CFSANEWS

CANADIAN FIRE SAFETY ASSOCIATION



Fire Safety is Everybody's Business



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Editor: Lesley-Anne Coleman

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President's Message

As I indicated in my previous President's Message, "Attending, participating and contributing are inherently action words, but not all lead to action. My personal and professional challenge for 2020 is to flip the order of these words so that they can lead my actions versus occupy my time." This was a New Years resolution of sorts, which was written well before we entered into the world wide pandemic of COVID-19.

Since this last issue of the Canadian Fire Safety Association (CFSA) Newsletter, it would be fair to say that just about everything that we had been used to, has now in some way changed. I certainly acknowledge that not all these changes have been easy. These tumultuous times have been especially challenging for our Fire Protection Industry, for our members and for the CFSA as a whole.

In the past few months the entire association has had to pivot, much more then just having our monthly meetings changing from in-person to online. On June 22nd, we held our first ever Online Annual General Meeting, this formal meeting was separated from our Annual Education Meeting (AEF) to comply with the association's governance requirements and related By-laws.

During this AGM we reviewed and approved the actions of the Board of Directors (BOD) for the previous year, and elected a new slate of Directors for 2020-2021. During this process, we also paused to acknowledge the retirement of Jim Stoops, Randy de Launay and Anthony Van Odyk as active CFSA Board Members. Jim, Randy and Anthony have all been involved within the CFSA BOD for many years and each have Chaired different committees within the CFSA, and individually have also served as Executives within the BOD. Their contributions have helped to shape the CFSA for years to come.

Presently our AEF is postponed until the spring of 2021. It is our hope that this AEF could return to an in-person session, however we will continue to monitor and follow the guidance as provided by the Ministry of Health.

In the meantime, we are looking to provide a similar range of educational topics as planned within the AEF. These ideally will be split up over the next few months as a way to provide this great content from a list of wonderful guest speakers. With an AEF postponed, and the AGM online we were unable to have an official awards ceremony for our 2020 Scholarship program award winners. The selection committee did continue their work to review and award these scholarships. We have been sharing the winners on our website and within our Social Media feeds. A virtual awards presentation will be held in the coming months as we felt that the focus needed to be on making these awards happen to ensure the money made it to the students in this time of need.

The "Big Pivot" or Plan "B" for the CFSA in the immediate future, and likely well into 2021, is to shift our education efforts to all online content delivery. This already has been seen as a welcomed change by our AHJ members as now they can attend more sessions with less of an impact on their own time in the office.

I wanted to end this message as I had started, with a personal reflection. The goal of "Attending, participating, and contributing" within an association, within our career fields, and within our personal lives has never been more challenging. I am truly thankful for all of the work that you are doing day-in and day-out to protect our communities. The road ahead is still very uncertain, we must still continue to adapt, evaluate, and pivot. In the meantime, looking forward to seeing and hearing from you during our next Online session.

Be sure to follow or connect with us using Twitter @CFSA_NextGen along with @CFSA_Canada. Please feel free to contact me at any time at president@canadianfiresafety.com.

Stay safe, Scott Pugsley CFSA President



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 ME

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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The Current Impact of COVID-19 on the Fire Safety Industry

By: Randy Panesar, Durham College

ack in December of 2019 when COVID 19 made its grand appearance in the world, we all knew that it was only a matter of time before the outbreak found its way to Canada. Even with the SARS experience, many of us were not prepared to understand COVID-19's true impact. In January of 2020, COVID-19 welcomed itself to Canada spreading rapidly across the nation.

In the months that followed fear and uncertainty was hanging over our heads as our daily routines were changing by the minute. Our health care system was impacted almost immediately and soon after our economy. As the pandemic showed no signs of slowing down, social/physical distancing, wearing gloves and N95 masks became the norm. Provinces and Territories across the country began implementing emergency protocols, which included the banning or limiting of social gatherings, shutting down restaurants, parks, arenas, busi-

nesses, offices, schools, places of worship and much more. Where possible working from home became a necessity, no longer having to pack a lunch and commuting to and from work. Working in your pajamas and attending Zoom meetings became a new normal.

It will be interesting to see if there was a significant spike in residential fires as much of the country has been working from home. Cooking is still the number one cause of fire incidents in Canada and with the nation under emergency orders and in lock down, many fire professionals are curious to see the data related to fire incidents during the pandemic. Has the case for sprinklers in homes become stronger and more apparent?

With business shut down creating a significant blow to the economy, every industry has felt the impact from the pandemic as our efforts to plank the curve continues. The unfortunate consequence

of employers having to make the difficult decisions to implement layoffs and/or let employees go has become a reality. Every industry has their own uniqueness and circumstances which required a deep analysis in governing next steps. Similarly, the fire and life safety industry has experienced significant changes enforced by government regulations or suitable best practices.

What's unique about our industry, and for obvious reasons, fire safety is an absolute essential service. Fire protection services must not be discounted under any condition or circumstance. At the end of the day whichever sector of the fire protection industry one may belong to, the matter of fact is that we are united in saving lives and property.

Fire protection consists of many interrelated professions which range from fire fighting, prevention, consultation, engineering, education, enforcement and



more, which collectively forms the fire protection industry. An industry that we are all proud to be a part of. The pandemic forced all sectors of the fire protection world to face historic change. In an attempt to mitigate the risk, significant operational considerations and the associated risks had to be explored and implemented. In some cases, this includes the reality of accepting the dangers associated when providing fire protection services to the public while absorbing financial loss and/or simply halting specific operations.

It's important to know what precautions each sector of the industry has taken to protect themselves and the public. So, what are some of the significant changes industry professionals have made? To answer this question, we need to briefly look in each major discipline within the industry.

As first responders attending fire incidents, medical calls, car accidents, and any emergency situation, firefighters are most at risk. With strict privacy protocols in place and limiting to essential information only, the information of individuals that may have been in contact with the virus can be made available to responding fire fighters and other emergency response personnel. This data is essential to ensure the safety of responding firefighters and the public. Dispatch will collect as much information as possible by conducting a pre-screening questionnaire as the fire department makes its way to the incident. Upon arrival firefighter assess the situation and implement appropriate PPE measures such as N95 masks and gloves.

To avoid any possible transfer of the virus in the firehall, firefighters are required to maintain physical distancing. Some fire departments have implemented rules such as one person in the kitchen at a time and eating meals to-

gether is no longer taking place. Each crew is expected to disinfect the firehall at the beginning and at the end of every shift. In some cases, crews are required to leave the firehall at the end of their shift collectively before the next crew enters the fire hall. Some fire depart-

The pandemic forced all sectors of the fire protection world to face historic change.

ments also require firefighters to have their temperature taken before and at the end of every shift. Many also complete a pre-screening questionnaire. This will ensure that there is little probability of transferring the virus between crews, in the event a crew member has been in contact with the virus. These efforts can be employed quite easily but can be a bit more challenging for a volunteer fire department.

Recently an Ontario town with a volunteer fire department was required to self-isolate due to fears that one of the crew members had been in contact with someone who was tested positive for COVID 19. Fortunately, the individual tested negative but the reality of the situation became apparent. With a number of firefighters in self-quarantine, responding to an emergency would have been quite the trial having limited available firefighters and limited resources from neighbouring towns.

As much as possible fire prevention officers have been working from home but this has not halted inspections or enforcing the fire code. Many prevention officers have been conducting virtual inspections and holding online meetings with building owners and tenants. In some cases, and where possible, public education opportunities are held online. With many businesses shut down, inspections have slowed down therefore, some FPO's took this time to redevelop public education curriculum and training content. Making the paradigm shift to online resources has proven to be of great value for some fire departments.

Fire protection firms conducting inspections, repairs and maintenance of fire protection equipment are required to continue doing so regardless if the building or facility is occupied or not. Fire alarm systems, sprinkler systems, extinguishers and other suppression work must continue. Some municipalities across Canada have deemed it okay to delay an inspection provided that there are no current deficiencies or concerns with fire protection in the building. Any deficiencies and repairs must be completed.

Typically lay-offs or job loses are unheard of in the field of fire protection. The common statement people in our industry like to quote is "if there are buildings and construction taking place then there will always be work available". Well this pandemic has proven this statement incorrect during these challenging times. The pandemic has forced many fire protection firms to lay off employees and/or let them go. With construction and businesses coming to a halt, work has slowed down. Building owners and tenants are reluctant to allow technicians to enter their buildings in fear of being exposed to the virus. Furthermore, with construction projects being halted or delayed, the work load

The Current Impact of COVID-19 on the Fire Safety Industry Cont'd

of designers, engineers and installers has lessened dramatically. For the first time ever, we have seen technicians getting laid off and many companies introducing a hiring freeze. At an industry level this has never happened before.

Many not-for-profit fire safety associations have also been impacted dramatically. Much needed industry seminars such as our very own CFSA's, Annual Education Forum and technical seminars have had to be cancelled or postponed until further notice. Fire safety associations such as the CFSA, offer great professional development value for fire safety professionals by sharing information on various fire safety matters and innovations. Associations that offer training, examinations and accreditations are also facing challenges as not all assessments can be conducted on-

line, which in turn delays fire safety professionals from obtaining certificates or accreditations needed to advance in their careers.

Finally, how have colleges and universities who offer fire safety education handled the pandemic? As we are all aware, post-secondary campuses have been closed but education has not stopped. Courses have continued online using learning management systems or other online platforms. Courses are held either as synchronized or asynchronized without impleading on the quality of education. Students enrolled in post secondary institutes studying fire and life safety are still obtaining great education. Colleges and Universities are known for innovation and research therefore, transitioning classes online for the most part has not been a problem.

As an industry we have stepped up to these challenging times and ensured that fire and life safety is not compromised. Firefighters, prevention officers, engineers, technicians, project managers, not for profit associations and anyone in between have proven once again to be reliable, studious and driven during this pandemic.

Well, what's next? Is a second wave of COVID 19 upon us, if so will it be easier to cope with? As an industry have we come to accept and adapt to a new normal? Will we continue to conduct fire safety measures and protocols online, if so to what extent? What lessons have we learned? All these questions can only truly be answered once this pandemic is over and we return to some sort of normalcy which will hopefully be soon.

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Conventional and Contemporary Care Facilities

(A study on a variety of care facilities including retirement homes and home-type care facilities in relation to the provisions prescribed in the Model National Building Code of Canada)

By: Avinash Gupta, P.Eng., CBCO, CRBO, LBO and Brent Stuntzner, LEED GA, CSI CDT, Assoc. AIA

According to government statistics, the population of Canadians aged 65 and over increased from 14.4% in 2011 to 17.7% in 2018. The proportion of seniors within the population has been steadily growing since 1960. It increased from 8% in 1960 to 14% in 2009. According to all population projections, seniors are expected to account for 23% to 25% of the population by 2036 and around 24% to 28% in 2061, implying approximately one-fourth of the population will be seniors. As per Canadian Survey on Disability (CSD), 2017, the occurrence of disabilities among Canadians tends to increase with age. An estimated one in five Canadians (20%) aged 15 years and over suffered from one or more disabilities that limited them in their daily activities, according to findings from the 2017 CSD.

A comprehensive list of fires that occurred in health care facilities across Canada in the last 20 years is not readily available, however, a report published by 'The Globe and Mail' on January 23, 2014, updated on May 11, 2018 and complied by Mr. Rick Cash is tabulated below. The list provides a glimpse of fatal fires involving retirement and nursing homes in Canada.

According to a NFPA study, in three out of five fires (60%), kitchen equipment was the leading cause of fires in health care facilities. Other reasons found were: 7% pertained to dryers and laundry facilities, 6% were set intentionally, 6% started from smoking materials, and



Firefighters battle a blaze at a seniors residence in L'Isle-Verte, Quebec.
Photo Crédit: FRANCOIS DROUIN, INFODIMANCHE.COM

6% involved heating equipment. Care facilities housing residents with developmental disabilities, mental illness, or substance abuse saw more fires set intentionally.

The occupants of a health care facility usually require additional time to evacuate because of the varying health conditions of the residents in comparison to

continued...

Number of Casualties	Date and Location of Fires			
35	February 10, 1948, at a Nursing Home in Newfoundland			
38	December 2, 1969, at Le Repos Du Vieillard in Notre-Dame-du-Lac, about 160 kilometers northeast of Quebec City			
21	December 26, 1976, at a nursing home in Newfoundland			
25	July 14, 1980, at a nursing home in Mississauga			
04	January 19, 2009, at a retirement home in Orillia			
03	January 23, 2014, at a seniors home in Quebec			

Fires set intentionally were found more predominant in care homes caring for those with development disabilities or mental illnesses.

other occupancies. Health facilities accommodate a significant number of persons using wheelchairs, making the evacuation process challenging and time-consuming. In these facilities, residents may not be capable of self-preservation and therefore may require assistance to help evacuate the building before smoke contamination reaches a lethal level or untenable conditions are reached.

Classification and Variety of Care Facilities

Pragmatic and prudent application of the National Building Code of Canada 2015 (NBC) and standards would contribute significantly to control fire and fire propensity in any type of structures including health care facilities. To achieve this, it is important to examine and determine the classification of a building in conformance with its use and application.

Care Facilities could include senior care homes, adult care homes, long-term care homes, assisted living homes, independent living seniors homes, residential care homes, the campus of care homes, and many more similar types of care homes. Other care facilities that need to be considered include hospitals, retirement homes, primary care clinics, diagnostic centres, clinic-types infirmaries, nursing homes and other similar types of facilities.

In the absence of any scientific mechanism available to classify any building, a certain amount of personal and pragmatic judgment is required to classify a building. The designer may use the Appendix Note to Article 3.1.2.1. of Division B of NBC as a guide to classify a building, however, the list is not considered an exhaustive list. The most important factor when classifying a building is to understand the principal use of the building and no significance should be attached to the name of the business assigned to it. All the facilities listed above could be classified as a treat-

ment occupancy (Group B, Division 2), or care occupancy (Group B, Division 3), or residential occupancy (Group C), or business and personal services occupancy (Group D).

Understanding the difference between a residential, care, and assembly occupancy is of significance for determining the classification of a health care facility in conformance with the requirements of NBC.

Treatment occupancy (Group B, Division 2 occupancy) is defined in the NBC as, "the occupancy or use of a building or part thereof for the provision of treatment, and where overnight accommodation is available to facilitate the treatment." Treatment may include surgery, intensive care, or emergency medical intervention to persons, where administration or lack of administration of these may render them incapable of self-preservation. Hospitals or hospices with treatment fall under this category and would usually contain operation rooms, recovery rooms, intensive care units, birthing rooms, and (or) emergency wards.

Assembly occupancy (Group A, Division 2) is defined in the NBC and it means an occupancy that is primarily used for a group activity, staging or audience, or consumption of food or drink. Therefore, permitting sleeping or sleeping accommodation or personal care assistance or administering of medicine or transient medical services in assembly occupancy is a significant departure from the fundamentals of NBC.

Care occupancy (Group B, Division 3) is defined in the NBC as "the occupancy or use of a building or part thereof where care is provided to residents." The term care used in care occupancy means the provision of services for an uninterrupted period exceeding 24 hours (i.e. around the clock) other than treatment by or through care facility management to

residents who require these services because of cognitive, physical or behavioural limitations. Whereas, a residential occupancy (Group C) is defined in the NBC as "the occupancy or use of a building or part thereof by persons for whom sleeping accommodation is provided but who are not harboured for the purpose of receiving care or treatment and are not involuntarily detained."

The major and substantial difference between care occupancies and others is the sizeable population of residents with diverse abilities (non-ambulatory) as well as those who require assistance to evacuate in care occupancies. Residents or patients who do not have the ability to evacuate independently or without the assistance/intervention of staff members or who are incapable of recognizing and responding to an emergency situation due to their physical, cognitive and behavioural limitations are non-ambulatory residents or residents with diverse abilities. As previously discussed, these residents require additional time to evacuate a building thus the quantity and quality of exits carry a greater significance for accelerating the evacuation and rescue operation. Many designers, where possible, prefer to locate the required exits for care occupancies at the grade level to ease fast evacuation and rescue operation.

Examples of non-ambulatory (incapable of self-preservation) residents/patients include such persons who are not able to get-up and walk or transfer by themselves from a bed or chair to a wheelchair or any other means of mobility device and leave the building or relocate within a building on their own. A few other examples of residents who can be classified as incapable of self-preservation also include: children under the age of 24 months (designer to discuss with the local authority for the definition of infant), residents who do not understand or remember what to do once the fire alarm has been activated, residents who may not be

awakened by a fire alarm due to hearing impairment and there are no alerting devices, residents who do not act on verbal orders or who cannot follow directions and need handholding to access an exit, residents who are confined to a wheelchair who cannot self-propel and need to be pushed by a staff member, and residents who cannot use stairs due to mobility or mental disorder.

Morning personal hygiene assistance and personal care services are usually offered in all the different types of care occupancies. Morning personal assistance includes tooth brushing, washing, showering, bathing, toenail cutting, shaving, hair washing, nose-hair clipping, and the usual bodily functions. It also includes activities of daily living such as dressing, cleaning, laundry, feeding, etc. Personal care services in addition to above activities of daily living include monitoring of self-administered medications or other medical needs, and the monitoring of physical condition, health status and functional skills necessary to live in the community or participate in community activities.

Sleeping accommodation and staff assistance/intervention to evacuate the occupants safely before the environment becomes untenable due to fire conditions is provided in both the treatment and care occupancies. However, no treatment that may render the occupants incapable of self-preservation is provided in a care occupancy, which further differentiates the care occupancy from the treatment occupancy.

Daycare occupancy has not been defined in the current NBC, and may be considered as an occupancy where clients, who normally reside at another location, are provided care for less than 24 hours per day. Whereas, care occupancy, as stated earlier, is an occupancy, where clients are in the residence for 24 hours a day and total care is provided by the staff for a con-

tinuous period exceeding 24 hours. The period of duration of care between the two is the main difference between daycare and care occupancies.

Understanding Variety of Care Facilities

Senior care homes, adult care homes, long-term care homes, assisted living homes, independent living senior homes and many more similar types of care facilities are mushrooming across Canada and are the commercial names assigned to these facilities. In these facilities, non-hospital care services are typically provided to promote their businesses. All of them, as per NBC, fall under the classification of care occupancy (Group B, Division 3) and generally speaking, provide similar types of care services listed earlier in this article.

For example, assisted living homes may be suitable for an elderly person who needs assistance with certain activities but may not suffer from conditions requiring continual medical care and attention. Independent living, on the other hand, may be good for seniors who do not want daily stress of household chores like cooking and grocery shopping. These may be intended for seniors who are otherwise self-sufficient and active and only need a few services to help them continue to live independently. Similarly, long-term health care facilities are ideal for seniors/individuals who need 24-hour care by staff members. On the contrary, nursing homes may be most suitable for individuals who require around the clock (24 x 7) care and monitoring. These are good for individuals who typically live with more complex medical conditions that require the assistance of a skilled nurse or doctor.

As we age, it is quite natural for our health to decline and depending on health conditions and type of care required, individuals consider options between varieties of care homes/facilities available on the market. However, long-term health care facilities may be more suitable for patients with Alzheimer's

disease, including advanced cases of Alzheimer's, dementia and those with Parkinson's, and other mental disabilities as long as they do not present an imminent danger to themselves or others.

Home-type care facility as a separate major occupancy is expected to be included in the NBC 2020 with the intention of providing affordable care in a family-type environment and in a smaller accommodation that resembles a residential facility. Home-type care occupancy, Group B, Division 4 (B4) is defined as the occupancy or use of a single housekeeping building where care is provided to residents and may include the living space of the caregiver and his/her family. This occupancy is independent of the self-preservation capabilities of a person as this condition may keep changing with the time and age of a person.

Retirement home is the other commercial name given to a care facility (Group B, Division 3 occupancy) unless their management staffs do not offer care services around the clock. Some jurisdictions (e.g., Ontario) have added provisions for retirement homes in conformance with the Ontario Retirement Homes Act, 2010. These retirement homes are classified as a residential occupancy (Group C) in contrast to care occupancy (Group B, Division 3) of NBC.

Currently Federal, Provincial, and Territorial discussions are ongoing about increased harmonization to provide an overview of the path towards the cross-country harmonization of construction codes. The purpose of the 'Reconciliation Agreement on Construction Codes' (RCT) is to harmonize all codes and come up with a single Model Code that could be adopted all across Canada. Careful fire protection and cost analysis is required for the classification of the retirement homes when harmonization of the construction codes is taken up.

Post-Disaster Building

A post-disaster building is a defined term in the NBC and it means, a building containing essential services (Not Emergency Services) available to the public before a disaster, during a disaster and after a disaster. Except for the structural system of the building, a post-disaster building classification has no influence on any portion of NBC.

A standalone care facility is typically not required to be designed with a post-disaster importance factor. However, in many remote communities and municipalities across Canada particularly in the Northwest Territories, a health care facility comprising of long-term care and other basic primary care facilities like examination rooms, treatment rooms, X-ray labs, trauma rooms, and radiology rooms are included in the same building complex.

The above mentioned basic primary care services are generally not available in many remote communities and therefore considered as essential services when these services are not available elsewhere in the community. For a health care facility containing above services, it is appropriate that the building be designed as a post-disaster building as the residents are required to be stabilized in a trauma centre or provided primary care before they can be transported or flown to other specialised hospitals. At the conceptual stage of a project, the designer is to discuss the importance category of a structure with the Authority Having Jurisdiction (AHJ).

Compartments and Fire Separations

For combating the additional time needed by the occupants to evacuate, NBC has prescribed additional fire safety measures including additional fire compartments and fire separations.

NBC Article 3.3.3.5. of Division B, re-

quires fire compartments that can be used for the horizontal movement of patients for relocating them from one fire compartment to an adjoining (attached) compartment for their safety in case of a fire emergency. A floor area providing sleeping accommodation for more than a total of 10 patients or residents is reguired to meet the conditions like dividing the floor area into at least two fire compartments, each having an area limited to 1000 m2, fire separated from each other having a fire-resistance rating not less than 1 h, a travel distance to a door to an attached fire compartment limited to 45 m, etc. Figure 1 explains the above requirements for a conventional care facility.

Walls between patients or residents sleeping rooms and the remainder of the floor area are required to be fire separated but without a fire-resistance rating. In addition to the above, NBC permits no fire separation to walls within a group of intercommunicating rooms having a maximum occupant load of five or include storage, bathing or toilet facilities serving patients not occupying the group of rooms. NBC exempts doors serving patients or residents sleeping rooms from the requirements for the positive latching devices when doors are equipped with roller latches. This is waived on the assumption that adequate trained staff will be on duty around the clock and will close all doors in case of a fire emergency. The designer is to ensure that the closing of doors is a part of the fire safety and evacuation plan.

NBC exempts the area limit of 1000 m2 for a fire compartment and other conditions except the travel distance requirement of 45 m where the floor area is divided into fire compartments by a horizontal exit and designed in conformance with the NBC. A horizontal exit is an exit as a part of means of egress, facilitating passage from one building to another by means of a doorway, vestibule, walkway, bridge or balcony. Horizontal exits are permitted to account for not

more than two thirds of the required number of exits from a floor area of a hospital or nursing home with treatment. A horizontal exit is not permitted to be served as the only exit from a portion of a building.

The current edition of the NBC does not exclusively deal with the exits from the fire compartments of care occupancies. However, requirements of exits prescribed in Section 3.4. of the NBC are required to be met. As per this section, at least 2 exits are required to be provided on every storey of a building, however, a single exit is permitted under certain conditions like maximum floor area is to be limited to 100 m2 for a floor area that is sprinklered throughout. For meeting the intent of the NBC, it is mandatory to provide at least one conventional type of exit in each fire compartment unless an access to an exit is provided through other fire compartments without passing through the compartment under fire. Figure 1 shows arrangement of exits for three fire compartments formed by the required fire separations. Access to two exits is provided for each fire compartment, however, FC-2 is provided with two exits leading to FC-1 and FC-3 in addition to a traditional exit-E1. Therefore, a traditional exit-E1 for the layout shown in this figure is not a mandatory requirement. However, an exit leading directly to the outside of the building helps fast evacuation and rescue operation.

A traditional exit as an alternative exit is required to ensure, residents are not confined in the fire compartment for a long period of time. The intent of a temporary area of refuge is to provide occupants, a place of safety until occupants of both sides of the fire compartments are able to egress to the outside of the building through the conventional exit stair/door and the bedridden/non-ambulatory patients are evacuated by the fire department. The fire compartment on either side of a firewall or fire separation

also helps the fire department to conduct rescue operations.

Corridor Widths

For buildings containing care occupancy, a minimum 1650 mm wide corridor condition applies (a) when the number of residents in the care occupancy is more than 10. (b) where the corridors serve the residents, and (c) where corridors are not used to move patients or residents in beds. However. a minimum 1100 mm wide corridor is permitted for buildings containing care occupancy with an occupant load limited to 10 residents.

The current NBC limits the width of a corridor on the basis of the number of residents and movement of patients in beds (in an emergency situation), however, it does not reference patients using wheelchairs or other mobility devices that may also require assistance in evacuating. As mentioned earlier, the disability rate of the Canadian population is increasing rapidly and occupants of health care facilities will have patients with varying health conditions. Therefore, most care occupancies will have a significant population using wheelchairs or other mobility devices. The minimum width required for a person using a manual or power wheelchair is 800 mm wide and the width of the common stretcher bed (side-rails stored) used for relocating patients is 770 mm. Although the length of stretcher bed is greater than the length required for a manual or power wheelchair, the 1650 mm width of corridor does not take into consideration the movement of patients in beds. It seems unreasonable as the width of the corridor occupied by a wheelchair and stretcher bed is almost same. The corridor width available to other users will be limited to 300 mm for a 1100 mm corridor and 850 mm for a 1650 mm wide corridor. In view of the reduced width of 300 mm (minimum width of means of egress is to be not less than 750 mm-3.3.1.23.) for a 1100 mm wide corridor for a care occupancy with not more than 10 occupants needs to be discussed with the AHJ as most care occupancies will have residents using wheelchairs or other mobility devices.

Suites

As per NBC, walls between individual suites of care occupancy are required to be separated from each other and remainder of the building by fire separations having a fire-resistance rating not less than 1 h but not less than 45 min when permitted by the applicable construction Article.

The term suite is a defined term in the NBC and in the context of care occupancies, an individual suite is used for a single patient. A room that is individually rented and is under the control of a tenant is considered a suite. An individual suite may have a separate room for the storage of personal items, bathing or toilet facilities. Walls within an individual suite are not required to be constructed as a fire separation having a fire-resistance rating.

As shown in Figure 4, like residential occupancies, doors of individual suites open onto a public corridor that provides an option to go in opposite directions to access two separate exits. The floor area of care occupancies comprising of individual suites is not required to be divided into fire compartments (temporary refuge) because each individual suite itself is a fire compartment.

Conventional care occupancy, as per NBC, has attached fire compartments and its intent is to limit excessive travel distances to a door to an adjoining fire compartment that could lead to delays in moving patients to a safe area. The travel distance is the distance from the point of departure of the occupant to the nearest exit.

Care occupancies are comprised of people who are disabled and travel time is a function of a number of factors including occupant density, physical/health conditions of occupants and their age. As per SFPE Handbook-5th edition, an occupant density less than 0.54 persons/m2 is considered as uncongested flow and the people will move at their own pace. The maximum speed for corridors, aisle, and doorways can be taken as 1.19 m/second for horizontal movement. However, the Americans with Disabilities Act (ADA) suggests a speed of 0.47 m/second for people who are disabled. In addition to this, a person who is disabled will pause for two minutes to rest after every 30.5 m of travel. Broadly speaking, this means people with diverse abilities will need an additional 178 seconds (3 minutes) for traveling the maximum required distance of 45 m. The intent of attached fire compartments is to accelerate the movement of residents from one protected space to an adjoining protected (safer) space without going through other parts of the building.

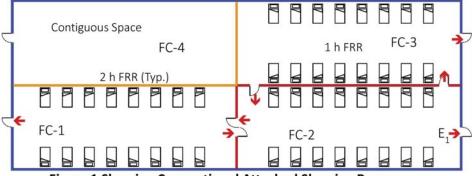


Figure 1 Showing Conventional Attached Sleeping Rooms Exit (E1) leading directly to outside of the building is not mandatory

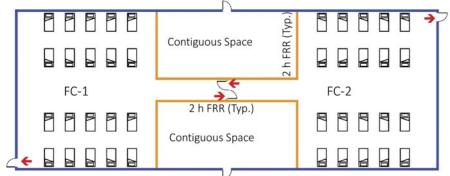


Figure 2 Showing Attached Conventional Sleeping Rooms
Travel distance from any point to an → is to be ≤ 45 m

As stated earlier, the fire compartments are attached to each other to help residents relocate in case of a fire emergency within a travel distance of 45 m. Figure 1 shows care occupancy containing three patients or residents sleeping fire compartments (FCs) as an example for study purposes. As shown, fire compartment, FC-1 is separated by a fire separation with a required 1 h fireresistance rating from FC-2 and by a fire separation with a 2 h fire-resistance rating from FC-4 in conformance with the separation of major occupancies (As per Table 3.1.3.1.). In this case, FC-4 is considered as a separate major occupancy and may comprise of facilities like examination rooms, treatment rooms, X-ray facilities, trauma rooms, laboratory rooms, therapy rooms, radiology rooms, pharmacy rooms, and other related services that serve patients beyond the adjacent care occupancies.

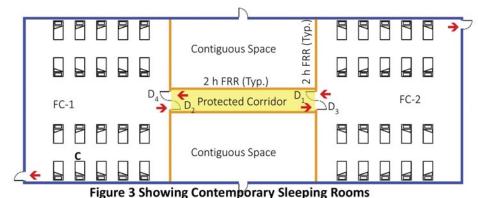
A pair of doors swinging in the opposite directions and in the direction of path of travel connect FC-1 and FC-2 and the maximum travel distance to the door from either compartment is limited to 45 m. Similarly FC-2 and FC-3 are separated by fire separations with the required fire-resistance rating, however, these fire compartments are accessed from each other by two separate single leaf doors rather than the opposite swinging pair doors. Each door swings in the direction of the path of travel and the travel distance to each door is limited to 45 m. For the floor layouts shown in the examples, all the fire compartments are required to be provided with a traditional exit door for exiting and for the fire department to access and perform rescue operations.

Figure 2 shows a care occupancy containing two sleeping fire compartments. An opposite swinging pair doors is installed in a corridor that connects the two fire compartments and its location is decided to ensure that the travel dis-

tance from either fire compartment is limited to 45 m. The fire compartments are separated from the remainder of building by a fire separation with a fire-resistance rating of 2 h and all other conditions remain same as explained for Figure 1.

However, Figure 3 is different from earlier figures as the travel distance to reach the adjoining fire compartment exceeds the prescribed limit of 45 m. This is the most common problem observed in contemporary care occupancies. As shown in Figure 3, travel distance from point A to leaf D1 or from point C to leaf D2 is required to be within 45 m and to reach the adjoining fire compartment, an additional length of a corridor is to be travelled. An approach could be developed where the corridor is constructed as a protected corridor to meet the intent of the NBC.

Figure 4 shows the layout of today's



TD from any point to an → is to be ≤ 45 m

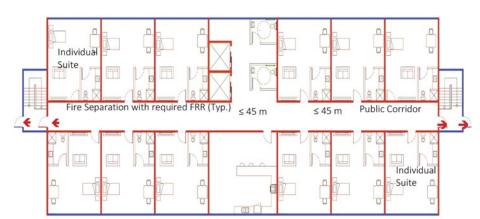


Figure 4 Showing State-of-the art Care Occupancy

contemporary care occupancy comprising of individual suites for each resident. Each individual suite is required to be fire separated from each other and remainder of the building by a fire separation with the required fire-resistance rating. As shown in the figure, doors of individual suites open onto a public corridor and the travel distance from any part of the floor area to an exit is required to be within 45 m. However, NBC permits to measure the travel distance limiting to 45 m from the egress door of an individual suite as it opens onto a public corridor.

The design of care occupancies comprising of occupants with varying ages and health conditions is a convoluted topic and it is not quite feasible to cover all aspects of life safety and safe evacuation in one article. However, in conclusion, for greater harmonization, consistency, and to eliminate an element of discretion to the designers and the AHJ, which could lead to a variety of approaches with different life safety per-

formance levels, the following needs to be further examined:

- Classification of care occupancies as well as what constitutes care— There are inconsistent approaches to these occupancies and this causes interpretive issues like classifying an assembly as a care occupancy or classifying a residential building providing care service as a residential occupancy instead of a care occupancy. Also interpretation of care among professionals across Canada is not consistent and therefore clarification in NBC would benefit professionals.
- 2) The terminology of ambulatory/non-ambulatory or residents with diverse abilities needs to be included in the NBC as there is no clear guidance available in the current NBC. Should a person incapable of self-preservation be referred to as non-ambulatory?

- 3) Should the width of a corridor in a care occupancy be also based on the use of wheelchairs by residents/patients, and not just for the use of movement of residents/patients in beds?
- 4) Adjoining fire compartments (areas of refuge)—The NBC does not prescribe design requirements for fire compartments that are not adjoining each other and exit requirements for fire compartments that are adjoining each other.

Both the writers are experienced professionals and currently working in the building code industry. The views expressed by the authors are for educational purposes only. Both writers acknowledge and express gratitude to Dominic Esposito, P.Eng. for providing his observations.

For any clarification, please contact Avinash Gupta at avinashguptap.eng@gmail.com ◆

"Serve Up Fire Safety In The Kitchen!"™

Fire Prevention WeekTM | October 4 – 10, 2020

This year's Fire Prevention Week (FPW) theme, "Serve Up Fire Safety in the Kitchen!"TM is aimed at educating everyone about the simple but important actions they can take to keep themselves and those around them, safe in the kitchen.

Unattended cooking is the number #1 cause of fires in Ontario.

The Office of the Fire Marshal (OFM) has developed the resources to help support fire departments in their local efforts to raise public awareness of fire safety during Fire Prevention Week.



For more information visit:

https://www.mcscs.jus.gov.on.ca/english/FireMarshal/FireSafetyandPublicEducation/FirePreventionWeek/OFM FPW.html



April 14, 2020



Building Code and Fire Code Exemptions for Temporary Health and Residential Facilities

On April 9, 2020 the Ministry of Municipal Affairs and Housing filed Ontario Regulation 141/20, an Emergency Order made under the Emergency Management and Civil Protection Act establishing that, for the purposes of expediting construction, temporary health and residential facilities that are being constructed or converted in response to the COVID-19 emergency, are exempt from compliance with the Building Code and building permit processes under the Building Code Act, 1992 as well as compliance with certain bylaws and approvals required under the Planning Act.

The Emergency Order is retroactive to March 17, 2020 and sets out the following requirements for these temporary facilities:

- Any new facilities must be designed, and construction must be overseen by an architect and professional engineer;
- The professional must submit designs and reports to the Chief Building Official, who must attest to their receipt;
- The Chief Building Official must conduct inspections of a new or converted facility prior to occupation; and,
- The Chief Building Official must conduct monthly inspections thereafter to determine continued safety.

As a result of this Emergency Order and to align with its requirements, <u>Ontario</u> Regulation 144/20 made under the *Fire Protection and Prevention Act, 1997*, was filed and came into force on April 11, 2020. Under this regulation, these temporary health and residential facilities are exempt from the following Fire Code requirements:

- Article 2.1.2.2. requiring approvals from the local Chief Fire Official for undertaking activities in a building that are not allowed for in the original design;
- Article 2.9.1.1. requiring tents and air-supported structures to comply with the Building Code; and

• Part 9 requiring retrofits for certain types of existing buildings, including health care facilities and residential occupancies.

To raise fire department awareness of changes occurring in the community, this regulation also requires that notice be provided to the Chief Fire Official prior to or as soon practicable after construction, conversion or use of a temporary health or residential facility begins. This will provide fire departments with the opportunity to conduct preplanning, and to assist building owners and operators with the implementation of fire safety plans.

Ontario Regulation 141/20 and Ontario Regulation 144/20 permit the temporary flexibility needed to expand Ontario's capacity to meet the anticipated demand for health and residential facilities due to the COVID-19 emergency.

Enquiries regarding Ontario Regulation 141/20 may be directed to the Ministry of Municipal Affairs and Housing at Building and Development Branch. Please email codeinfo@ontario.ca, or call 416-585-6666 and select option one (1) to leave a message. Staff will return your call within one (1) business day.

Enquiries regarding Ontario Regulation 144/20 may be directed to your local Field and Advisory Services Advisor or to the Field and Advisory Services general telephone number at 1-844-638-9560.

Call for Members for the ULC Standards Subcommittee on Audible and Visible Signal Devices (ULC-S500F/SC4)

The ULC Standards Subcommittee on Audible and Visible Signal Devices covers Notification Appliances and the following binational standards:

- UL 464/ULC-S525 Audible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories
- UL 1480/ULC-S541 Speakers for Fire Alarm and Signaling Systems, Including Accessories
- UL 1638/ULC-S526 Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories

The Technical Committee is currently looking for members in all interest categories (visit https://canada.ul.com/ulcprograms/becomeatechnicalcommitteemember/ for category definitions).

Interested parties can contact the Project Manager, Paul Lloret at Paul.E.Lloret@ul.org for more information or submit an application at https://csds.ul.com/STPInfo/Application.aspx?UserGroup=2.



Total Evacuation Fire Drills in Schools During COVID-19 Pandemic

Jon Pegg, Ontario Fire Marshal September 04, 2020

his directive is issued under the provisions of the Fire Protection and Prevention Act, 1997, (FPPA) S.O. 1997, chapter 4, clause 9.(1)(b). It is the responsibility of every Assistant to the Fire Marshal to follow the Fire Marshal's directive as set out in subsection 11.(1) of the FPPA. Further, under clause 9.(2)(b) of the FPPA, the Fire Marshal has the duty to advise municipalities in the interpretation and enforcement of this Act and the Regulations.

Background

In response to the global COVID-19 pandemic, Ontario declared a state of emergency on March 17, 2020, which ended on July 24, 2020 when the Reopening Ontario Act, 2020 came into force. Despite the ending of the provincial declaration of emergency, COVID-19 transmission continues to pose a significant risk to the people of Ontario. With the re-opening of schools for the 2020-2021 school year, it is critical to balance fire safety requirements for schools with public health guidance being provided to minimize the risk of COVID-19 transmission.

Requirements in Section 2.8 of Division B of the Fire Code (Ontario Regulation 213/07, as amended) require that schools and private schools, conduct total evacuation fire drills at least three (3) times in each fall and spring term while school is in session, with additional fire drill requirements for schools operating in the summer. These fire drill

requirements also apply to extended day programs or third-party programs, and to day nurseries that are operated in schools and provide services to children that are pupils of a board. In addition, the Fire Code requires fire drill procedures to be prepared in consultation with the Chief Fire Official.

While a "total evacuation fire drill" is not a defined term under the Fire Code, there is a general understanding that all building occupants are expected to evacuate simultaneously. As a result, total evacuation fire drills commonly result in the converging of building occupants in hallways, exits, and at designated meeting areas outside of the school building. Therefore, it is critical that when planning for the 2020-2021 school year, procedures for conducting total evacuation fire drills should be aligned with physical distancing guidance provided by local public health officials. As such, a flexible and balanced approach will be required when undertaking total evacuation fire drills.

Directive

For the 2020-2021 school year, Assistants to the Fire Marshal are directed to deem the following procedures to be compliant with the requirements of total evacuation fire drills as set out in Article 2.8.3.2 of Division B of the Fire Code for schools, private schools, extended day programs or third-party programs, and to day nurseries that are operated in schools and provide services to children that are pupils of a board:

- On the scheduled Fire Drill day, a one-time sounding of the fire alarm during an all-school announcement in order to familiarize all students and staff with the sound of the fire alarm.
- 2. On the same day following Item 1, evacuation of individual classrooms in a manner that ensures physical distancing is maintained in accordance with public health guidance. As only a few classrooms may be able to evacuate simultaneously, the total evacuation of the school may extend over the course of the school day. The teacher/supervisory person may use a cell phone ringer, a bell or a similar type of device to commence the individual classroom evacuation, at the scheduled time.

For clarity, these allowances are only for purposes of undertaking a total evacuation fire drill and only where needed to ensure compliance with public health guidance. Where a fire alarm sounds outside the scope of a planned fire drill, the total evacuation of the school shall proceed as per procedures outlined in the approved school Fire Safety Plan.

Rationale

During the 2020-2021 school year, the term "total evacuation fire drill" must allow for procedures that will ensure fire drill evacuations can be conducted safely, in accordance with public health advice, to minimize the risk of COVID-19 transmission.



September 4, 2020



Fire Drills and the Safe Re-Opening of Schools

In response to the global COVID-19 pandemic, Ontario declared a state of emergency on March 17, 2020, which ended on July 24, 2020 when the *Reopening Ontario Act, 2020* came into force. Despite the ending of the provincial declaration of emergency, COVID-19 transmission continues to pose a significant risk to the people of Ontario. With the re-opening of schools for the 2020-21 school year, it is critical to balance fire safety requirements for schools with public health guidance being provided to reduce the risk of direct infection and transmission of COVID-19 among staff and students.

Requirements in Section 2.8 of Division B of the Fire Code (Ontario Regulation 213/07, as amended) require that schools and private schools conduct total evacuation fire drills at least three (3) times in each fall and spring term while school is in session, with additional fire drill requirements applying to schools operating in the summer. Fire drill requirements also apply to extended day programs or third-party programs, and to day nurseries that are operated in schools and provide services to children that are pupils of a board (e.g., before- and after-school programs). In addition, the Fire Code requires fire drill procedures to be prepared in consultation with the Chief Fire Official.

While a "total evacuation fire drill" is not a defined term under the Fire Code, there is a general understanding that during this type of fire drill all building occupants are expected to evacuate simultaneously. As a result, total evacuation fire drills commonly result in the converging of building occupants in hallways, exits, and at designated meeting areas outside of the building. The overcrowding generally associated with total evacuation may lead to an increased risk for COVID-19 transmission. Therefore, it is critical that when planning for the 2020-21 school year, procedures for conducting total evacuation fire drills be aligned with physical distancing guidance provided by public health officials. As such, **Fire Marshal Directive 2020-001, Total Evacuation Fire Drills in Schools During the COVID-19 Pandemic** is being issued. The Directive ensures that procedures not typically undertaken during a total evacuation fire drill, but currently necessary to ensure physical distancing, will be deemed to comply with Fire Code requirements for school fire drills.

Finally, while best practice would anticipate all students and staff participating in the 3 mandatory total evacuation fire drills per term required by the Fire Code, in circumstances where modified school attendance may be necessary in response to safe re-opening, fire departments are encouraged to work together with school administrators to maximize, as best possible, participation of all students. Fire departments are encouraged to work together with administrators of schools, extended day programs, third party programs and day nurseries to ensure a continued level of fire safety for school occupancies.

The Office of the Fire Marshal acknowledges that there may be compliance challenges during these unprecedented times and will work to support fire departments in their efforts to ensure fire safety.

For assistance with evaluating options to address fire safety, please contact your local fire protection adviser.

Questions and Answers:

Fire Drills and the Safe Re-Opening of Schools

1. Does everyone need to evacuate during a total evacuation fire drill?

Yes, a total evacuation fire drill requires all occupants of a building to evacuate.

2. Does public health protocol apply during a total evacuation fire drill?

Recommendations and instructions of public health officials play a critical role in preventing the spread of COVID-19 and these guidelines will apply during a school total evacuation fire drill. **Fire Marshal's Directive 2020-001, Total Evacuation Fire Drills in Schools During the COVID-19 Pandemic,** ensures that procedures not typically undertaken during a total evacuation fire drill but currently necessary to ensure physical distancing, will be deemed to comply with Fire Code requirements for school fire drills by Assistants to the Fire Marshal.

3. What is best practice with respect to total evacuation fire drills in schools when students are unable to participate due to an adapted in-person teaching model?

When a school board is operating under an adapted in-person teaching model and students are attending school on alternate schedules, a fire drill will only involve the participation of staff and students present on that day. In this scenario, fire departments and school administrators are encouraged to work together to ensure that fire drills are scheduled to maximize the best possible participation of all staff and students during the fall and spring terms.

4. How do "fall term" and "spring term" as referenced by the Fire Code with respect to fire drill requirements for schools, apply to a quad-mester school model?

Schools are required to conduct at least three total evacuation fire drills during each fall and spring term, resulting in an aggregate of six total evacuation fire drills for a normal school year. In a quadmester model, six fire drills continue to be required for the school year, however with the additional terms and shorter duration, some terms may stagger in between fall and spring seasons. Fire departments and school administrators are encouraged to review the schedule for each term and determine the best dates to conduct fire drills. If a shortened term cannot accommodate three fire drills, consideration for conducting drills based on the calendar months typically associated with fall and spring terms may be considered.

5. Is advance notice of a fire drill permitted?

Fire drills are not required to take place without notice. In fact, advance planning, scheduling and notification are beneficial to mitigate operational concerns. Within the context of the safe re-opening of schools during the 2020-21 school year, advance planning and notice of total evacuation fire drills will facilitate the implementation of practices that comply with public health guidance. •



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REMOTE INSPECTIONS (THE NEW NORMAL): LESSONS LEARNED FROM WORLD CLASS INTERNATIONAL PRACTICE

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WORKSHOP OUTLINE:

This webinar describes practical methods for application of remote inspections, identifying where each method has proven successful. Methods are evaluated against critical factors: quality, time, and investment. Real case studies feature some of the world's most prestigious and complex projects in United Arab Emirates (UAE). This webinar summarizes lessons learned based on 13 years' experience using remote inspections. It addresses best international practices and provides tools to minimize your liability while maintaining the highest levels of quality assurance when practicing remote inspections!



WORKSHOP OBJECTIVES:

- Learn about remote inspection: background, methods, challenges and limitations
- Understand remote inspection processes for full complex building inspections and handing over.
- Get an introduction to the NEW NFPA 915 Remote Inspection standard.
- Identify how VR & 3-D scanning has been utilized in remote inspections.
- Understand the latest artificial intelligence and object-recognition remote inspection methods capabilities currently under development.



ADDITIONAL INFORMATION:

Wednesday, October 8, 2020 Date:

Location: CFSA Online Learning (Once registered, additional information will be provided regarding the webinar URL)

Time: 9:00 a.m. to 10:00 a.m.

Certificate: A certificate of attendance will be issued by CFSA at the end of the workshop

\$25.00 (including HST) for CFSA members Fees:

> \$32.50 (including HST) for non-members \$10.00 (including HST) for students



WHO WILL BENEFIT:?

This workshop will benefit engineers, designers, consultants and Authorities Having Jurisdiction (building and fire departments).



INSTRUCTOR'S BIOGRAPHY:



Bassem Khalil is a Senior Consultant at Jensen Hughes Consulting Canada Ltd. Prior to joining Jensen Hughes, Bassem was an Expert Advisor for U.A.E Government GHQ Civil Defense and a Practice Leader in fire consultancy & remote inspections. Mr. Khalil has developed diverse expertise, and his skills & efforts were recognized by the NFPA Standards Council who accepted his proposal for a new standard, NFPA 915 "Standard for Remote Inspections".

Mr. Khalil has served for over 19 years on several National Fire Code Committees, including the NFPA 915 Remote Inspections, UAE Fire Safety Code of Practice (2011 & 2017), Abu Dhabi Urban Planning Council "Urban Street Design Manual", and many more. He was awarded "The Excellence Award & Medal Of Honor" in 2013 by the Abu

Dhabi Civil Defense, U.A.E Ministry Of Interior (M.O.I), is the highest award bestowed by UAE M.O.I for outstanding contributions to U.A.E Abu Dhabi Civil Defense Department.

Mr. Khalil earned his Bachelor of Architectural Engineering from the High Institute for Architecture & Business Administration Technology in Cairo, Egypt. He holds multiple certifications from NFPA including CFPS, CFI1, CFPE, and he is considered an NFPA expert instructor for the Life Safety Code, NFPA 101.

Register via email: cfsa@associationconcepts.ca, fax: 416.491.1670 or at: www.canadianfiresafety.com

REGISTRATION FORM – REMOTE INSPECTIONS WORKSHOP By Reservation Only Company: _____ City: _____ Province: _____ PC: _____ Name: (CFSA Reserves the right to cancel the course due to insufficient attendance) Members: \$22.12 + 2.88 HST = \$25.00 Non-Members: \$28.76 + 3.74 HST = \$32.50 \$8.85 + 1.15 HST = \$10.00 Non-Members: Payment Method: PayPal (cfsa@associationconcepts.ca) Visa **Canadian Fire Safety** Cheque Mastercard Amex Association 2800 - 14th Avenue, Suite 210 Card No.: Expiry Date: Markham, ON L3R 0E4 Tel.: 416.492.9417 Fax: 416.491.1670 This workshop may qualify for continuing education credits/learning hours when recertifying for designations (i.e. C.E.T., CFPS, CFEI, CFAA, etc.). This workshop will account for 1 hour.

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Fall Fire Safety Tips

ome fire safety concerns are seasonal, particularly those that involve keeping your home warm. As the weather begins to turn cold, we begin using equipment in the home such as fireplaces, furnaces and heaters to keep us warm. To eliminate any hazards, be sure to have done the following:

Service Your Furnace

Call your heating and cooling company to service your furnace. A specialist should inspect the furnace to make sure everything it is maintained, in good working order and that there are no leaks that can be deadly.

Use Fireplaces Safely

Use a fireplace screen to keep any sparks from a wood burning fireplace

from flying out and landing on furniture or flooring. Never leave a burning fire unattended and make sure the fire in the fireplace is out completely before heading to bed.

Use Caution with Space Heaters

Space heaters are a great way to warm up a cool room. Be sure to read and follow the instructions on the unit before using it. Ensure the space heater is a "listed" product and follow all the instructions. Keep all combustible items 3 feet from the heat! Never use your stove or oven to heat your home.

Leaf Burning

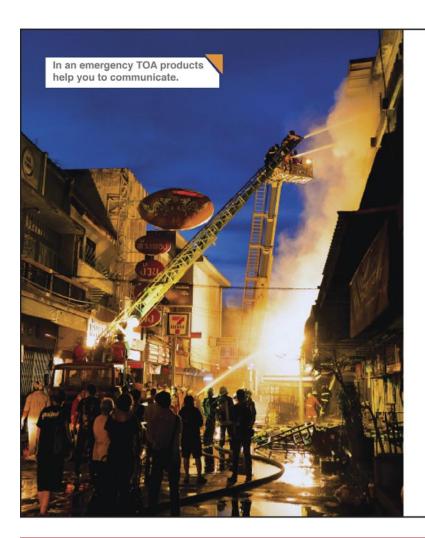
The Environment Protection Agency released information advising the burning leaves produces dangerous and carcinogenic chemicals. If you do decide to burn leaves, only do so far away from the house and any other structures on the property. Check the weather forecast before starting as this activity should not be attempted in windy conditions. Make sure you wear a protective mask.

Candle Caution

Never leave candles burning if you go out or go to sleep and keep your candles away from pets and kids.

Change Smoke Alarm Batteries

Change the batteries in your smoke alarm and carbon monoxide alarms when you turn back your clocks. Test the smoke alarm by pressing the test button. Remember working smoke alarms saves lives so check them monthly.





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Ashfiq Ur Rahman

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Savannah Blyth

Fanshawe College, Fire Inspection and Fire Safety Education



CFSA City of Markham, Buildings Standards Dept. Award



Curtis Nickerson

Seneca College, Fire Protection Engineering Technology



FCS Fire Consulting Services Ltd. **Award**



Joshua Cole Barrie

Durham College, Fire and Life Safety Systems Technician



CFSA Mircom Group Award

What it Means to be an Award Winner

By: Chris Michael Sullivan Matthews
CFSA Siemens Canada Ltd. Award
Student of the Fire and Life Safety Technician Diploma program at Durham College



I am currently entering my 2nd year of the Fire and Life Safety Technician Diploma program at Durham College. I was so honoured to hear that I will be the recipient of the CFSA Siemens Canada Ltd. Award and instantly wanted to show my gratitude for the recognition. The award is presented to a top 1st year student in a technician program with a primary focus on fire

alarm, code, design and an academic proficiency \geq 3.3 GPA. It was my goal at the beginning of the program to hone my skills in to perfect them in these areas of fire protection. I car-

ried out these goals and obtained a GPA of 4.92/5.0 in semester 1 and 4.83/5.0 in semester 2. So, to get the praise and recognition from industry professionals and my professors, that I worked so hard to achieve, was both motivating and satisfying.

As a student and class president of the Fire and Life Safety Technician program at Durham College, I have developed my leadership and community development skills to be exemplary. Thus, making me a natural fit to enter the fire protection industry. As class president, I have had the opportunity to assist my peers to be successful, organize volunteer work espe-

continued...



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What it Means to be an Award Winner Cont'd

cially during fire prevention week and to serve as the student voice on the Program Advisory Committee. Outside of school I was able to secure a competitive co-op position at Vital Safety Services. In this role, I was able to learn crucial aspects of fire protection to be successful, especially in areas of fire alarm systems, codes, stan dards and design.

The awards and sponsorships that the CFSA and Siemens Canada Ltd present are instrumental to ensure success to the upcoming students of the fire protection industry. These awards and sponsorships ensure that proper education, ideas and talents are brought forth to the industry. While someone is a student, financial need can be very high

and every bit goes a long way to secure the necessities that drive success. Such as tuition fees, supplies, online platforms and text books. They also allow for the recognition of hard work and dedication. These are just a few examples of why these awards and sponsorships are so important and why we want to show so much appreciation. When I originally heard of the CFSA Siemens Canada Ltd Award I was especially excited to attend the Canadian Fire Safety Association Annual Education Forum. It would have been so beneficial to have attended and been able to receive education and guidance from all of the industry professionals there. Unfortunately, during these unprecedented times of the Covid-19 pandemic, this forum was not able to take place.

However, this will not draw me back in pursuing more education and continuing to contribute to the industry any way I can.

Receiving the CFSA Siemens Canada
Ltd Award is very motiving for me to always strive for excellence, not only for
myself but also for the fire and life safety
industry. It reminds me to always be a
promoter in raising awareness of fire
and life safety within my community and
to maintain drive and dedication towards my passions. I want to give a big
final thanks to my professors at Durham
College, my sponsor Siemens Canada
Ltd and the CFSA for the continuous
education and for this prestigious
award.





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CFSA Scholarship Program Your Opportunity to Support Our Students

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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
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- be recognized in the CFSA Newsletter and on the CFSA website
- · help a deserving student in their quest to become a fire safety professional

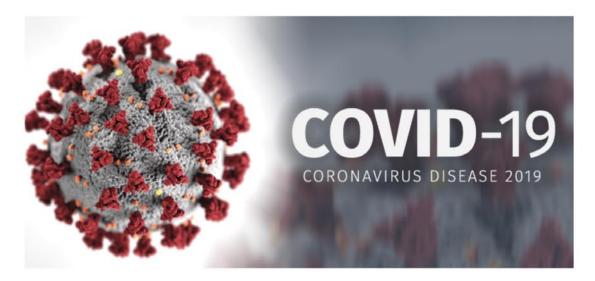
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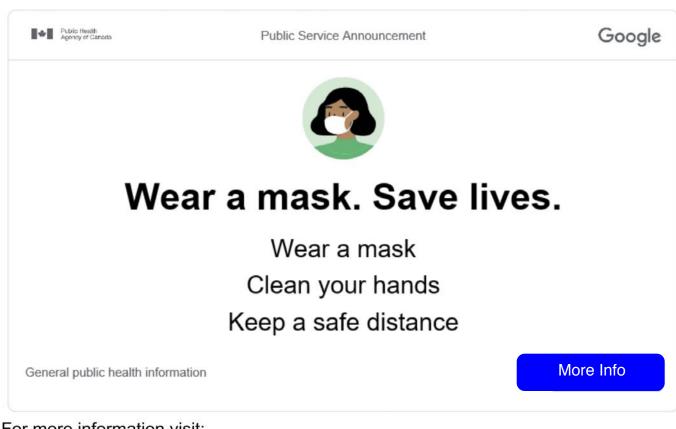
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