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CORPORATE REPORT

NO: R170 COUNCIL DATE: September 23, 2024

REGULAR COUNCIL

TO:	**Mayor & Council**	DATE:	**September 19, 2024**
FROM:	**Fire Chief**	FILE:	**7320-01**
SUBJECT:	**BC Building Code changes to allow a Single Exit Stair in Six Storey Buildings**		

RECOMMENDATION

The Fire Services recommend that Council receive this report for information.

INTENT

The purpose of this report is to provide Council information on the recent BC Building Code changes, the process to determine the changes and fire service safety concerns with the changes.

BACKGROUND

The BC Ministry of Housing published a request for proposals in January 2024 seeking a contractor with expertise in building design, engineering, and fire and life safety to provide a comprehensive single egress stair ("SES") designs report detailing options for how SES designs of up to eight storeys in height may be enabled in the British Columbia Building Code ("BCBC") and British Columbia Fire Code.

Fire Service representatives met with the contractor and Ministry of Housing staff on two occasions to list their concerns with changing the code without the benefit of a National Model Codes revision process and to highlight the increased risks of eliminating the only escape redundancy in a multi-unit residential building, the second emergency stairs.

On June 27 2024, the Minister of Housing published the report on technical options to enable SES building designs in the BCBC.

On July 12, 2024, the Ministry invited stakeholders, to comment on the drafted code changes. They requested information on "*how the Ministry can use existing standards, definitions, or benchmarks to describe an adequate level of fire service to be provided where SES buildings are built and other tools your organization may feel be helpful in doing your work in fire safety.*"

On August 28, 2024, by Ministerial Order, the BCBC was amended to enact the code changes. None of the fire service recommendations or benchmarks were included in the order.

DISCUSSION

The Greater Vancouver Fire Chiefs Association ("GVFCA") on August 6, 2024, provided a submission to the Ministry of Housing with their concerns, along with references to National Fire Protection standards and benchmarks for adequate fire response. The GVFCA submission is attached to this report as Appendix "I".

The concerns can be summarized as follows:

1. The Minister of Housing would use his ministerial powers to enable a Building Code change, outside of the national process the province regularly participates in. Especially a building code change that removes a key safety redundancy which has been effective at reducing occupant deaths and injuries during building fires.
2. The opinion of the report writer prevailed over the concerns raised by frontline first responders, who have significant experience and knowledge from practically evacuating/rescuing residents, suppressing fires, and investigating the cause and origin of fires in multi-residential buildings.
3. The code changes do not consider the increased risks introduced by the actions and behaviours of the building occupants during an emergency. The layers of safety redundancy established over the years have become best practice to reduce the fire and life safety risks of unexpected occupant behaviour.
4. The adequacy of fire response is a decision determined by each individual local government jurisdiction. Not all fire departments have the same capabilities and are not comparable to each other. However, the recommended standards and benchmarks were not considered in the enacted code changes.

The Metro Vancouver Mayors Committee heard the issues with the Building Code changes and passed a motion *"That a letter to be sent to the Provincial Government requesting that implementation of changes to the BC Building Code to allow single egress stair buildings be paused until safety considerations are reviewed as requested by the Greater Vancouver Fire Chiefs; and that the Province commit to utilizing standard code change processes incorporating the safeguards provided by the consultation."*

Mayor Locke has also taken a leadership role on this issue and wrote a letter to the Premier to highlight the fire service concerns with the process and ultimate code changes made by ministerial order. Mayor Locke's letter is attached as Appendix "II".

CONCLUSION

Based on the fire service concerns, and the fact this amendment has been enacted, next steps should consider seeking exemption from the province in regard to concurrent authority, to enable local government to enact bylaws to determine zoning locations where adequate fire response to these high-risk building can be achieved.

Larry Thomas
Fire Chief

Appendix "I" GVFCA submission to Ministry of Housing
Appendix "II" Letter to Honourable David Eby, re Changes to BC Building Code

Greater Vancouver Fire Chiefs' Association

c/o 8767 132 St,
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Tel: 604 543 6783

August 6, 2024

Kevin Harding
John Thomson
Ministry of Housing
Province of British Columbia
building.safety@gov.bc.ca

Re: Invitation to review draft code language and provide suggestions to describe an adequate level of fire service where Single Egress Stair buildings are built.

Thank you for the opportunity to review the draft code language for enabling Single Egress Stair (SES) and invitation to suggest how we can use existing standards, definitions, or benchmarks to describe an adequate level of fire service to be provided where SES buildings are built and other tools our organization feel may be helpful in doing our work in fire safety.

The Greater Vancouver Fire Chiefs Association solicited comments from its membership on the request received from the Ministry. The results of the solicitation were wholly consistent in that every comment made is opposed to the BC Building code being amended prior to a more fulsome review process such as the national building code amendment process. Changes in building practice and codes in Canada have traditionally followed an in-depth, consensus-based process that considers all perspectives, extensive research and evidence. Due to the important and wide-ranging implications, it is not a process to be rushed, considered incremental or driven by single-issue agendas.

Other comments were also included and are provided below for the GVFCA submission on this topic.

Adequate level of Fire Service

The current National Fire Protection Association (NFPA) 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments provides definitions and benchmarks related to fire response. Appendix I contains samples of the NFPA 1710 definitions and benchmarks for reference to the request and this submission.

Special attention should be given to the deployment requirements in section 5.2.4 of the NFPA 1710 standard. The difference in resources required for a three-story "Apartment Initial Full Alarm Assignment Capability" and a "High-Rise Initial Full Alarm Assignment Capability" (building with the highest floor greater than 75 ft (23 m) above the lowest level of fire department vehicle access), is 27 to 43 on-duty career firefighting staff.

Further, the standard provides when responding to fires in occupancies that present hazards greater than those found in the occupancies described in section 5.2.4 shall deploy additional resources on the initial alarm. The fire department shall have the capability to deploy additional alarm assignments that can provide for additional command staff, members, and additional services, including the application of water to the fire; engagement in search and rescue, forcible entry, ventilation, and preservation of property; safety and accountability for personnel; and provision of support activities for those situations that are beyond the capability of the initial full alarm assignment.

A potential six-story SES building would meet the criteria of presenting a greater hazard than a three-story apartment building with additional means of egress. Therefore, the resource requirements for deployment would fit somewhere in between the three-story requirement of 27 staff and the high-rise resource requirements of 43.

The NFPA standard also provides response time requirements. The first due engine company at a fire suppression incident has 240 seconds or less travel time for arrival. The arrival of the second company has 360 seconds or less travel time, with a minimum staffing of 4 personnel at a fire suppression incident. For fire suppression incidents other than high-rise, 480 seconds or less travel time is allowed for the deployment of an initial full alarm assignment.

All of these NFPA 1710 requirements rely on an adequate supply of water from fire hydrants in a municipal water distribution system.

If SES building code amendments were to be adopted, local government, at a minimum, would require an exemption from needing building code concurrent authority approval from the province, so local bylaws could be enacted to address geographical zoning areas which meet the NFPA 1710 standard requirements.

Conflict with Public Safety Operations

The single means of egress will significantly impede the firefighter's ability to assist occupant egress, especially if the stairway is required for suppression operations.

With respect to firefighting assumptions in particular the Jensen Hughes comment "additional building protection measures may be required". The AHJ should have the authority to either approve or not approve SES and impose the addition of a second exit as the "additional building protection measure". Municipalities should be allowed to develop bylaws restricting SES, as it is a life safety matter. At a minimum, local government would require an exemption from needing building code concurrent authority approval from the province, so local bylaws could be enacted to address geographical zoning areas which meet the NFPA 1710 standard requirements.

Police operations as well as Emergency Medical responses and patient transport are also restricted with a limited 1500 mm single exit stair for access or egress.

The SES design increases occupant and responder risk due to there being a single point of failure in the building protection system. Whether the single point of failure is the sprinkler system, ventilation for egress or accidental/intentional obstruction of the exit stair, there does not appear to be any other design features that can facilitate access/egress in the event of an emergency.

Fire risk of overwhelming one of the single points of failure is further increased as the building construction material is combustible, as opposed to non-combustible materials, as used in international jurisdictions or in a large majority of high-rise buildings.

Adequate level of prevention oversight

The proposed code amendments for SES rely heavily on all building systems functioning as intended for fire protection and life safety 100% of the time. If there is a single point of failure in the building design, the most effective alternate life safety design for occupant and responder safety is the second egress stair, and it is proposed to be removed. Other areas of potential single point of failure which significantly increase access/egress risk during an emergency are:

- The egress pathway must remain clear of parcels/packages, storage and other obstructions.
- The exit facility should be non-combustible construction to be safer for all, rather than the alternate described.
- The exit facility should be automatically pressurized and not rely on a vestibule on the public corridor side of the doorway.
- The behavior of persons during an emergency is invariably the biggest wildcard when expecting egress systems to work as designed.

For these few reasons, the proposed code amendments will increase the need for prevention compliance inspections and follow up to achieve compliance with any violations. While the newly enacted Fire Safety Act provides a risk-based approach to adapt the frequency of compliance inspections, this will create an additional burden on the existing prevention staff resources within fire departments, because SES buildings will be higher risk due to multiple points of single system failure.

Local governments should not be required to hire additional compliance inspection prevention resources for SES high risk buildings, outside of their normal workload to staffing ratios.

In closing, emerging technologies and new hazards such as those posed by lithium-ion battery-powered devices, solar power, and building energy storage systems, underscore the need to be able to exit a building quickly and safely in an emergency. The proliferation of such risks necessitates stringent adherence to building codes that prioritize occupant and firefighter safety, with the inclusion of a second staircase serving as a cornerstone of this protective framework.

Enhancing safety and accessibility beyond its life-saving implications, the provision of two staircases enhances the efficiency, convenience, and inclusivity of residential living environments. It mitigates congestion, promotes equitable access for individuals with mobility challenges, and fosters a more welcoming community for all residents. This is especially important when more and more combustible products, including delivered packages, adds potential fuel loads into the corridors and egress pathways.

The top three causes of fires are People, People and People. Despite fire prevention systems and educational efforts, fires are always caused by the behavior and actions of people. This is why fire and safety system redundancy is a best practice to preserve life and property.

The GVFCA and its members urge the Ministry to reconsider its initiative to adopt building code changes to enable SES building development for the many reasons we have provided.

Thank you for the opportunity to provide a submission on this important topic for public safety professionals.

Larry Thomas, President
Greater Vancouver Fire Chiefs Association

APPENDIX I

Definitions

3.3.13 Career Fire Department - A fire department that utilizes full-time or full-time-equivalent (FTE) station-based personnel immediately available to comprise at least 50 percent of an initial full alarm assignment.

3.3.15 Fire Company – A group of members:
(1) under the direct supervision of an officer;
(2) trained and equipped to perform assigned tasks;
(3) usually organized and identified as engine companies, ladder companies, rescue companies, squad companies, or multi-functional companies;
(4) operating with one piece of fire apparatus (pumper, aerial fire apparatus, elevating platform, quint, rescue, squad, ambulance) except where multiple apparatus are assigned that are dispatched and arrive together, continuously operate together, and are managed by a single company officer;
(5) arriving at the incident scene on fire apparatus. [1500, 2018]

3.3.16 Company Officer - A supervisor of a crew/company of personnel.

3.3.17 Crew - Two or more members who have been assigned a common task and are in communication with each other, coordinate their activities as a work group, and support the safety of one another. [1081, 2018]

3.3.27 Fire Suppression - Fire suppression includes all activities performed at the scene of a fire incident or training exercise that expose fire department members to the dangers of heat, flame, smoke, and other products of combustion, explosion, or structural collapse. [1500, 2018]

3.3.40 Initial Full Alarm Assignment - Those personnel, equipment, and resources ordinarily dispatched upon notification of a structure fire.

3.3.49.1 Emergency Operations - Activities of the fire department relating to rescue, fire suppression, emergency medical care, and special operations, including response to the scene of the incident and all functions performed at the scene. [1500, 2018]

3.3.53 Rapid Intervention Crew (RIC) – A dedicated crew of at least one officer and three members, positioned outside the IDLH, trained and equipped as specified in NFPA 1407, who are assigned for rapid deployment to rescue lost or trapped members.

3.3.54 Rescue - Those activities directed at locating endangered persons at an emergency incident, removing those persons from danger, treating the injured, and providing for transport to an appropriate health care facility. [1500, 2020]

3.3.64.7 Travel Time - The time interval that begins when a unit is enroute to the emergency incident and ends when the unit arrives at the scene.

Benchmarks

Response time:

4.1.2.1 - The fire department shall establish the following performance objectives for the first-due response zones that are identified by the AHJ:

(3) 240 seconds or less travel time for the arrival of the first engine company at a fire suppression incident

(4) 360 seconds or less travel time for the arrival of the second company with a minimum staffing of 4 personnel at a fire suppression incident

(5) For other than high-rise, 480 seconds or less travel time for the deployment of an initial full alarm assignment at a fire suppression incident

(6) For high-rise, 610 seconds or less travel time for the deployment of an initial full alarm assignment at a fire suppression incident

Fire Suppression Capability:

5.2.1.1 - Based on a formal community risk assessment, fire suppression operations shall be organized to ensure that the fire department's fire suppression capability encompasses deployment of personnel, equipment, and resources for an initial arriving company, the initial full alarm assignment, and additional alarm assignments.

5.2.2* Staffing - The number of on-duty fire suppression members shall be sufficient to perform the necessary fire-fighting operations given the expected fire-fighting conditions.

5.2.2.1 - These numbers shall be determined through task analyses that take the following factors into consideration:
(1) Life hazard to the populace protected
(2) Provisions of safe and effective fire-fighting performance conditions for the fire fighters
(3) Potential property loss
(4) Nature, configuration, hazards, and internal protection of the properties involved
(5) Types of fireground tactics and evolutions employed as standard procedure, type of apparatus used, and results expected to be obtained at the fire scene

5.2.2.2 - On-duty members assigned to fire suppression shall be organized into company units and shall have appropriate apparatus and equipment assigned to such companies.

5.2.2.2.1 - The fire department shall identify minimum company staffing levels as necessary to meet the deployment criteria required in 5.2.4 to ensure that a sufficient number of members are assigned, on duty, and available to respond with each company.

5.2.2.2.2 - Each company shall be led by an officer who shall be considered a part of the company.

5.2.2.2.3 - Supervisory chief officers shall be dispatched or notified to respond to all full alarm assignments.

5.2.3 Operating Units - Fire company staffing requirements shall be based on minimum levels necessary for safe, effective, and efficient emergency operations.

5.2.3.1 Engine Companies - Fire companies whose primary functions are to pump and deliver water and perform basic fire fighting at fires, including search and rescue, shall be known as engine companies.

> 5.2.3.1.1 - These companies shall be staffed with a minimum of four on-duty members.
> 5.2.3.1.2 - In first-due response zones with a high number of incidents, geographical restrictions, geographical isolation, or urban areas, as identified by the AHJ, these companies shall be staffed with a minimum of five on-duty members.
> 5.2.3.1.2.1- In first-due response zones with tactical hazards, high-hazard occupancies, or dense urban areas, as identified by the AHJ, these fire companies shall be staffed with a minimum of six on-duty members.

5.2.3.2 Ladder/Truck Companies - Fire companies whose primary functions are to perform the variety of services associated with truck work, such as forcible entry, ventilation, search and rescue, aerial operations for water delivery and rescue, utility control, illumination, overhaul, and salvage work, shall be known as ladder or truck companies.

5.2.3.2.1 - These fire companies shall be staffed with a minimum of four on-duty members.

5.2.3.2.2 - In first-due response zones with a high number of incidents, geographical restrictions, geographical isolation, or urban areas, as identified by the AHJ, these fire companies shall be staffed with a minimum of five on-duty members.

5.2.3.2.2.1 - In first-due response zones with tactical hazards, high-hazard occupancies, or dense urban areas, as identified by the AHJ, these fire companies shall be staffed with a minimum of six on-duty members.

5.2.3.3 Other Types of Companies.

5.2.3.3.1 - Other types of companies equipped with specialized apparatus and equipment shall be provided to assist engine and ladder companies where necessary to support the fire departments' SOPs.

5.2.3.3.2 - These companies shall be staffed with the minimum number of on-duty members required to deal with the tactical hazards, high-hazard occupancies, high incident frequencies, geographical restrictions, or other pertinent factors as identified by the AHJ.

5.2.3.4 Fire Companies with Quint Apparatus.

5.2.3.4.1 - A fire company that deploys with quint apparatus, designed to operate as either an engine company or a ladder company, shall be staffed as specified in 5.2.3.

5.2.3.4.2 - If the company is expected to perform multiple roles simultaneously, additional staffing, above the levels specified in 5.2.3, shall be provided to ensure that those operations can be performed as required.

<u>Deployment</u>

5.2.4.3 Apartment Initial Full Alarm Assignment Capability.

5.2.4.3.1 - The initial full alarm assignment to a structure fire in a typical 1200 ft2 (111 m2) apartment within a three-story, garden-style apartment building shall provide for the following:

(1) Establishment of incident command outside the hazard area for the overall coordination, direction, and safety of the initial full alarm assignment with a minimum of two members dedicated to managing this task (2)

(2) Establishment of two uninterrupted water supplies at a minimum of 400 gpm (1520 L/min), with each supply line maintained by an operator (2)

(3) Establishment of an effective water flow application rate of 300 gpm (1140 L/min) from three handlines, each of which has a minimum flow rate of 100 gpm (380 L/min), with each handline operated by a minimum of two members to effectively and safely maintain each handline (6)

(4) Provision of one support member for each attack, backup, and exposure line deployed to provide hydrant hookup and to assist in laying of hose lines, utility control, and forcible entry (3)

(5) Provision of at least two victim search-and-rescue teams, each team consisting of a minimum of two members (4)

(6) Provision of at least two teams, each team consisting of a minimum of two members, to raise ground ladders and perform ventilation (4)

(7) If an aerial device is used in operations, one member to function as an aerial operator and maintain primary control of the aerial device at all times (1)

(8) At a minimum, an initial rapid intervention crew (IRIC) assembled from the initial attack crew and, as the initial alarm response arrives, a full and sustained rapid intervention crew (RIC) established (4).

(9) The establishment of an initial medical care component consisting of at least two members capable of providing immediate on-scene emergency medical support, and transport that provides rapid access to civilians or members potentially needing medical treatment (2)

(10) Total effective response force a minimum of 27 (28 if an aerial device is used)

5.2.4.4* High-Rise Initial Full Alarm Assignment Capability.

5.2.4.4.1 - Initial full alarm assignment to a fire in a building with the highest floor greater than 75 ft (23 m) above the lowest level of fire department vehicle access shall provide for the following:

(1) Establishment of a stationary incident command post outside the hazard area for overall coordination and direction of the initial full alarm assignment with a minimum of one officer with an aide dedicated to these tasks and all operations are to be conducted in compliance with the incident command system. (2)

(2) Establishment of an uninterrupted water supply to the building standpipe/sprinkler connection sufficient to support fire attack operations

maintained by an operator and if the building is equipped with a fire pump, one additional member with a radio to be sent to the fire pump location to monitor and maintain operation. (1/1)

(3) Establishment of an effective water flow application rate on the fire floor at a minimum of 500 gpm (1892 L/m) from two handlines, each operated by a minimum of two members to safely and effectively handle the line. (4)

(4) Establishment of an effective water flow application rate on the floor above the fire floor at a minimum of 250 gpm (946 L/m) from at least one handline, with each deployed handline operated by a minimum of two members to safely and effectively handle the line. (2)

(5) At a minimum, an initial rapid intervention crew (IRIC) assembled from the initial attack crew and, as the initial alarm response arrives, a full and sustained rapid intervention crew (RIC) established. (4)

(6) Provision of two or more search-and-rescue teams consisting of a minimum of two members each. (4)

(7) Provision of one officer, with an aide, dedicated to establishing an oversight at or near the entry point on the fire floor(s). (2)

(8) Provision of one officer, with an aide, dedicated to establishing an oversight at or near the point of entry on the floor above the fire. (2)

(9) Provision of two or more evacuation management teams to assist and direct building occupants with evacuation or sheltering actions, with each team consisting of a minimum of two members. (4)

(10) Provision of one or more members to account for and manage elevator operations. (1)

(11) Provision of a minimum of one trained incident safety officer. (1)

(12) Provision of a minimum of one officer two floors below the fire floor to manage the interior staging area. (1)

(13) Provision of a minimum of two members to manage member rehabilitation and at least one of the members to be trained to the ALS level. (2)

(14) Provision of an officer and a minimum of three members to conduct vertical ventilation operations. (4)

(15) Provision of a minimum of one officer to manage the building lobby operations. (1)

(16) Provision of a minimum of two members to transport equipment to a location below the fire floor. (2)

(17) Provision of one officer to manage external base operations. (1)

(18) The establishment of an initial medical care component consisting of a minimum of two crews with a minimum of two members each with one member trained to the ALS level capable of providing immediate on-scene emergency medical support, and transport that provides rapid access to civilians or members potentially needing medical treatment. (4)

(19) Total effective response force a minimum of 42 (43 if the building is equipped with a fire pump).

5.2.4.6 Additional Alarm Assignments.

5.2.4.6.1 - Fire departments that respond to fires in occupancies that present hazards greater than those found in the occupancy described in 5.2.4.1 shall deploy additional resources on the initial alarm.

5.2.4.6.2 - The fire department shall have the capability to deploy additional alarm assignments that can provide for additional command staff, members, and additional services, including the application of water to the fire; engagement in search and rescue, forcible entry, ventilation, and preservation of property; safety and accountability for personnel; and provision of support activities for those situations that are beyond the capability of the initial full alarm assignment.

CITY OF SURREY

OFFICE OF THE MAYOR

September 16, 2024

The Honourable David Eby
Premier of British Columbia
PO Box 9041, Stn Prov Govt
Victoria, BC V8W 9E1

Transmitted by email: Premier@gov.bc.ca

Re: Changes to the BC Building Code allowing single egress stair (SES) designs in low- and mid-rise buildings.

Dear Honourable David Eby,

BRENDA LOCKE
MAYOR

MAYOR@SURREY.CA

604.591.4126

I understand the recent BC Building code amendments to allow SES designs for buildings up to six storeys were enacted by a Ministerial order. Further the process used to amend the code was based on a single report from Jensen Hughes.

I have several concerns with both the process to amend the BC Building Code and the code changes.

1. The province has signed on to the Canadian Board of Harmonized Construction Codes (CBHCC) which is responsible for developing Canada's National Model Codes, including the National Building Code (NBC). The CBHCC, which is made up of representatives from provincial, territorial, and federal public services, approves the content of the National Model Codes and works within a system of groups that provide oversight, advice, and develop proposed changes.

   The development of the National Model Codes is a public, collaborative, and consensus-based process. It is informed by standards, evidence, and research, with input from industry, the regulatory community, and interested stakeholder groups. Changes to the National Model Codes are developed by technical committees of volunteers that focus on specific technical topics.

   The CBHCC's current membership lists the co-chair as Jun'ichi Jensen, Director, Building and Safety Standards Branch, Ministry of Housing, British Columbia, provincial representative.
   It is extremely concerning the Minister of Housing would use his ministerial powers to enable a Building Code change, outside of the national process the province regularly participates in. Especially a building code change that removes a key safety redundancy which has been effective at reducing occupant deaths and injuries during building fires.

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2. The process to consult about the proposed code changes with fire service representatives, while being given the opportunity to discuss with the Jensen Hughes report author and subsequently with Ministry staff via written submission, appears to have ignored the concerns raised by frontline first responders, who have significant experience and knowledge from practically evacuating residents, suppressing fires, and investigating the cause and origin of fires in multi-residential buildings.

   The fire service representatives locally, provincially, and nationally are united in their concerns about the BC Building Code changes. The amendments reduce key fire and life safety systems and introduce alternative systems which do not align with best practice and further increase the risk of a fire protection system being the single point of failure, causing a tragedy.

3. The fire service representatives appropriately point out that the code changes do not consider the increased risks introduced by the actions and behaviours of the occupants during an emergency. The layers of safety redundancy established over the years have become best practice to reduce the fire and life safety risks of unexpected occupant behaviour. Some of the considerations are:

- Emergency exit stairways built with non-combustible construction materials provide greater protection as opposed to use of fire rated drywall.
- Mechanically controlled positive pressure fans for keeping the egress ways clear of toxic smoke as opposed to use of smoke vestibules. The proposed smoke vestibule concept relies on the evacuating occupants to never have both doors open at the same time in a short 5 ft. hallway, which is not realistic.
- The increase in stairway width does not eliminate potential congestion/conflict with evacuations and fire operations.
- Designs with a second emergency exit stairway works to deconflict/decongest occupant evacuation and interior fire suppression/rescue operations.
- Access for fire ladder trucks to reach the upper floors of six storey buildings on all sides of the building, not limiting access to only the front street side of a lot locked building.

4. The adequacy of fire response is a decision determined by each individual local government jurisdiction. Not all fire departments have the same capabilities and are not comparable to each other.

   Fire hall locations within a jurisdiction have been planned and designed to geographically provide a quick first response with a single fire crew in their primary response areas. To assemble a large enough number of fire suppression resources at a multi-occupant structure, most if not all fire departments in BC rely on the layers of fire protection measures in a building to protect the occupants while the responders take time to assemble the needed resources to action rescue/suppression procedures.

   For these reasons, at a minimum, local government requires an exemption from needing building code concurrent authority approval from the province, so local bylaws could be enacted to address geographical zoning areas which meet the response needs for the adequate assembly of firefighters and fire suppression of SES buildings.

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In closing, the province did not conduct a consensus-based consultation process or follow the National Model Codes process. Their process was not informed by National Fire Protection Standards, Canadian evidence and research. It was a single report written by a Professional Engineer, which the province hired and instructed. The report author had only two meetings with fire service representatives and none of their concerns were fully addressed in the amended code document. Further, submissions to the Ministry for providing definitions of adequate fire response and referenced fire protection standards were not included in the code changes enacted by ministerial order in August, in fact no changes to the originally proposed code changes were made.

I am reminded that in 1921 the BC Fire Commissioner ordered all SES buildings in the province to add external fire escapes, to protect occupants from the very concerns described above.

As leaders in public office, we should be increasing safety and not reducing it. The overall discussion and decision-making processes related to single egress code changes, appears to have become dominated by political interests, while practical expertise and professional concerns have been pushed aside.

The proponents are selling a bill of goods, based on powerful promotion of the concept, by a couple of well-intentioned advocates. Unfortunately, those individuals do not have any expertise or comprehension of the very significant fire protection and life safety implications of their cause.

The SES movement has influenced decision makers to believe that these code changes will make housing more available, affordable and permit innovative designs. All reasons which are very politically attractive objectives at this time. The movement has also persuaded decision makers that the impediment to be overcome, is obsolete and overly restrictive codes that stand in the way of progress. The same codes that have evolved over time, to protect and enhance the safety of occupants from the tragic harms related to fires.

This code change identifies there is increased fire risk, which means that there will be an increased risk that the occupants may become victims - especially when the existing codes are changed without thoroughly and carefully identifying the layers of safety measures that could help balance the risk equation with a fulsome consensus based national model codes review process.

On its face, this code change appears to trade-off occupant and firefighter safety for a purported nicer design and additional housing. In our city and in neighboring jurisdictions, we are adding great amounts of housing units, within the contexts of the BC Building code for Part 3 multi-residential buildings. These small footprint six storey buildings are not as efficient or effective as our current housing initiatives and frankly will only confound the potential to assemble the larger six storey buildings, which contain many with more units than the SES buildings.

I am requesting that implementation of changes to the BC Building Code to allow single egress stair buildings be paused, until safety considerations are reviewed as requested

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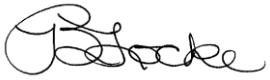
by the fire service; and that the province commit to utilizing the national code change processes, incorporating the safeguards provided by that consultation.

Respectfully submitted,



Brenda Locke,
Mayor, City of Surrey

Copy: Rob Costanzo, City Manager, City of Surrey
Members of the BC Legislative Assembly
Honourable François- Philippe Champagne, Minister of Innovation, Science and Industry