager
- ○ Engineer
- ○ Fire Official
- ○ Fire Consultant
- ○ Other (please specify) _____

	Rate	+13%HST	Total Rate
☐ Corporate Plus (C3)	$ 790.00	$ 102.70	$892.70
☐ Corporate	$ 406.00	$52.78	$458.78
☐ Individual	$ 82.00	$10.66	$92.66
☐ Student	$ 25.00	$3.25	$28.25
☐ Retired	$ 25.00	$3.25	$28.25
☐ Associate	$ 56.00	$7.28	$63.28
☐ Chapter	$ 180.00	$23.40	$203.40

Method of Payment:

☐ Cheque Enclosed $ _____

☐ VISA ☐ MasterCard ☐ American Express

Account # _____

Expiry Date _____

Signature _____

Please make cheques payable to:

Canadian Fire Safety Association
2800 - 14th Avenue Suite 210. Markham, ON L3R 0E4
Telephone (416) 492-9417 Fax (416) 491-1670

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Mike Norris
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Andrew VonHolt
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OFS Fire Prevention
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Jeff Ough
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Kevin Worrall