

CFSA

CANADIAN FIRE SAFETY ASSOCIATION

NEWS



Fire Safety is Everybody's Business

SUMMER/FALL 2018

Fire Protection on First Nations Reserves





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Editor: Lesley-Anne Coleman

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President's Message

As I had mentioned in my last Presidents message; “the Canadian Fire Safety Association (CFSA) does not represent one singular group, trade or sector of the Fire Industry. With such a wide span, we can help to support so many different areas all across Canada.” This is not a new mission or goal that the board of directors has developed. This is one of the fundamental edicts of the CFSA and can be traced all the way back to our very name sake. As noted within our history page online, “the term “fire safety” was chosen to include both “fire prevention” and “fire protection”. It was realized that there are subtle differences but the needs and objectives of both fields have been so inter-related, that the two terms were melded into one term “fire safety” to cover both fields of activity.”

Today the entire association as a whole can thank our founding members for having the foresight to work together to create the CFSA. Our association was formed in light of the following needs:

1. A Canadian organization to which anyone, regardless of their qualifications, may belong, so long as they are interested in some facet of fire safety;
2. A National body which may adequately represent the entire fire safety field for the whole of Canada;
3. A Canadian medium, through which, by talks, lectures, panels, discussions, library and publications, the latest available information on fire safety could be collected and disseminated as needed to all interested Canadians;
4. A central Canadian base of operations to which those in need of help for specific fire safety problems may refer; and
5. An organization where all those engaged in the fire safety field can meet on an equal footing, so that all participants may obtain through knowledge and understanding, a congenial appreciation of how other segments of the entire fire safety field are endeavoring to progress towards a common objective, the minimizing of the loses of life and property from fire, explosions and related hazards.

It is not surprising at all that these five statements have stood the test of time and are still as equally important and needed 47 years later. With our roots having been started with collaboration and learning at the center, it is my plan to stay true to the needs of the fire safety community. During my time as your association President we will be working on deepening our roots by offering more seminars and forging ahead with plans to make the CFSA a more attractive organization for our current and future members.

The Education committee, has begun to set the dates and topics for several more seminars in 2018 with plans already underway for the 2019 Annual Education Forum. The Membership committee has also been busy with setting the ground work for our new membership drive which will include enhancements to our existing member categories along with great outreach efforts directed at our fire related college and universities students. It is this last effort that I am most excited about as it will also include the formal launch of the CFSA NextGen Group. This “NextGen” movement is something that is not special from the CFSA or any other four letter association. This is certainly a widely spreading concept that is gaining momentum across many trades, industries and countries.

In the next CFSA News, I will be pleased to provide a broader update and more information on how you can become involved. For now those of you using social media be sure to connect with @CFSA_NextGen along with @CFSA_Canada. Please feel free to contact me at any time Scott.Pugsley@SenecaCollege.ca

Stay safe,

Scott Pugsley
CFSA President



CANADIAN FIRE SAFETY ASSOCIATION
ASSOCIATION CANADIENNE DE SÉCURITÉ INCENDIE

What is The CFSA?

The Canadian Fire Safety Association is a non-profit 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 NEWS

CANADIAN FIRE SAFETY ASSOCIATION

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.

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The Airbnb Challenge

As Airbnb and other short-term rental services expand to include a range of property types, regulatory challenges create uncertainty over the level of safety those spaces should provide.

By: Angelo Verzoni

Reprinted from the *NFPA Journal* July 2018

Four years ago, Medina Eve wrote about a frightening Airbnb stay. [In an article for the online publishing platform Medium](#), she detailed how she and her partner had used the online marketplace, where homeowners rent their properties to guests seeking an alternative to a hotel or other accommodations, to book a cabin in the remote woods of Ontario, Canada. After trudging through snow, they followed the host's instructions to retrieve the key and let themselves into the cabin, which she described as "a treehouse, only firmly planted on the ground."

Right away, Eve felt nervous about the property. The cabin had a wood-burning stove on the first floor, and its chimney snaked through the ceiling into the second-floor bedroom, passing within a foot of the bed before disappearing into the roof. Eve and her partner took note of a fire extinguisher hanging on the wall. She texted a friend, jokingly, that she would die there, and included a string of fire emojis.

That night, the couple woke to find their bed smoking and, seconds later, on fire. "Our blankets act like kindling, flames licking upwards," Eve wrote, adding that it became difficult to breathe and see. Her partner rushed to grab the fire extinguisher, attacking the fire with what little remained inside the tank. "There are two, just two, brief spurts left in it," she said. "But it's enough to get us the hell out of there."

According to [airbnb.com](#), on any given night, 2 million people stay in properties rented by the service in some 65,000

cities around the globe. There are more than 4 million active Airbnb listings in 191 countries. "What makes all of that possible?" the website reads. "Trust."

That's not very reassuring in light of a [new study](#), published in May in the journal *Injury Prevention*, that found a lack of fire and life safety features in Airbnb properties in 16 United States cities, including New York, Los Angeles, Boston, and San Francisco. Researchers analyzed about 121,000 of the roughly 600,000 Airbnb listings in the U.S., finding that 20 percent of the property owners did not report having smoke alarms, 42.5 percent didn't report having carbon monoxide (CO) alarms, 58 percent didn't report having fire extinguishers, and 64 percent didn't report having first aid kits. "This is really surprising because most fire deaths and carbon monoxide poisonings happen in residential housing," study co-author Vanya Jones of the Johns Hopkins Bloomberg School of Public Health told Reuters.

The study comes at a time when cities nationwide are moving to more tightly regulate Airbnb and other short-term rental properties. But as some communities have learned, regulation of such a new and unique building use is easier said than done.

"All of a sudden, we're sending building officials out and they're seeing things they've never seen before," said Keith Burlingame, director of the Rhode Island Fire Safety Code Board of Appeal and Review. "Classification of these properties is the biggest challenge that

we are facing at the outset."

Classifying something new

What are these properties? That's the question building and fire code officials have struggled to answer since short-term rental companies like Airbnb began launching several years ago. Are they hotels? Are they residential properties? Or are they something else altogether?

Not much insight can be gained from digging into widely used building codes. The International Building Code (IBC), for example, applies to what it calls "transient" residential occupancies, or places where occupants stay no longer than 30 days. That broad definition seems to fit the bill for Airbnb rentals and similar properties. But it also lists hotels and boarding houses as examples, and an argument could be made that most Airbnb properties aren't similar enough to a hotel to be regulated as such.

That's the logic Burlingame subscribes to. He told me in May that building code officials in the small coastal city of Newport, Rhode Island, have been classifying short-term rental properties under the IBC, instead of classifying them under the International Residential Code that applies to one- and two-family homes. That means, like hotels, they're required to have fire sprinklers and meet other life safety requirements for accessibility and egress. In reality, though, that's not happening. A search of Airbnbs in Newport using the company's website showed over 300 avail-

continued...

The Airbnb Challenge Cont'd

able properties, some of which didn't even report having smoke alarms. (There is no option for reporting sprinklers.)

There are too many of these properties scattered throughout the tourist-dense town, some in houses that are well over 100 years old, to enforce the IBC classification, Burlingame said, which is why he and other members of the fire code board don't support it. "We've always taken the position that if you rent a single-family house to anyone for any period of time it's still a single-family house," he said. "There is a fire safety concern out there by some people, but you have to look at the global picture. How different is renting an Airbnb to someone for under 30 days from renting that same structure to someone seasonally for six months?"

Like the International Code Council codes, NFPA codes, including *NFPA 5000®*, *Building Construction and Safety Code®*, and *NFPA 101®*, *Life Safety Code®*, leave it up to the jurisdiction to decide whether they want to classify short-term rental properties like hotels, residential properties, or something else. "It's not currently a distinct type of occupancy in the codes, nor do I see it becoming a type of occupancy," said Robert Solomon of NFPA's Building Fire Protection and Systems division. He compared the situation to when condominiums became more popular in the 1970s. Some viewed that as a type of occupancy when in reality it is just a form of legal ownership of a particular type of building space, Solomon said.

Further complicating the issue of classifying short-term rental properties using codes is the breadth of scenarios that present themselves through the Airbnb business model. There are hosts who rent out one or two bedrooms in a single-family home, or rent an entire single-family home. Others rent an apartment or condo in a larger building. Most recently, entire apartment or condo buildings have been devoted to short-term rentals to multiple renters.



HOTEL CALIFORNIA? Housing activists in San Francisco protest the conversion of an apartment building into Airbnb rentals. Safety advocates have cited fire and other hazards among their concerns as the number and type of residential properties devoted to short-term rentals increases nationwide. Photograph: Justin Sullivan/Getty Images

It's the last scenario that concerns building and fire code officials the most. "If you have a 15-unit apartment building and you rent out all 15 units short-term, you've just created a hotel and skipped all the regulations that go along with hotels," said Adam Miceli, assistant fire chief in Rockland, Maine, a small seaside town where Airbnb hosts have been competing for guests with inn and bed-and-breakfast owners for about four years. "The only difference is with the apartment building you're going to have a kitchen in every unit, so for us that's more dangerous, not less dangerous, than a hotel."

Aware of the potential danger, the city passed an ordinance in 2016 in part prohibiting the short-term rental of more than one unit in an apartment building. Other cities—including San Francisco, the birthplace and current headquarters of Airbnb—have recently imposed similar restrictions, citing a more ethical concern: landlords illegally evicting tenants so they can rent out all of their units on sites like Airbnb to turn a higher profit. The Rockland ordinance also requires all short-term rental properties to meet minimum city requirements for one- and

two-family homes, such as having smoke alarms, but the city doesn't inspect all of these properties. Like Burlingame, Miceli said, he understands the limitations of the fire service to start imposing strict, non-traditional requirements on properties such as old one-family homes, especially in a city like Rockland that has minimal inspection resources. "With or without Airbnb, there's still the sense that homeowners are the king of the castle" and won't let someone come in and tell them what to do, Miceli said.

Educating the guest and the host

Since jurisdictions haven't come up with clear answers for the emergence of short-term rentals, NFPA and others stress the importance of education for both consumers and hosts who choose to rent and rent out units on sites like Airbnb. "Consumers need to be more than mindful of the safety features," said Lisa Braxton, a public education specialist at NFPA. "They need to know what safety features are in place before committing to an Airbnb."

On the service's website, prospective

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The Airbnb Challenge Cont'd

renters can filter available properties by amenities including smoke and CO alarms—which the site refers to as “detectors,” a term commonly and inaccurately used to describe residential alarms. While users can’t filter by fire extinguishers or first-aid kits, they can check properties individually to see if they list them as amenities before booking. There’s no way to see if a property has fire sprinklers, but users can send a message to the host asking any question they wish about fire and life safety before booking.

Miceli agrees that public education is key to keeping people safe in the new world of short-term rentals. “Someone who’s short-term renting may never become familiar with the peculiarities of a house,” he said. “So we really need to be regulating common sense.”

The experience has been similar in Cambridge, Massachusetts. About a year ago, the city, located across the Charles River from Boston, passed an ordinance regulating short-term rental properties. But Chris Towski, one of the fire prevention staff members at the Cambridge Fire Department, said that

doesn’t mean the properties are all being inspected. The onus falls on the Airbnb hosts to be compliant with the same building codes they would have to be if their property wasn’t being used as a short-term rental, as well as some additional measures like providing fire escape route maps in the same way hotels need to. Towski doesn’t suspect—or even expect—every owner to be doing that, though.

For the city’s fire department, Towski said the concern revolves less around the built environment and more around occupant load and behavior, especially as firefighters respond to incidents like residential structure fires. “As a firefighter, you see a classic three-decker building and you’re thinking, OK, you have three families in there—but now you have others taking up those spaces, so it could be a higher volume of occupancy,” Towski said. Overcrowding in short-term rentals is a concern many cities have expressed since businesses like Airbnb began emerging. Like Miceli, Towski also said there’s a concern over guests not taking the time as they enter a short-term rental property to note the exits and safety features. And unlike an event like a house party, which may have a similar higher-than-usual occupant load, there’s potentially nobody in

the property who “knows the lay of the land” and can help direct occupants to safety, he said.

When it comes to educating Airbnb hosts about the importance of being compliant with necessary building codes and providing fire and life safety features, Miceli said he’s faced a lot of pushback but in some cases has been able to persuade hosts by bringing up the potential legal implications of renting out an unsafe space. “Once you start talking about risk, the lightbulb comes on,” he said. “The more we talk about it, the more we can move the dial a bit in some people, the more risk-averse people, but there are still people who say it’s their home, it’s their right” to do as they please with their property.

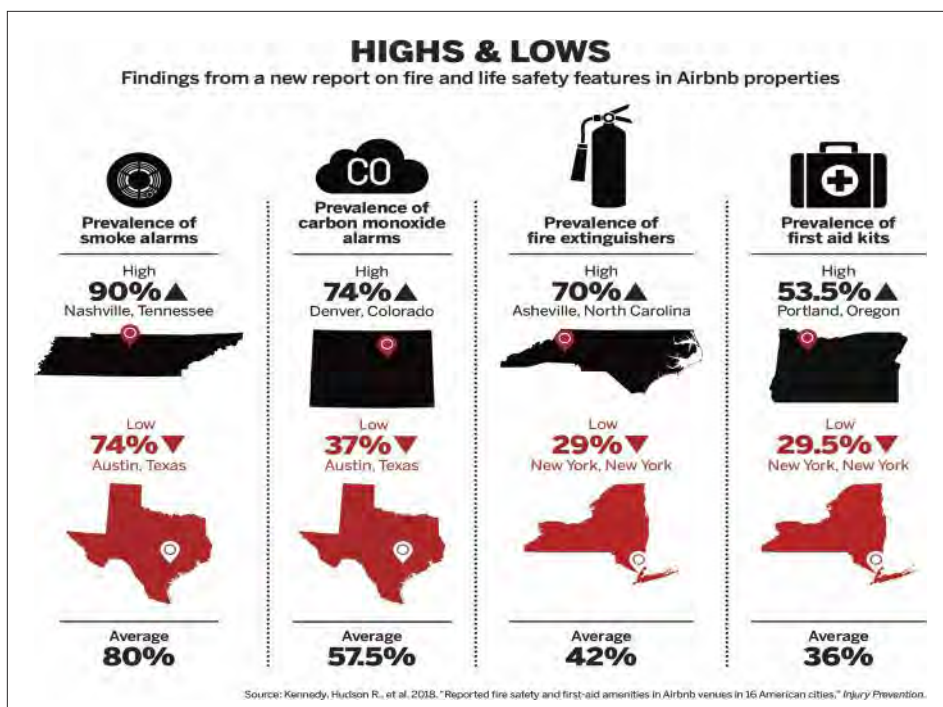
Some Airbnb hosts don’t need that nudge. In May I sent messages using Airbnb’s website to several hosts who reported having smoke and CO alarms, fire extinguishers, and first-aid kits. While no one took me up on a request to visit their property, a couple sent messages back explaining why they chose to include these features. One host in the Cambridge area said he chose to include the features because it was the responsible thing to do. “I totally believe [in] safety first,” said another in Newport. “I am in the medical field, and anyone can get hurt.”

Airbnb itself has taken actions to make its properties safer by working with its hosts. “We routinely run safety workshops with hosts and leading local experts and provide hosts with online safety cards with important local information for their guests,” Airbnb’s website says. “Hosts can also request a free smoke and carbon monoxide [alarm] for their home.”

Still, after her fire scare in Canada, Eve has decided to take safety matters into her own hands when staying in Airbnbs – and hers is good advice for any consumer.

“When it comes to your safety, don’t assume anything is taken care of,” she wrote in the Medium article. “Pack the

continued...



The Airbnb Challenge Cont'd

nerdiest first aid kit you can find, make a mental note of where to find safety items (e.g. fire extinguisher), check the batteries on the smoke [alarms], etc. Don't be shy about having the necessary conversations with your host about safety features. Do this especially ... when the place is off-[the-]grid and quirky, which is a big selling point for Airbnb properties but potentially risky for you. Airbnb experiences are generally excellent, and in many cases rival the hotel experience ten times over, but they definitely don't have the same safety regulations. Or any."

Angelo Verzoni is staff writer for *NFPA Journal*. Photographs: Thinkstock, IStock-photo ♦



GUEST, PROTECT THYSELF

In the absence of uniform standards and practices, safety officials urge users of services like Airbnb to act as their own safety advocates when selecting and occupying accommodations. Photograph: Jens Kalaene/Picture-Alliance/DPA/AP Images

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Innovation in Standards Development, Lifejacket Marking, Labeling and Point of Sale Information – Facilitating Harmonization to Save Lives



Chris James, Principal Engineer, Underwriters Laboratories
Maria Lafano, Director, UL Standards, Underwriters Laboratories

Introduction

This paper explores the theme of using standards to facilitate market access and international trade. As well, it describes a different mechanism for standards development and harmonization that leverages a Standards Development Organization's accreditation in more than one country. The paper goes on to compare and contrast the traditional mechanisms used for harmonization with a new process piloted in the area of lifejackets and describes the process that was followed, which involved the creation of a single, bi-national technical committee. In looking at the impact of harmonization on an industry, the paper explores the benefits of harmonization and the positive impact harmonization can have for an industry and users. It also makes linkages between technical requirements, market access, and how the creation of a larger, North American market can spur innovation that can ultimately change behavior and save lives. In addition, the paper explains the processes used to simultaneously adopt ISO standards for Canada and the US while also harmonizing requirements across both countries. The paper also explores the benefits of this joint process for stan-

dards development and provides a case study that shows the benefits of harmonization for not only the lifejacket and personal floatation device industry, but the benefits this will also provide to users of lifejackets.

The Challenges

The pace of change across all sectors is accelerating. The number of new products entering the marketplace is increasing; production, distribution and the supply chain are now global; and new trade agreements aimed at streamlining and opening trade are all having an impact on which products are sold as well as when and how they gain market access. All of these things are good for consumers and manufacturers. However, despite positive changes, innovation in the personal floatation device (PFD) and lifejacket sectors in Canada and the United States have been inhibited by

- differences in standards across markets;
- varied approval requirements by national regulators; and
- unique label and point of sale requirements for products sold in the US versus Canada.

In part, these challenges have been due to not only the underlying standards used to manufacture and approve prod-

ucts, but the process by which these standards have been developed and maintained.

Canada and the US share the world's largest bilateral trade relationship, with total merchandise trade exceeding \$500 billion annually. Notwithstanding positive changes in the marketplace to facilitate and expand this trading relationship, standards development processes have not changed significantly over time.

Although international standards continue to be developed through international standards organizations such as ISO, national standards bodies and standards development organizations (SDOs) continue to operate mainly within their own national borders (domestic markets). They primarily serve the specific needs of that market, although harmonization efforts have expanded greatly in recent years.

Although this approach has served the market well in the past, new approaches and innovations in standards development are required to respond to the new market realities and to facilitate market access. As markets become more global and the supply chains become more integrated, separate but parallel standards development

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processes undertaken on a national basis cease to support competitiveness and result in:

- country-specific standards, developed by multiple SDOs with significant duplication of effort;
- harmonization efforts which are slow, cumbersome and unsupportive of innovation;
- poor coordination between AHJs (Authorities Having Jurisdiction)/Regulators, within and between countries, resulting in complexity and trade barriers; and
- a fragmented approach to standardization.

In January, 2013, Underwriter's Laboratories (UL) became accredited by the Standards Council of Canada (SCC) as a standards development organization (SDO) for Canada allowing UL to develop National Standards of Canada (NSCs) in addition to American National Standards (ANSs) under its accreditation with the American National Standards Institute (ANSI). UL's accreditation as an SDO for Canada has enabled UL to develop standards specifically for Canada, as well as fully harmonized bi-national or joint standards for the US-Canada marketplace, facilitating more efficient manufacturer access to both markets.

Traditional Standards Harmonization Process

Traditionally, the process to harmonize standards between Canada and the US has involved coordination of separate technical committees attempting to harmonize requirements for both markets (see [Figure 1](#)). Under this process, a Technical Harmonization Committee (THC) would be created with members from corresponding Technical Committees (TCs) from each country. The process could be managed by participating SDOs from each country, and would normally include a THC chair from industry with the support of a publication coordinator from one of the SDOs.



The THC would collaboratively work to propose harmonized requirements, which would be reviewed and balloted. Once complete, the harmonized requirements would be sent back to each SDO who would then undergo their national process for balloting and approval as national standards within their country. Should differences arise during the national process, amendments would be proposed back to the THC for consideration and resolution. Ultimately, this process would result in a harmonized set of requirements that would be published by each SDO within their respective countries.

Although this process has helped achieve harmonization between countries in the past, there are some challenges associated with this model of harmonization, including:

- duplication of effort, given that the same basic process is repeated by each SDO and the THC;
- a process that is potentially complex and lengthy given the number of people and separate processes that need to be managed;
- the publishing of more than one standard with separate covers;
- the potential for de-harmonization in the long-run given that the process can be lengthy due to coordination between SDOs and national processes; and
- a less resilient process—it cannot react quickly and flexibly to changes or innovations and identified safety issues.

In addition to an inefficient process for harmonization, this approach continues to support separate standards development processes in each country administered by separate SDOs. This increases the risk of divergence since those involved are not present to understand the specific discussions and ra-

Traditional Harmonization Process



Figure 1: Traditional Harmonization Process

continued...

tionale that lead national differences between countries. In addition, maintaining separate domestic TCs increases the risk of de-harmonization since you have separate people sitting at separate tables discussing technical issues. Ultimately, the process remains fragmented and nationalistic.

Innovation in Standards Development—New Harmonization Possibilities

UL's accreditation as an SDO in Canada created the possibility of a new harmonization process for standards between Canada and the US. It enabled harmonization using a single process (See Figure 2).

New Harmonization Process

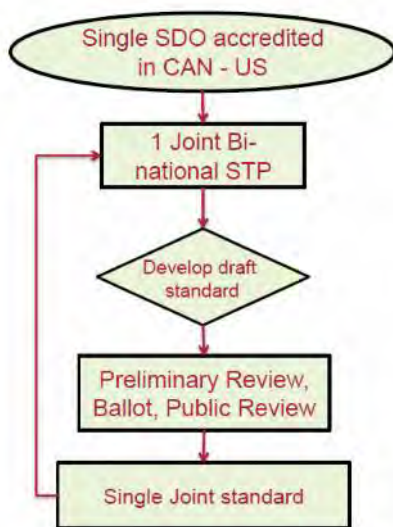


Figure 2: New Harmonization Process

UL, as an accredited SDO in both Canada and the US can now facilitate harmonization using a single process administered by a single SDO using a joint bi-national Standards Technical Panel (STP) or Technical Committee. The Joint STP would develop a standard using its accredited procedures for each country. The process uses a traditional standards development process but would ensure that both Canadian and American requirements are met throughout the process. Appropriate

stakeholders would be invited to participate and public review would be undertaken in each country.

This innovation in standards development will streamline the harmonization process by creating a single, simultaneous process for harmonized standards development. This allows harmonization to be undertaken simultaneously at the time of original development of a standard, thereby cutting the time between the development of a standard in the US or Canada and the harmonization or adoption of that standard in the other country. Moreover, using one committee versus two separate committees will also provide the ability for technical experts to collaborate on requirements, leading to fewer national differences. The result is greater harmonization achieved more efficiently.

Using a single process will result in the streamlining of resources, lowering standards development costs by reducing effort, resources, and time. In the long run, since this new process involves a single STP, harmonization is easier to maintain. This approach not only facilitates greater harmonization of standards, but it also supports government and industry objectives of facilitating domestic and international trade and fostering technological innovation by providing market access for new devices into the United States and Canada simultaneously.

From an industry perspective, this process should result in reduced testing, lower manufacturing costs, with less retooling and creating greater efficiencies for industry. Further benefits include greater innovation and (by facilitating first edition standards to be developed concurrently for both markets) quicker access to new technology, reducing time lags and stimulating innovation.

From a safety standpoint, updates to safety standards can occur at a quicker pace and concurrently for both countries, eliminating differences in safety requirements between Canada and the US when issues are identified.

Case Study: Lifeguard Industry

For the lifeguard industry, this innovative process has proven to be invaluable. By transitioning the UL STP for lifeguard standards from a US technical committee to a single bi-national STP with the appropriate US and Canadian stakeholders, this STP has within two years successfully achieved consensus on two joint Canada-US standards. Not only have two joint standards been published, these standards have been based on international standards (ISO standards) with national differences and have been published simultaneously for both countries. International harmonization will occur for both Canada and the US concurrently.

The adoption of these standards will allow for greater innovation in the Canadian and US markets for lifeguard and personal floatation devices (PFDs), creating additional choices for users which should increase wear rates and decrease deaths associated with drowning. Additionally, through the publication of the joint Canada – US standards, the same product (device) can be sold and used in both Canada and the US for the first time.

Since a single standard was developed, regulators were able to develop a joint label acceptable to both Transport Canada and the US Coast Guard, facilitating streamlined approvals and allowing for lower certification and testing costs for producers. It also allows for greater harmonization with international standards—moving away from traditional prescriptive requirements towards more performance based requirements—thereby allowing for greater innovative products to be offered and approved for use in the US and Canada.

It is important to note, however that although the standards have been published, they have not yet been adopted into law by regulators in either the United States or Canada. As of the writing of this article, the regulatory process had not yet been completed and the standards, although published, remain voluntary until the adoption process is complete.

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Evolution of Marking, Labeling and Point of Sale on Lifejackets

As the lifejacket standards within the United States and Canada evolve, so too should the message to the users of those devices. As one can imagine, changing a paradigm is not easily done and requires the dedication of many to fulfill the mission.

It was acknowledged during the standards harmonization effort that an opportunity may be missed to revisit the marking and labeling requirements so that the users of lifejackets could be better educated on the intended uses and applications. Understanding the positive implications for revising the current marking, labeling, and point of sale information of lifejackets, various UL STP Task Groups and external focus groups were established to accomplish such a monumental task. These groups included participants from the United States, Canada, and Europe. The participants came from Federal and local regulatory bodies, user groups and associations, manufacturers, certification bodies, point of sale organizations, and special interest groups.

Marking and Labeling: Today

As shown in Figure 3, the marking, labeling, and point of sale information on lifejackets have remained generally un-



Figure 3:

Example of a current lifejacket label

changed over the past few decades. The markings on a lifejacket have been required to include all of the required text to be located together within a defined parameter. Information such as the USCG Type and Approval number, Third Party Certification Mark, size and various other warning and caution statements were specifically prescribed within the certification standard. This type of specificity limited the creativity of the manufacturers due to the footprint needed on the lifejacket to include such information.

In addition to the information required to be printed on the lifejacket, it is also required that a "Think Safe Pamphlet" be attached. The pamphlet includes information that educates the users on the different types of devices, how to properly fit a device, and other information that may further educate the user in regards to water safety. Although the material currently provided on lifejackets and point of sale information is important and should be delivered to the user, it has been agreed that the current vehicle for delivery is in dire need of a facelift. The current markings are too wordy and, due to the amount of information required to be located on the label, the critical information on the device is less noticeable..

Marking and Labeling: Future

Today's world is visual, with the need to grab their attention quickly. Within that short duration of attention, the user must be drawn in and directed to the information that is important to them so that they make the right choice when purchasing and using a lifejacket.

The future marking and labeling on lifejackets, as shown in Figure 4, intends to replace much of the wording of the current labels with icons. The labels will consist of three panels as follows:

- 1) Selection and Warnings Panel
- 2) Certification and Approval Panel

3) Care and Maintenance Panel

The Selection and Warnings Panel will include information such as the size of the device, performance information, intended use such as use with towed sports, and other additional warnings. The Certification and Approval Panel will include the USCG Approval number, Third Party Certification Body Mark, manufacturer's information and product model/style.

Finally, the Care and Maintenance Panel will include information pertaining to the service and maintenance of the lifejacket.

One of the more significant revisions is the inclusion of the performance level and turning ability within the Selection and Warnings Panel. With the removal of the USCG Type System (e.g., Type I, II, III, etc.), the intent is to replace the Type System with a performance level similar to the approach taken in Europe. As shown in Figure 4, the icon with the number 70 indicates that the device is a Level 70 performance device. In addition to the performance level, the new markings inform the user of the turning ability of the lifejacket. The draft label indicates a device that has no turning ability. The amount of turning ability is translated to the user by one of the three turning indicators shown.



Figure 4: Draft future lifejacket label

continued...

As marking and labels evolve, a more refined mechanism at the point of sale is needed. The current *“Think Safe Pamphlet”* has too many pages and is seldom read by the purchaser at the time of buying the lifejacket. As was done for lifejacket labels, it was decided that using more icons and less wording on the point of sale information would aid the purchaser in obtaining the correct device for their activity.

The current 16 page *“Think Safe Pamphlet”* is being replaced with a very simple two-sided placard as shown in [Figure 5](#). The draft placard uses bright colors to attract the attention of the purchaser. The draft placard is being coined as the decoder ring for new lifejacket labels. The information provided on the draft placard will allow the purchaser to compare the performance of one device to another. Based on the user’s activity and use environment, a sliding scale allows the purchaser to make an informed decision based on their perceived water environment.

The aforementioned sliding scale informs the user that the water environment in which the purchaser primarily intends the lifejacket to be used may impact the duration in which rescue could

be available. For example, as the environment moves from near shore/calm waters to offshore/waves, the time to rescue may increase. With this information provided to the user at the point of sale, this placard can be used to determine which performance level device they should purchase.

In addition to the previously mentioned information, the draft placard will also include material relating to water safety facts, the descriptions of each design type (e.g. inherently buoyant, inflatable, hybrid, etc.), maintenance, warnings, and approvals.

So where is the additional information within the current *“Think Safe Pamphlet”* going? Since much of the information is better suited after the point of sale, most of the information will be provided within the manufacturer’s user manuals or consumer education websites.

Conclusion

In conclusion, change can sometimes be difficult to accept. However, with these changes, the goal has and always will remain the same—INCREASE THE WEAR RATES AND SAVE MORE LIVES. Allowing the user to make more sound decisions and choosing the right lifejacket for their activity will hopefully aid in this mission.

It should be noted that the publication of the first two joint Canada – US standards is a critical milestone in reaching the goal of facilitating trade across the border and the development of new innovative products. However, before these standards can be adopted, policy and regulatory changes must be made by Transport Canada and US Coast Guard.

At the time of the writing of this article, the adoption process had not been completed. In the meantime, both existing and new devices will be available in the marketplace. Given the nature of regulatory changes, it is expected that full transition to the new standards will take several years as manufacturers determine when they will have their product tested and certified to the new requirements. Notwithstanding the time required for full transition, the publication of the standards using the joint STP has enabled the transition and has reduced the time required for full transition by many months, or even years.

About the Authors

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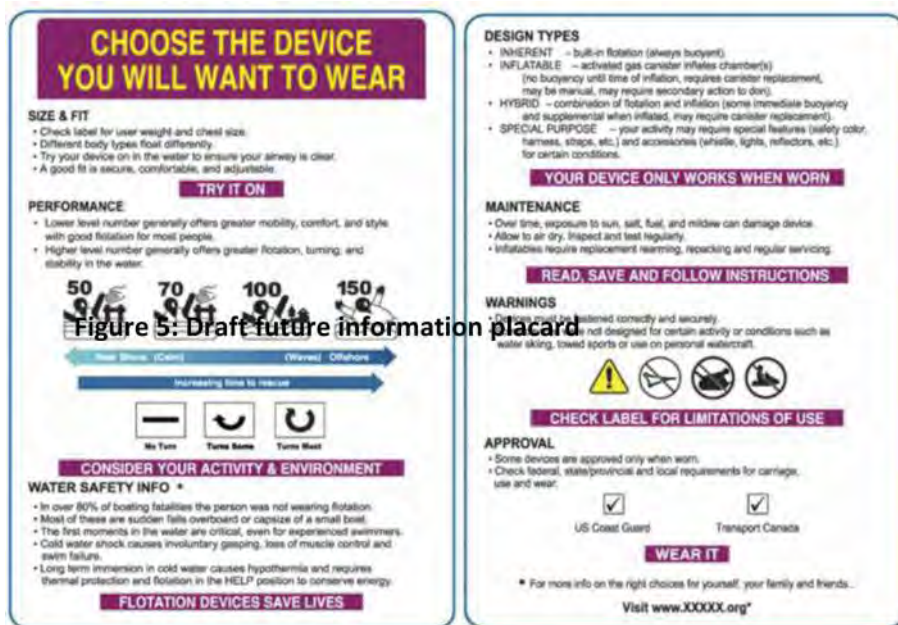


Figure 5: Draft future information placard

Fire Protection on First Nations Reserves



By: Randy Panesar
Durham College

Introduction

As fire and life safety professionals, we often pride ourselves regarding the strength of our building and fire codes across Canada. We draw upon these legalities to design, implement, maintain and enforce fire and life safety regulations and protocols for the benefit of Canadians. We work within the confines of these legalities to find effective solutions for fire protection and life safety. The purpose of this article however, is to draw attention to a known concern that unfortunately is not commonly discussed among most fire professionals in Canada. For the most part, fire protection on First Nations reserves have been either misunderstood or unnoticed among some fire professionals due to either the lack of knowledge, or the complexity and uniqueness of Indigenous affairs.

Reality of fire protection on First Nations reserves

Far too often we hear of shocking fire incidents on reserves across the country, many of which result in devastating outcomes leading to severe injuries and/or death among the most vulnerable within these communities. The matter of fact is that many of the fires which have occurred on the reserves are preventable; however, due to the lack of adequate fire protection, effective resources and suitable training, the corresponding result is not only disturbing but also embarrassing for the fire and life safety community.

Take for example the Pikangikum re-

serve, located approximately 500 kilometers north of Thunder Bay. This remote fly in community has little means of fire protection and due to its location, accessibility by neighbouring fire departments is quite challenging. A fire incident on this reserve resulted in the loss of six adults and three children, the youngest of which was five months old. The fire took place in an over crowded bungalow which could have been avoided. The investigation determined there was no trace of smoke alarms at the time of the fire even though the federal government provided 1,015 smoke alarms for the 500 homes on the reserve.

Another example can be taken from the community of Pelican Narrows, which is another remote community located along the northern border of Saskatchewan and Manitoba, approximately 120 kilometers north of Fin Flon Manitoba. A fire which is believed to have been started from burning candles, occurred in a home resulting in the death of two young boys. The unfortunate reality is that fire protection and emergency services on the reserve were not available. The reserve had no trained personnel for a volunteer fire fighter crew nor does it have the adequate resources to support one. The lone fire truck on the reserve was twenty-five years old and not in operable condition.

The Oneida Nation of Thames Ontario is another of the many reserves that suffered a fire incident which resulted in the death of a father, three young children and a baby. The fire could have

been contained if the home met appropriate building codes which would have implemented effective passive fire protection for purposes of fire containment. Some reports claim that the home in which the fire broke out was simply kindling.

The above are just a few examples of many reserves that lack effective fire protection which lead to devastating consequences. The insufficient level of fire protection and shortage of trained personnel on many reserves across Canada has led to unnecessary fires and death. However, it would be difficult to accurately calculate the actual fire incidents and related deaths since the federal government stopped collecting data on fire incidents on reserves between the years 2010 to 2017, which is quite concerning considering that the Canadian Mortgage and Housing Corporation issued a report in 2007 stating that the death rate from fire related incidents on reserves is approximately 10.4 times higher than those living off a reserve.

The factors which contribute to the void of fire protection on reserves are numerous and complex. More than fifty percent of homes on reserves do not have adequate fire protection, and some do not have access to emergency services, proper equipment for fire suppression or trained personnel to assist in fire emergencies. Furthermore, many of the homes on the reserves do not meet the national building code requirements due to a lack of code enforcement. Many homes are built with only one means of

continued...

Fire Protection on First Nations Reserves Cont'd

gress and are over crowded. Furthermore, a countless number of homes are not equipped with smoke alarms or fire extinguishers. Many of the reserves have little access to water making it difficult to have operable fire hydrants or to supply water to a fire truck. Additionally, the lack of training for volunteer firefighters and lack of fire safety regulations are all areas of deep concern for fire safety on reserves.

For years now Indigenous community leaders and Indigenous fire protection associations across the country have been calling on the federal government for change. The federal government, through the department of INAC - Indigenous Northern Affairs Canada, does supply reserves with funding towards fire protection. The amount of funding is determined on a regionally based formula that takes several factors under consideration such as; the number of buildings on the reserve, population of the reserve, local environment and the proximity of the reserve to other communities. Funding includes financial support for fire fighting, operating and maintaining fire halls, purchasing fire trucks, education and training for firefighters. Management of the funds lies strictly with the First Nation band councils to run their own fire departments or contract fire protection services from nearby communities.

So, where's the disconnect? One would assume that because INAC provides funding of nearly \$29 million annually for fire protection services, the outcome would lessen the enormous catastrophes that are being experienced on the reserves across Canada. Others would argue that the funding just isn't enough and more focus should be on education and training. These arguments can go on forever circling back to the same initial questions and discussions. The matter of fact is that the processes in place are just not working and maybe its time to look at alternative solutions.



Firefighters attend the scene in the aftermath of a fire that killed 5 family members in Oneida Nation of the Thames in December 2016.

Dave Chidley/Canadian Press

How can fire professionals help?

Which brings us to the point – how can fire professionals help? There are many factors and complexities involved that generally confuse those living off reserves and therefore, professionals may prefer avoiding such discussions. It is essential that awareness is raised regarding fire and life safety issues and concerns on reserves among fire and life safety professionals and advocates.

Though a bit late, it might be about time not only to educate people on but also off reserves. Without raising awareness of the state of fire protection and life safety on reserves nothing will change and we will continue losing lives and property. Awareness and discussion regarding fire safety concerns facing Indigenous communities on reserves should be common among fire professionals with responsive outcomes, with the hope of promoting effective solutions and research to solve this very complex issue.

Furthermore, the lack of awareness fosters ignorance and leaves the reality of the situation in the dark and unacknowledged. The most prominent issues should be discussed, such as; the means to strengthen fire safety on the reserves, hands on training, basic services, national building code enforcement and operable fire protection and

fire fighting equipment.

Without raising awareness of the current state of fire protection on the reserves very little will change. All fire professional's, whether on the front lines or behind the scenes, have a major role to play in saving lives. Let's start having the discussion to raise the matters of fact regarding fire and life safety on reserves and foster change.

Randy Panesar is Program Coordinator of the Fire and Life Safety Technician Program at Durham College ♦

References

- CBC News. (2016, March 30). Pikangikum First Nation fire kills 3 children, 6 adults. Retrieved from <http://www.cbc.ca/news/canada/thunderbay/pikangikum-fatal-fire-1.3512105>
- CBC News. (2014, Jan 22). Fire fighting on reserves needs more attention, officials say. Retrieved from <http://www.cbc.ca/news/canada/saskatchewan/fire-fighting-on-reserves-needs-more-attention-officials-say-1.2507514>
- Walker, C. (2014, Jan 27). Fire safety on First Nations a national problem. CBC News. Retrieved from <http://www.cbc.ca/news/aboriginal/fire-safety-on-first-nations-a-national-problem-1.2512633>
- Government of Canada. Fire protection in First Nation communities. Retrieved from <http://www.aadnc-aandc.gc.ca/eng/1317842518699/1317842725065>

Understanding Marked versus Measured Sound Levels



By: Donald Boynowski & Daniel Grosch
D.Boynowski Fire Consulting • UL LLC

Anyone who has spent time in the field taking sound level measurements on installed products or reviewing manufacturer's specification sheets and the device markings for Audible Signaling Devices, soon realizes that the numbers don't match up. You're not going crazy; the reason for differences has to do with the physical nature of sound and how we measure it. This article is to help unravel the mystery and explain why the numbers are different. Sound is a pressure wave that travels through space at a frequency generated by the device. As sound travels through space it can bounce off reflected surfaces or get absorbed by others, both of which change the level measured at the desired location.

Installation codes require measuring sound levels of installed audible signals by use of a hand held meter located throughout the protected area. This process insures that device is properly located and has sufficient level to alert the occupant. As sound travels through the area of coverage it will change level as it bounces off or gets absorbed by nearby surfaces. Think of the analogy of light that is reflected by a mirror surface versus light that is absorbed by a flat black or dark surface. It is because of this reflection and absorption of sound as it travels through its environment that we have differences in sound levels between what is marked on the product and what is measured in the field.

Generally, the marked rating numbers on data sheets for Canada are higher than the same US product. So why does it appear that products are louder in Canada? It has to do with the method used to make the measurement to obtain the rating.

The marked rating on the product is obtained by the product certification labs under a controlled laboratory condition. In Canada, ULC Standards specify that **sound pressure** measurements are to be measured in an **anechoic room**, on axis at 3m. This sound pressure level at this point in space is what is marked on the product for Canada.

In the US, UL Standards specify that sound power level measurements to be measured in a **reverberant room** and then converted to a sound pressure measurement at 10ft. Sound power does not have a distance associated with it. Think of it as a 100 watt light bulb. 100 watts describes the power the light bulb consumes and not how bright it is. Because installation codes specify a sound pressure level at a distance, the sound power measurement has to be mathematically converted to an equivalent sound pressure level at a distance of 3 meters. For purposes of this discussion, the difference between 3 meters and 10 feet is negligible.

Notice the different highlighted terms **sound pressure** and **sound power** as

well as the different rooms; **anechoic** and **reverberation**.

Starting with the rooms, in simple terms an **anechoic chamber** (an-echoic meaning "non-reflective, non-echoing, echo-free") is a room designed to completely absorb sound. A **reverberation** room is a room designed to create a reflected sound field. Going back to the analogy of light, an anechoic would be room painted flat black and a reverberation room would be a room made of mirrors.

Now for the difference in the terms; **sound pressure** and **sound power**. Product certifications to ULC Standards are made in an anechoic room by a single sound pressure measurement made on axis directly in front of device at a distance of 3 meters. Product certifications to the UL Standards are made in a reverberant room by taking many sound pressure measurements and integrating them into a sound power measurement. Sound pressure is what is measured with a hand held meter. To understand the difference visually, think of the single sound pressure measurement as flashlight with a beam of light and the sound power measurement as the average brightness of the room. Sound radiation patterns of devices are generally somewhere between a beam of sound and being omni-directional.

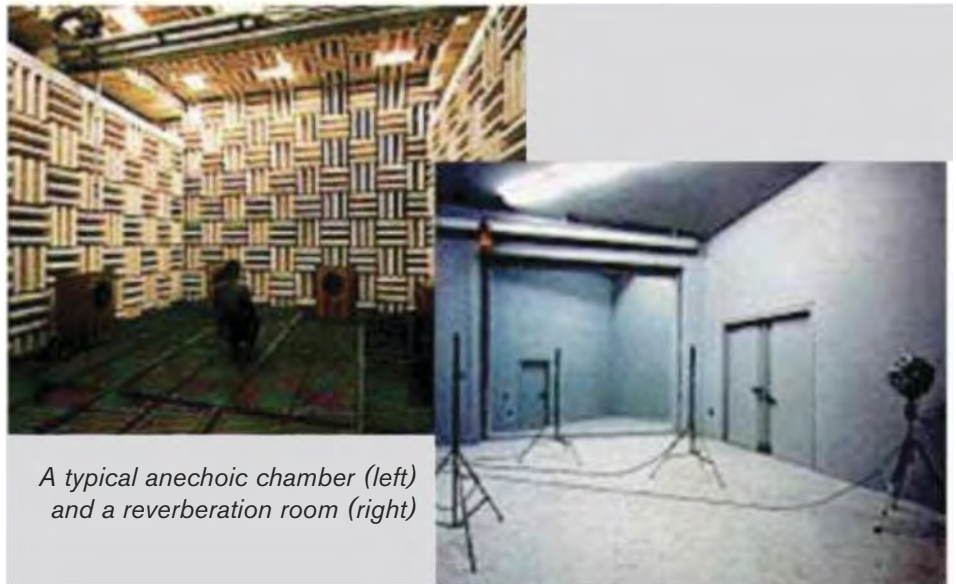
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Understanding Marked versus Measured Sound Levels *Cont'd*

The combination of the device sound pattern, the sound absorption or sound reflective properties of the surroundings and the method of measurement produce different sound level numbers.

Neither product level marking may equal measurements made in the real world all of the time. Generally speaking, distance and sound absorbing will lower the reading. On the other hand, a highly reflective stair well or laundry room may produce readings that are higher than the products marked rating.

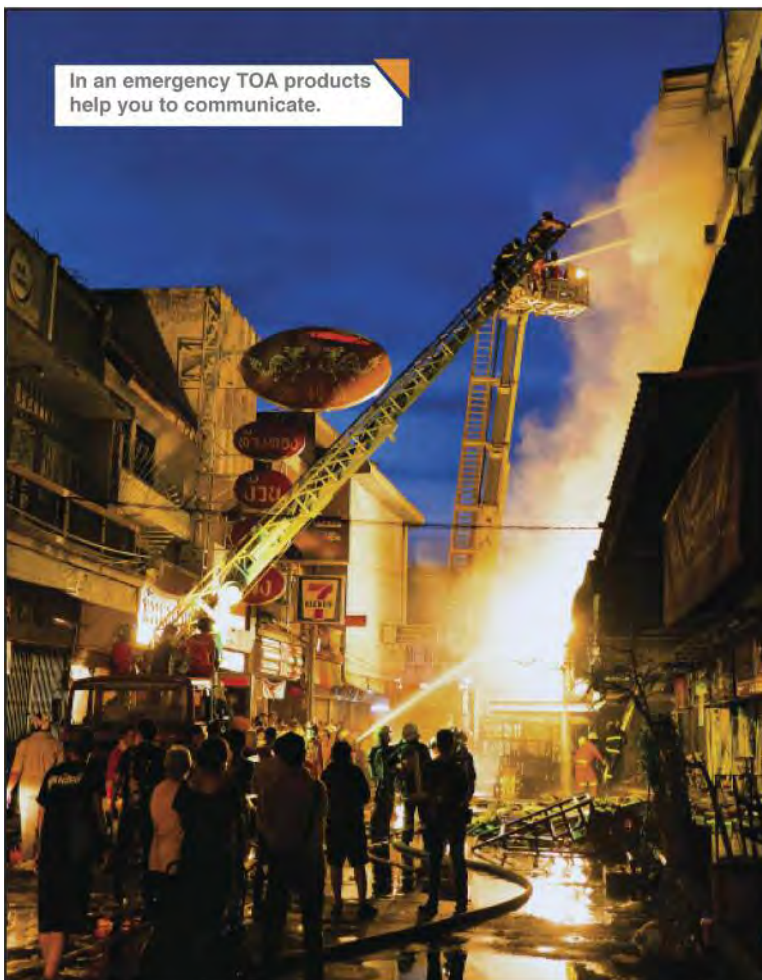
Understanding how product certification ratings are established, how sound propagates through space and is affected by, will help AHJs and designers in selecting the right product for the area of coverage.



A typical anechoic chamber (left) and a reverberation room (right)

The general rule of thumb is if you have a highly reflective room or the device is located directly in front of the area of coverage, lean toward using the ULC marked rating. If the room has a lot of

sound absorption in it, lean toward using the UL marked rating. But in all cases, acceptance should be determined by actual sound level measurements in the area of coverage. ♦



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Fire Alarm System Misconceptions Debunked

By: Lui Tai, P. Eng.
Senior Fire Protection Engineer Specialist, Morrison Hershfield

It has been over 160 years since the invention of the first electric fire alarm system in 1852. The latest fire alarm systems have incorporated many cutting edge technologies in their design, including point-addressable detection and signaling, networked communications, video analytics and over-the-internet program downloading.

However, there are still some fundamental misconceptions of fire alarm systems that frequently arise during the design or installation of a fire alarm system. Since code requirements vary by jurisdiction, what's presented below may not be applicable to all municipalities. Accordingly, local building codes and standards should be consulted.

Misconception 1: Visual signal strobes should remain on when audible signals are silenced.

Fact: In a fire scenario, both audible and visual signal devices on a fire alarm system would activate in accordance with the approved sequence of operations. When it is time to silence the audible signals, many fire inspectors would request that visual signal devices be kept activated after the audible tones are silenced. This would typically require the audible and visual signal devices be installed on separate circuits. However, the latest version of ULC-S524 stipulates that when visual signal devices are installed to supplement audible signal devices in a fire alarm system, these visual signal devices must behave in the exact same fashion as their audible counterparts, meaning that when the audible signal devices are si-



lenced, the visual signal devices should be turned off at the same time.

Misconception 2: All visual strobes can be synchronized if synch modules are added.

Fact: Traditionally, visual signal devices (strobes) are typically not required to be cross-listed for use with fire alarm control panels from a different manufacturer, since the strobes are driven by simple 24 VDC circuits. However, this is no longer true with the requirement for synchronization. Fire alarm system manufacturers use different algorithms to synchronize their brand of visual signal devices. So, the synch module from one manufacturer will not work with strobes from a different manufacturer. Moreover, older models from the same manufacturer may not work either. This means, in a typical retrofit installation where visual synchronization is required,

all strobes should be upgraded to the same model by the same manufacturer as the control panel. Always check with the manufacturer's datasheet for device compatibility

Misconception 3: Exit stairwell in a building must be equipped with fire alarm signal devices.

Fact: Some support the installation of signal devices inside stairwells, arguing that stair enclosure are occupied spaces, and thus must be equipped with fire alarm notification devices. Others oppose the idea, arguing that signals inside the stair enclosure will only annoy those people who are already evacuating the building. Code requirements vary from jurisdiction to jurisdiction. Where NFPA 101 is adopted, the general evacuation signal is not required in exit stair enclosures.

Misconception 4: Wiring T-tapping is not allowed as all circuits in a fire alarm system must be electrically supervised.

Fact: Traditionally for a fire alarm system, electrical supervision of a circuit (for open, short and ground) could only be achieved through the use of either a class A circuit, or a class B circuit with an end-of-line device. However, with microprocessor-based control panels, wire T-tapping is possible through the use of isolators and junction boxes. When used in the right configuration, the isolators would maintain the electric supervision of the circuit wiring, while allowing the circuits to be fully functional. Supervision is accomplished by electronically "polling" each device. ♦



About Fire Prevention Week

Fire Prevention Week is observed each year during the week of October 9th in commemoration of the Great Chicago Fire, which began on October 8, 1871, and caused devastating damage. This horrific conflagration killed more than 250 people, left 100,000 homeless, destroyed more than 17,400 structures, and burned more than 2,000 acres of land.

Importance of Fire Prevention

In a fire, mere seconds can mean the difference between a safe escape and a tragedy. Fire safety education isn't just for school children. Teenagers, adults, and the elderly are also at risk in fires, making it important for every member of the community to take some time every October during Fire Prevention Week to make sure they understand how to stay safe in case of a fire.

Bring Awareness

While children under 5 and adults over 65 are at the highest risk for injury or death in a fire, people of all ages are vulnerable. In fact, the risk of a nonfatal fire injury is highest for those between 20 and 49, showing that fire safety education is essential for everyone. Additional risk factors include race, socio-economic status, education level, and geographic location.

The purpose of Fire Prevention Week is to bring awareness to the risk of death in case of a fire and provide educational resources to people of all ages, races, and socioeconomic status in order to keep everyone safe.

From the Ontario Ministry of Community Safety and Correction Services...

**"LOOK. LISTEN. LEARN.
Be aware. Fire can happen anywhere."**

This year's Fire Prevention Week theme focuses on three fundamental actions people can take to be fire-safe:

- 1. LOOK** for potential fire hazards around your home. Take action to prevent fire from starting:
 - Always stay in the kitchen while cooking. If you must leave, turn off the stove.
 - Encourage smokers to smoke outside. Always extinguish cigarettes in large, deep ashtrays that cannot be knocked over.
 - Check electrical cords for damage such as fraying or nicks. A damaged cord can expose wires and result in a potential shock or fire hazard.
- 2. LISTEN** for the smoke alarms in an emergency. Make sure everyone knows the sound of the smoke alarms and can hear them in an emergency. Early detection of fire provided by smoke alarms gives you the extra seconds you need to get out safely.
- 3. LEARN** two ways out of every room. Practice a home fire escape plan with everyone in your home before a fire starts so you and your family can get out quickly.

Safety Tips as You Inspect your Barbeque...



- Dirt and debris can build up inside the grill over the winter months. Carefully clean out any particles, dust, and cobwebs that may have built up over the winter. Newer barbecues have spider guards to prevent them from entering the burner and burner tubes, however if yours does not, use a pipe cleaner or wire to ensure that spider webs have not built up inside. Remove lava rocks and grates for a thorough cleaning with soap and warm water.
- Clean your burner ports to ensure they are free of dirt and rust.
- Make sure that the barbecue hose is in good condition, and is free of cracks. Propane or Natural Gas leaking from a cracked hose may send out a stream that if ignited can produce huge flames.
- Check to ensure that all connections are tight and that there are no leaks. Do not use a match/lighter to check for leaks. You can brush a mixture of soap and water onto the connections and hoses (a 50/50 mix) and any rising bubbles will indicate a leak. Repair your barbecue so that there are no more bubbles.
- Rusty, damaged propane tanks should be replaced by 10 years of age or less.
- If you have uncertainty about the condition of any barbecue part you should replace it with a new component. Parts are available at most hardware stores and building supply centres.
- Call a certified fuel appliance repair person if you do not feel comfortable completing safety checks yourself.

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www.mcscs.jus.gov.on.ca

OFS Fire Prevention

Member since 1998
Ed Herron
Jeff Ough
Tom Robbins
Barrie, ON
(705) 728-5289
www.ofsgroup.com

Pro-Firestop

Member since 2001
John Sharpe
Jeffrey Zamora
Toronto, ON
(416) 293-0993
www.profirestop.com

Secur Fire Protection

Member since 2001
Catherine Chandler
John Lemay
Bernard Seguin
Ottawa, ON
(613) 744-0722
www.noti-secur.com

Seneca College, School of Fire Protection Engineering Technology

Member since 1971
Scott Pugsley
Derek Gruchy
Aneetha Vairavanathan
Toronto, ON
(416) 491-5050
www.senecacollege.ca

Siemens Canada Limited

Member since 1998
Jason Baycroft
Manual Lopes
Jeffry Tondang
Mississauga, ON
(905) 465-7208
www.siemens.com

Toronto Fire Services

Member since 1988
Lesley-Anne Coleman
James Stoops
Toronto, ON
(416) 338-9102
www.toronto.ca

Toronto Transit Commission

Member since 1998
Mark Biamonte
Ryan Duggan
Cory Grant
Toronto, ON
(416) 393-4229
www.ttc.ca

Underwriters Laboratories of Canada

Member since 1998
Sandy Leva
Brian McBain
Toronto, ON
(416) 757-5250
www.canada.ul.com

University Health Network

Member since 2010
John Chartrand
Vito D'Amico
Ed Riley
Toronto, ON
(416) 340-4800
www.uhn.ca

University of Guelph, Campus Community Police and Fire Prevention

Member since 2009
Scott Hamilton
Karen MacDonald
Patrick Martin
Guelph, ON
(519) 824-4120
www.uoguelph.ca

Vaughan Fire & Rescue Services

Member since 2000
Doug Best
Jon Caruso
Vaughan, ON
(905) 832-8585
www.vaughan.ca

New Members

Associate

Marc-Andre Langevin
Technorm Inc., Montreal, QC

Students

Hussein Alasady
Serge Lalonde

Upcoming Events

Trade Shows:

Ontario Disaster & Emergency Management Conference

October 3-4, 2018
Toronto, ON

Fire Prevention Week

October 7-13, 2018

Security Canada Show

October 24-25, 2018
Toronto, ON

Fire Service Women Ontario

(FSWO) 2018 Professional Development Symposium

October 26-28, 2018
Conestoga College, Waterloo, ON

The Buildings Show/Construct Canada

November 28-30, 2018
Toronto, ON

More information regarding events and registration can be found by visiting:

<http://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
- Other (please specify) _____
- Engineer
- Fire Official
- Fire Consultant

	Rate	+13%HST	Total Rate
<input type="checkbox"/> Corporate Plus (C3)	\$ 790.00	\$ 102.70	\$892.70
<input type="checkbox"/> Corporate	\$ 406.00	\$52.78	\$458.78
<input type="checkbox"/> Individual	\$ 82.00	\$10.66	\$92.66
<input type="checkbox"/> Student	\$ 25.00	\$3.25	\$28.25
<input type="checkbox"/> Retired	\$ 25.00	\$3.25	\$28.25
<input type="checkbox"/> Associate	\$ 56.00	\$7.28	\$63.28
<input checked="" type="checkbox"/> Chapter	\$ 180.00	\$23.40	\$203.40

Method of Payment:

Cheque Enclosed \$ _____



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