



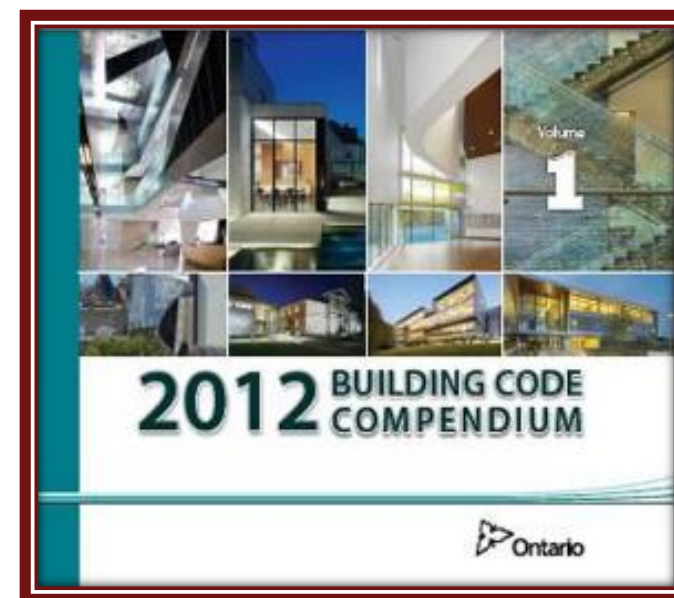
MATTEO GILFILLAN & ASSOCIATES INC.
FIRE & LIFE SAFETY CODE CONSULTING

Ontario Building Code Changes to Retirement Home Requirements (OBC, O.Reg. 139/17)

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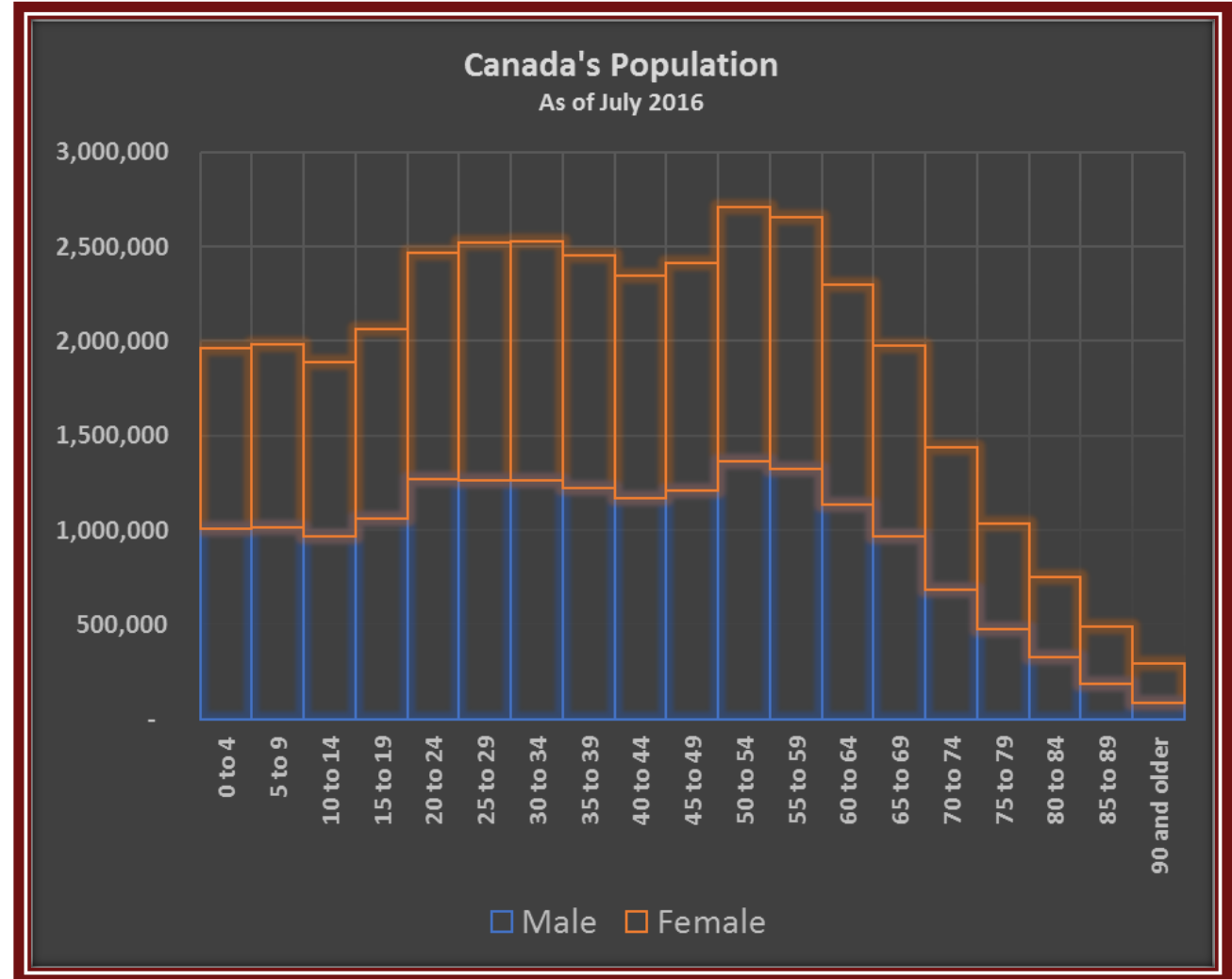
Canadian Fire Safety Association (CFSA) Seminar
November 14, 2017

1. Causes for Change
2. Ontario Building Code (OBC) O.Reg. 139/17 Amendment Roll-Out
3. Impacts of Roll-Out
4. Fire & Life Safety Changes Overview
5. Questions?



25%

Forecasted percentage of Canada's population to be 65 and older by 2036



- Retirement home model evolution
 - Providing a variety of options for level of care, not all ‘special’
 - Larger, residential-style living spaces; less shared rooms
 - Retirement Homes Act (RHA), 2010 – “care service”
- Less flexibility to design and more costly to construct when applying a Group B3 designation
 - Institutional feel
 - Fewer options for construction

- Inconsistent application of the Building Code with respect to retirement home occupancy classification
 - Some considered Group C while others considered Group B3
 - Subjective decision, left largely to the plans examiner / building inspector
- Changes aim to:
 - permit more flexible design and cost-efficient construction options
 - eliminate inconsistencies regarding occupancy classification of retirement homes
 - reflect unique nature and resident profile of retirement homes

- Filed as an interim amendment to the 2012 OBC on May 17, 2017
 - Part of the “Long-Term Affordable Housing Strategy”
- In effect date of July 1, 2017
 - New requirements apply for permit submission on or after July 1, 2017
- Approximately 1.5 months transition → rapid implementation

- New construction – straight forward application
 - May require a re-work of current models
- Renovations / changes of use – built-in mechanisms, but untested
 - OBC Part 11 changes also captured
- Projects Under Design – unfortunate victims
 - Projects having missed the July 1st deadline may be subject to significant redesigns (especially if designed to Group C)
 - Consult with Authorities / Code consultant re: options

- Ontario Fire Code not yet harmonized
 - Definition of “retirement home” differs between Building Code and Fire Code
 - May cause complications in authority application
 - Change of use? (Group B3 -> Retirement Home; Group C -> Retirement Home)
- Conflicting information
 - OFM Communique 2012-02, Care Occupancies, addresses retirement homes
- Learning curve
 - Both Authorities and designers / developers

Fire & Life Safety Changes Overview

Disclaimer:

- ✓ High level overview only
- ✓ Key changes – not comprehensive
 - ✓ Refer to OBC

- Part 3 only (Div. A, 1.1.2.2; 1.1.2.3)
- Building size determination (Div. A, 1.1.3.2)
- Definitions (Div. A, 1.4.1.2) – care, residential, retirement home
- Prohibition of occupancies (3.1.3.2)
- Combustible elements (3.1.5.13)
- Storage lockers (3.1.5.14)
- Separate major occupancy (3.2.2.4-3.2.2.8)
- New construction Articles (3.2.2.48A-E)
- Signals to fire department (3.2.4.8.(1)(f))
- Retirement home zone separations to be separate fire alarm zones (3.2.4.9.(2))
- Prevention of smoke circulation (3.2.4.13.(1)(c))
- Manual pull station permission (3.2.4.18.(6))
- Smoke alarms to provide audible / visual signal to staff (3.2.4.22.(16))
- NFPA 13R permitted up to 3 storeys (3.2.5.13.(2)(c)-(d); 3.2.2.48D and E)
- 1 h emergency power duration for lighting and fire alarm (3.2.7.4.(1)(b)(ii.1); 3.2.7.8.(3)(b)(ii.1))
- No additional devices permitted on suite egress door (3.3.1.12.(4))
- Fire separation between storage garage and dwelling unit (3.3.4.2.(4) and (5))
- New Article 3.3.4.11 specific to retirement homes
- Vestibule between storage garage and retirement home (3.3.5.7.(1))
- Continuous handrail on both sides of exit stairs (3.4.6.5.(14))
- Maglock to release upon 2nd stage alarm (3.4.6.16.(4)(b)(iii))
- Maglock permitted on exterior doors discharging from exit stairs (3.4.6.16.(6))
- Fire escapes prohibited (3.4.7.1.(2)(a))
- Storage of oxygen containers (3.6.2.9)
- Retirement Home Compliance Alternatives (Table 11.5.1.1.C)
- General Review requirements (Div. C, Table 1.2.2.1)
- Permit requirements (Div. C, Part 1)

- *Retirement Home* (OBC): a building or part of a building that is a retirement home as defined in subsection 2(1) of the Retirement Homes Act, 2010
 - Retirement homes also captured by “residential occupancy” definition
 - Retirement homes excluded from definition of “care occupancy”
- *Retirement Home* (RHA): a residential complex or the part of a residential complex,
 - a) That is occupied primarily by persons who are 65 years of age or older,
 - b) That is occupied or intended to be occupied by at least the prescribed number of persons who are not related to the operator of the home, and
 - c) Where the operator of the home makes at least two care services available, directly or indirectly, to the residents

- *Care Services* (RHA) includes:

- Prescribed health care service	- Assistance with dressing
- Administration of a drug	- Assistance with personal hygiene
- Assistance with feeding	- Assistance with ambulation
- Assistance with bathing	- Provision of a meal
- Continence care	- Other prescribed care services

- Part 3 only – no longer permitted to use Part 9
- Retirement home considered to be separate major occupancy for OBC Subsection 3.2.2 purposes (3.2.2.4 – 3.2.2.8)
- New construction Articles introduced – 3.2.2.48A to 3.2.2.48E
 - All require sprinkler protection
 - Combustible construction options up to 4 storeys
 - NFPA 13R sprinkler design permitted up to 3 storeys (3.2.5.13)

	3.2.2.48A	3.2.2.48B	3.2.2.48C	3.2.2.48D	3.2.2.48E
Building Height	Any	4 storey	4 storey	3 storey	3 storey
Building Area ⁽¹⁾	Any	3000 m ²	1650 m ²	8000 m ²	1600 m ²
Construction Type	Noncombustible	Combustible	Combustible	Noncombustible	Combustible
Sprinklers	Yes	Yes	Yes	Yes	Yes
Floor Assemblies	2 h	2 h	1 h	1 h	45 min
Mezzanines	1 h	1 h ⁽²⁾	1 h ⁽²⁾	1 h	45 min ⁽²⁾

(1) At maximum number of storeys

(2) If of combustible construction

- Smoke alarms to send an audible and visual signal to staff for identification of suite containing activated smoke alarm
 - Visual signals can be local (i.e., above room of origin) or remote (i.e., at staffed location)
- Aligned with care occupancy requirements (3.2.4.11.(3))
 - Recognition of staff presence in retirement homes
- Can use smoke detectors where permitted to be used in lieu of smoke alarms (3.2.4.22.(6))

- NFPA 13R, “Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Building Height” permitted for retirement homes up to 3 storeys
- Design benefits include:
 - Lesser water discharge demand
 - Omission of sprinklers in attics and certain washrooms / closets
- If combustible construction (3.2.2.48E), require floor area compartment separation (3.3.4.11) to be constructed to the underside of the roof deck

- Fire compartmentalization of retirement home floor areas containing sleeping accommodation for more than 10 residents
 - Maximum 1,000 m² area per compartment
 - 1 h fire separation (45 min permitted if floor assembly is permitted to be less than 1h)
 - Closures in fire separation to be designed to delay the passage of smoke (e.g., weatherstripping)
 - Maximum travel distance of 45 m from any point in a compartment to a door to the adjoining compartment
 - Accommodation for the compartment's occupants plus the occupants of the largest adjacent compartment (1.5 m² / resident)

- Maximum dead-end corridor of 3 m
- Minimum clear doorway width of 860 mm
 - Applies to all doorways serving residents
- Voice communication system required
 - Regardless of building height

- OBC Table 11.5.1.1.C – Compliance Alternatives For Residential Occupancies
 - C10.1 – re: hold open devices, ‘pause’ type self-closing devices can be retained between a suite and a public corridor
 - C15 –all existing sprinkler systems in retirement homes to be electrically supervised and monitored when used to waive roof rating
 - C22 – existing smoke alarms to be hard wired
 - C41 – use of connected balconies and areas of refuge as exits prohibited in existing retirement homes

- C60 – existing curved stairs acceptable provided no change in major occupancy or increase in occupant load greater than 15%
- C65 – combustible fire escapes are prohibited from being reconstructed or recreated
- C75 – not permitted to waive ceiling fire separation based on sprinkler protection of fire compartments

- All buildings containing retirement homes require architect and professional engineer general review (Div. C, Table 1.2.2.1)
 - Permissions for certain residential buildings to only require general review by an architect do not apply to retirement homes
- Non-high rise retirement homes subject to a 20 day time period within which a permit is to be issued or refused
 - Exception for smaller residential buildings does not apply to retirement homes
- Retirement homes do not qualify for partial occupancy

Questions?

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