

The "2020" Ontario Building Code Updates



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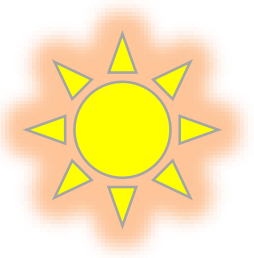
Who is Alek Antoniuk ?

... and why is he presenting this ?:



- **REASON #3:** Alek worked in the Building & Development Branch from 1990 – 2013 in various management capacities overseeing:
 - Ontario Building Code Development
 - Delivery of Code Advisory Services
- **REASON #2:** Alek led the Code Development Team that developed the technical requirements of:
 - 2006 Ontario Building Code (1st objective based code)
 - 2012 Ontario Building Code
- **REASON #1:** The Building and Development Branch no longer does “road shows” to explain code changes ... and it is unlikely it will ever do them again. The Branch held one webinar for about 50 people (*out of over 15,000 OBC holders*) on the current code changes.

Topics for Today:



1. Is there a 2020 edition of the Ontario Building Code?
2. O. Reg. 88/19
3. Part 3 Changes
4. Part 4 Changes
5. Part 5 Changes
6. Part 6 Changes
7. Part 7 Changes
8. Part 9 Changes
9. Other Resources

Disclaimer:

The information contained in this slide deck and the presentation is for information purposes only and shall not be used for building design or construction. Refer to the Ontario Building Code, as amended, for specific requirements.

Note: This presentation highlights some significant changes. [Refer to O. Reg. 88/19 for a complete list of changes.](#)

1. Timing of next Ontario Building Code?



- Lio & Associates prepared the OBC changes, based on the 2015 National Building & Plumbing Codes in early 2016
- During the Ontario government's consultation on changes to the Ontario Building Code, in 2017, it had stated that:
 - “The Ministry of Municipal Affairs (MMA) is proposing to revoke the current version of the Building Code (Ontario Regulation 332/12) and replace it with a new edition under the Building Code Act, 1992. **It is proposed that the new edition come into effect in January 2019.**”
- MMAH’s Building and Development Branch staff had drafted a new edition of the Ontario Building Code, which was based on consultations held prior to the Ontario election on June 7, 2018.

1. Will there be a 2020 edition of the Ontario Building Code?



Mrs. Kathleen Wynne
Former Premier



Premier Doug Ford

- The Ontario election on June 7, 2018 changed the priorities of the government.
The best laid schemes o' Mice an' Men, Gang aft agley. (Robert Burns)
- All of the "Ontario-only" code amendment proposals (eg: costly, job-killing "climate change" proposals) drafted for the previous government have been rejected by the current government of Premier Ford.
- The publication of the next edition of the Ontario Building Code was cancelled until further notice – there will not be a 2020 edition of the OBC...!
- Instead, the government has updated the current Ontario Building Code.

1. What happened after June 7, 2019:

- **O. Reg. 388/18 (OBC Amendment)** – *Lower Don Area Flood Protection*
 - Published in the Ontario Gazette on August 4, 2018 & in effect on July 20, 2018
- **O. Reg. 87/19 (OBC Amendment)** – *Cannabis Hazardous Extraction Processes in Farm Buildings*
 - Published in the Ontario Gazette on May 18, 2019 & in effect on July 1, 2019
- **O. Reg. 88/19 (OBC Amendment)** – *OBC Updated to Include 2015 NBC/NPC Changes*
 - Published in the Ontario Gazette on May 18, 2019 & in effect on:
 - May 2, 2019 (electric vehicle charging & spacing of sewage system absorption trenches)
 - January 1, 2020 (2015 NBC/NPC amendments, except stairs, guards and handrails)
 - January 1, 2022 (stairs, guards and handrails)
- **Amendment package #8 (May 2, 2019 update) to The 2012 Building Code Compendium**
 - Announced in Ontario CodeNews e-bulletin #285 on September 10, 2019
 - This amendment package contains 1,220 replacement pages to the 2012 Building Code Compendium Edition and reflects recent amendments to the Ontario Building Code, Supplementary Standards, and Appendix A.

O. Reg. 88/19 changes effective May 2, 2019:

- The electric vehicle charging requirements were one of the most badly drafted regulations in the history of the Ontario Building Code.



O. Reg. 88/19

made under the

BUILDING CODE ACT, 1992

Made: May 1, 2019

Filed: May 2, 2019

Published on e-Laws: May 2, 2019

Printed in *The Ontario Gazette*: May 18, 2019

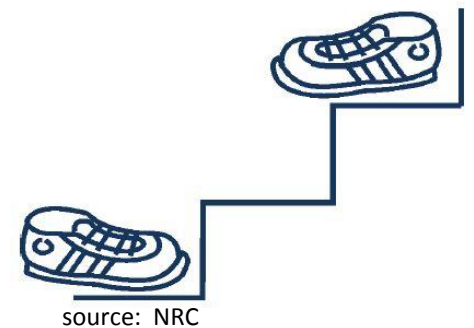
Amending O. Reg. 332/12
(BUILDING CODE)



O. Reg. 88/19 changes effective Jan. 1, 2022:

Amendments forming the 2015 NBC that deal with stairs, handrails, & guards will be in effect in the OBC on Jan. 1, 2022

- Definitions of: *flight*, *run*, & *tapered tread*
- Tapered treads in a curved flight - 3.3.1.15.
- Guards – 3.3.1.17.; 3.3.5.9.
- Handrails – 3.3.2.8A.; 3.4.6.5.
- Ramp slope – 3.4.6.7.
- Open risers – 3.4.6.8.
- Loads on guards and handrails – 4.1.5.14.; Table 9.8.8.2.
- Stair dimensions – 9.8.2.; 9.8.4.
- Spiral stairs – 9.8.4.5A.
- Compliance Alternatives Tables – Part 11

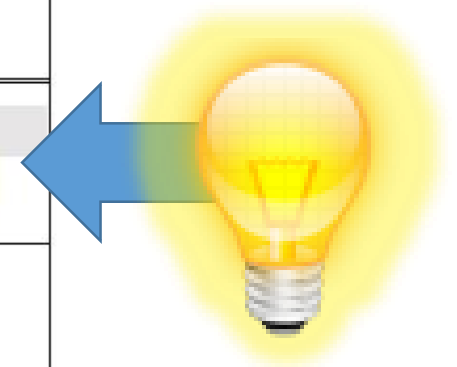


Question: Will municipal building departments accept these 2015 changes now?

O. Reg. 88/19 changes effective Jan. 1, 2022:

Table 9.8.4.1.
Rise for Rectangular Treads, Tapered Treads and Winders and Run for Rectangular Treads

Stair Type	Max. Rise, All Steps	Min. Rise, All Steps	Max. Run, Rectangular Treads	Min. Run, Rectangular Treads
Private stairs ⁽¹⁾	200 mm	125 mm	355 mm	210 mm 255 mm
Public stairs ⁽²⁾	180 mm	125 mm	355 mm no limit	280 mm
<ul style="list-style-type: none"> • Service stairs⁽³⁾ • Stairs to unoccupied attic space⁽⁴⁾ • Stairs to crawl spaces • Stairs that serve <i>mezzanines</i> not exceeding 20 m² within <i>live/work units</i> 	no limit	125 mm	355 mm	no limit



O. Reg. 88/19 changes effective Jan. 1, 2022:

- New Sentence 3.4.6.8.(2.1) bans open risers:

(2.1) Steps in *flights* shall have no open risers,

(a) except as provided in Article 3.3.4.7., and

(b) except for the following stairs:

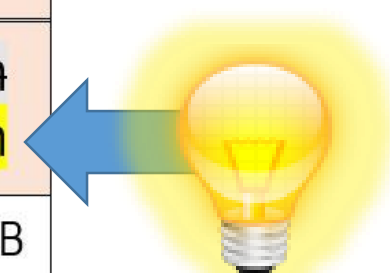
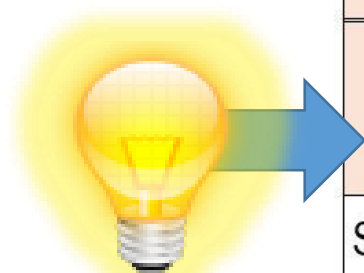
(i) fire escape stairs,

(ii) stairs that are principally used for maintenance and service, and

(iii) stairs that serve *industrial occupancies* other than *storage garages*.

- Rise and Run dimensions changed for Part 3 buildings:

Rise and Run of Part 3 Stairs			
Part 3, Div. B, Ontario Building Code			
<i>Rise</i>		<i>Run</i>	
Maximum	Minimum	Maximum	Minimum
200 mm 180 mm	125 mm	355 mm	255 mm 280 mm
Sentence 3.4.6.8.(2), Div. B		Sentence 3.4.6.8.(1), Div. B	



O. Reg. 88/19 changes effective Jan. 1, 2020:

- Most of the changes in O. Reg. 88/19 that come into effect on January 1, 2020 are the amendments forming:
 - the 2015 National Building Code of Canada
 - the 2015 National Plumbing Code of Canada



Not all 2015 model National Code amendments are included in O. Reg. 88/19



Not all 2010 model National Code amendments were incorporated into the 2012 edition of the Ontario Building Code

Part 3 highlights – Foamed Plastic:



- In **Group A** major occupancy buildings of combustible construction, 0.38 mm mechanically fastened sheet metal is no longer permitted to protect foamed plastics.

Revised Sentence 3.1.4.2.(1), Div. B

- However, a walk-in cooler or freezer consisting of factory-assembled wall, floor or ceiling panels containing foamed plastics is permitted to be used in any *building* permitted to be of *combustible construction*, provided the panels:
 - are protected on both sides by sheet metal not less than 0.38 mm thick having a melting point not less than 650°C
 - do not contain an air space, and
 - have a *flame-spread rating* not more than that permitted for the space in which they are located

New Sentence 3.1.4.2.(3), Div. B

Part 3 highlights – Foamed Plastic:

Requirements for foamed plastic insulation in *buildings* of *noncombustible construction* have been consolidate into two new articles:

New Article 3.1.5.5A., Div. B
New Article 3.1.5.12A. Div. B



- Requirements for foamed plastic factory assembled panels in *buildings* of *noncombustible construction*, relocated to a new Article 3.1.5.5A. "Factory Assembled Panels"
- Requirements for foamed plastic insulation in *buildings* of *noncombustible construction*, relocated to a new Article 3.1.5.12A. "Foamed Plastic Insulation"

In the 2015 edition of the NBC:

- *Ontario Article 3.1.5.5A is NBC Article 3.1.5.7.*
- *Ontario Article 3.1.5.12A is NBC Article 3.1.5.15.*

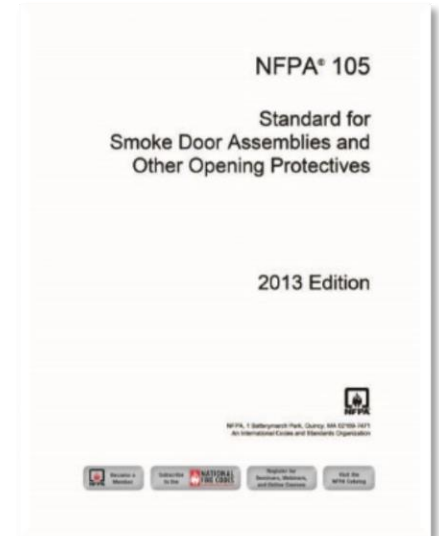
Part 3 highlights – Leakage Rated *Closures*:

- Leakage rated *closures* are required for certain:
 - door assemblies
 - smoke dampers or combination smoke and *fire dampers*

Installation Standard:

- Every required leakage-rated door assembly and every smoke damper used as a closure in a required fire separation shall be installed in conformance with NFPA 105, “Smoke Door Assemblies and Other Opening Protectives”

New Sentences 3.1.8.5.(3) & (6), Div. B

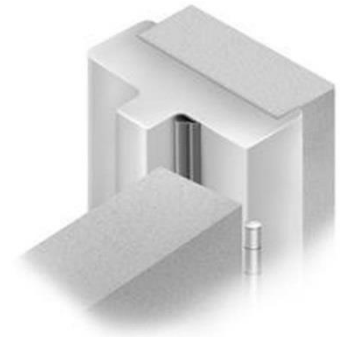


Part 3 highlights – Leakage Rated *Closures*:

Leakage Ratings of Door Assemblies:

- Leakage rating of a door assembly is determined in accordance with ANSI/UL-1784-04, “Air Leakage Tests of Door Assemblies and Other Opening Protectives”

New Sentence 3.1.8.4.(4), Div. B



Leakage Ratings of Smoke Dampers & Combination Smoke and Fire Dampers:

- Leakage rating of a smoke damper or combination smoke and *fire damper* is determined in accordance with in CAN/ULC-S112.1-10, “Leakage Rated Dampers for Use in Smoke Control Systems”
- Leakage rate must comply with Class I, II, or II

New Sentence 3.1.8.4.(3), Div. B



Part 3 highlights – Leakage Rated *Closures*:

Leakage Ratings of Smoke Dampers & Combination Smoke and Fire Dampers:

- Leakage rate must comply with Class I, II, or III:

Maximum Leakage Rates (M ³ /S/M ²)					
Class	0.995 kPa	1.49 kPa	1.99 kPa	2.49 kPa	2.99 kPa
I	0.041	0.048	0.056	0.064	0.071
II	0.102	0.123	0.143	0.160	0.179
III	0.408	0.489	0.571	0.064	0.714

Part 3 highlights – Leakage Rated *Closures*:

Where Leakage-rated Door Assemblies are Required:

A leakage-rated door assembly shall be installed:

- in a door in a *fire separation* that separates *barrier-free* zones described in Article 3.3.1.7.
- in a door in a *fire separation* that separates *fire compartments* in *care* or *care and treatment occupancies* described in Article 3.3.3.5.
- in a door in a horizontal exit through a firewall described in Article 3.3.3.5.
- in a door in a *fire separation* that separates *fire compartments* in *retirement homes* described in Article 3.3.4.11.
- in a door in a *fire separation of a public corridor* that serves *dwelling units* in unsprinklered storeys *see exception in Sentence 3.1.8.5.(7)*

New Sentence 3.1.8.5.(5), Div. B

Part 3 highlights – Smoke Dampers:

Smoke Dampers or Combination Smoke / Fire Dampers:

A smoke damper or combination smoke and *fire damper* shall be installed in ducts or air-transfer openings that penetrate an assembly required to be a *fire separation*, if the *fire separation*:

- separates a *public corridor*
- contains an egress door described in Sentence 3.4.2.4.(2) (extra travel distance)
- serves an assembly, *care, care and treatment, detention or residential occupancy*
- separates *barrier-free* zones described in Article 3.3.1.7.
- separates *fire compartments* in *care or care and treatment occupancies* described in Article 3.3.3.5.
- separates *fire compartments* in *retirement homes* described in Article 3.3.4.11.

New Sentence 3.1.8.7.(2), Div. B



source: RUSKIN

Part 3 highlights – Smoke Dampers:

Smoke Dampers Waived (**New Article 3.1.8.8A.**):

A smoke dampers or combination smoke and *fire dampers* described in Sentence 3.1.8.7.(2) may be waived for ducts:

- that serve commercial cooking equipment
- in which all inlet and outlet openings serve **ONLY** one *fire compartment*
- that penetrate a vertical *fire separation* referred to in Clause 3.3.1.7.(1)(b) or in Sentence 3.3.3.5.(4), provided,
 - a) the movement of air is continuous, and
 - b) the configuration of the air-handling system prevents the recirculation of exhaust or return air under fire emergency conditions.

New Sentence 3.1.8.8A.(1), Div. B



source: RUSKIN

Part 3 highlights – Smoke Dampers:

Smoke Dampers Waived (**New Article 3.1.8.8A.**):

A smoke dampers or combination smoke and *fire dampers* may be waived for *noncombustible* 760°C⁺ branch ducts:

- a) if the ducts
 - i. have max. 130 cm² cross-sectional area and serve only AC units or combined AC/Heating units discharging air 1.2 m max. above the floor; OR
 - ii. extent at least 500 mm inside exhaust duct risers that are under negative pressure and the airflow is upwards; OR
 - iii. are required to function as part of a smoke control system; OR
 - b) provided the *fire separation* separates a *vertical service space* from the remainder of the *building* and each individual duct exhausts directly to the outdoors at the top of the *vertical service space*. **New Sentence 3.1.8.8A.(2), Div. B**
- New Article 3.1.8.9A. "Installation of Smoke Dampers" added.**

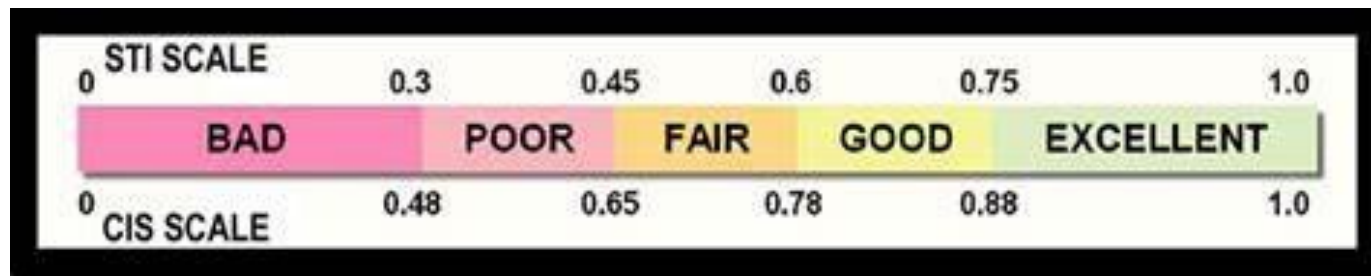


source: RUSKIN

Part 3 highlights – Voice Communication:

Common Intelligibility scale (CIS):

- It was determined that the current requirement of Sentence 3.2.4.23.(2), which required the voice communication system in a building to achieve a CIS score of 0.70 was an unachievable target.
- This requirement was first introduced in the 2010 NBC and adopted in the 2012 OBC.
- Sentence 3.2.4.23.(2) has been deleted.



CIS = 0.70 corresponds to:

- 80% word intelligibility, and
- 95% sentence intelligibility

Part 3 highlights – Miscellaneous:

Make-up Air to Public Corridors Serving Group C Suites in High Buildings:

- Air handling systems used to provide make-up air to *public corridors* serving *suites* in a Group C *major occupancy* shall not shut down automatically upon actuation of the fire alarm so as to maintain corridor pressurization.

New Sentence 3.2.6.2.(5.1), Div. B

Emergency Lighting in Washrooms for Public Use:

- Emergency lighting at an average level of at least 10 lx at floor level required in washrooms with *fixtures* for *public use*.

New Clause 3.2.7.3.(1)(m), Div. B

Distribution Panels For Emergency Lighting:

- Distribution panels serving emergency lighting units located on other *storeys* shall be installed in a *service room* separated from the *floor area* by a *fire separation* having a *fire-resistance rating* of at least 1 h.

New Sentences 3.2.7.10.(10) & (11), Div. B

Part 3 highlights – Miscellaneous:

Doors Serving *Self-service Storage Buildings*:

- Doors that serve individual storage spaces not more than 28 m² in area in *self-service storage buildings* need not swing on a vertical axis.

New Sentence 3.3.1.10.(5), Div. B

Door Thresholds:

- A door that opens into or is located within a *public corridor* or other facility that provides *access to exit* from a *suite*, shall not have a threshold more than 13 mm higher than the floor surface except where:
 - i. the threshold is used to contain spillage, or
 - ii. the doorway provides access to an exterior balcony, other than a balcony required by Sentence 3.3.1.7.(2).

New Clause 3.3.1.12.(1)(d), Div. B

See also: New Sentence 3.4.6.11.(1.1) for thresholds in *exit* doorways.

Part 3 highlights – Miscellaneous:

Where Guards are Required:

- A *guard* not less than 1 070 mm high shall be provided at locations where "the adjacent surface within 1 200 mm of the walking surface has a slope of more than 1 in 2 away from the walking surface".

New Clause 3.3.1.17.(1)(c), Div. B

Vision Panels in Door and Transparent Sidelights:

- Fully glazed transparent doors, and fully glazed transparent sidelights and panels with widths greater than 300 mm, shall be marked in conformance with Sentence 3.8.3.3.(15). New Sentence 3.3.1.18.(1.1), Div. B
- Glass in a vision panel in a door or in a transparent sidelight shall conform to Sentence 3.8.3.3.(14). New Sentence 3.3.1.18.(4.1), Div. B

Part 3 highlights – Miscellaneous:

Distance Between Exterior Exit Doors:

- The distance between exterior doors leading from two or more *exit* stairs serving the same *floor area* shall be:
 - a) not less than 9 m., or
 - b) not less than 6 m. if the *building* is *sprinklered*, and the exterior doors are located within 15 m of a *street*.

Exit Door Swing:

New Sentence 3.4.2.3.(4), Div. B

- An *exit* door need not swing on a vertical axis or open in the direction of *exit* travel if it serves:
 - a *storage garage* that serves only one *dwelling unit*,
 - an accessory *buildings* that serves only one *dwelling unit*, or
 - a storage *suite* not more than 28 m² in area located on the *first storey* of a warehouse and that opens directly outdoors at ground level.

New Sentence 3.4.6.12.(4), Div. B

Part 3 highlights – Barrier-Free Design:



Faucets for Lavatories Not in *Dwelling Units*:

- A lavatory faucet provided with a manual control shall:
 - i. have a lever type handle or is otherwise operable with a closed fist
 - ii. not require the application of continuous force to maintain water flow, and
 - iii. provide at least 10 s of water flow, where metered.

Building Controls in a *Barrier-free* Path of Travel:

- Controls for the operation of *building* services or safety devices shall be located so as to be adjacent to and centred on either the length or the width of a clear floor space of 810 mm by 1 370 mm.

Revised Sentence 3.8.1.5.(1), Div. B

Part 3 highlights – Barrier-Free Design:



Barrier-free Water Closet Stalls:

- General editorial and technical revisions. Revised Sentence 3.8.3.8.(1), Div. B

Barrier-free Water Closets:

- General editorial and technical revisions. Revised Sentence 3.8.3.9.(1), Div. B

Barrier-free Urinals:

- General editorial and technical revisions. Revised Article 3.8.3.10., Div. B

Barrier-free Lavatories:

- General editorial and technical revisions. Revised Sentence 3.8.3.11.(1), Div. B

Universal Washrooms:

- General editorial and technical revisions to door serving a universal washroom
Revised Clause 3.8.3.12.(1)(b), Div. B

Part 3 highlights – Barrier-Free Design:



Universal Washrooms:

- Power door operator required for every door serving a universal washroom

Revised Clause 3.8.3.12.(1)(i), Div. B

Barrier-free Showers and Bathtubs:

- General editorial and technical revisions to requirements for *barrier-free* showers
- General editorial and technical revisions to requirements for individual bathtubs in B-2 and B-3 *occupancies*

Revised Sentence 3.8.3.13.(2), Div. B
and New Sentence 3.8.3.13.(2.1), Div. B

Revised Sentence 3.8.3.13.(4), Div. B

Part 4 highlights – Companion Loads:

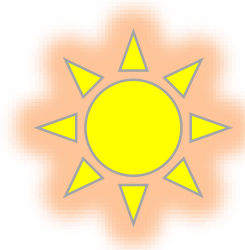


Table 4.1.3.2.A.

Load Combinations without Crane Loads for Ultimate Limit States

Forming Part of Sentences 4.1.3.2.(2) and (5) to (10)

- Companion Load Factor increased from 0.5 to 1.0 for both Live (L) or Snow (S) in Cases 2 & 3 of Table 4.1.3.2.A.

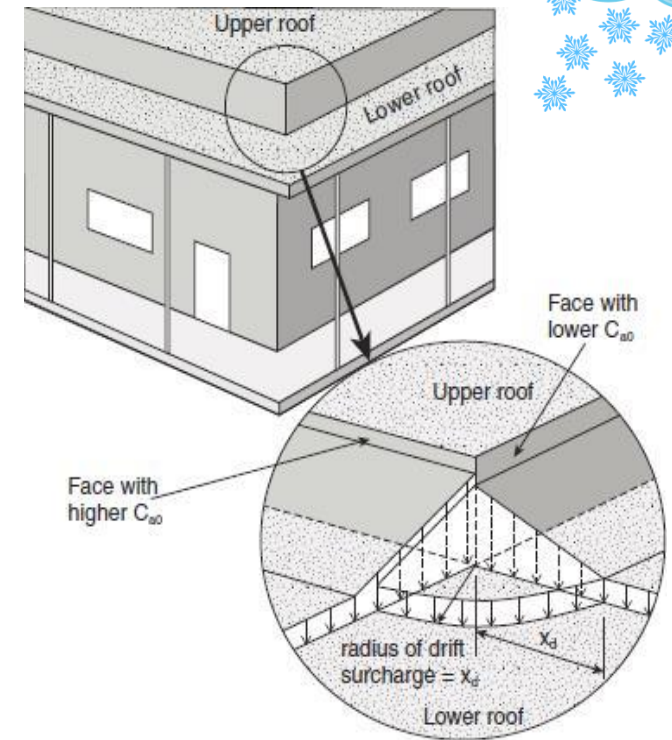
Case	Load Combination ⁽¹⁾	
	Principal Loads	Companion Loads
1	1.4D ⁽²⁾	---
2	(1.25D ⁽³⁾ or 0.9D ⁽⁴⁾) + 1.5L ⁽⁵⁾	0.5 1.0 S ⁽⁶⁾ or 0.4W
3	(1.25D ⁽³⁾ or 0.9D ⁽⁴⁾) + 1.5S	0.5 1.0 L ⁽⁶⁾⁽⁷⁾ or 0.4W
4	(1.25D ⁽³⁾ or 0.9D ⁽⁴⁾) + 1.4W	0.5L ⁽⁷⁾ or 0.5S
5	1.0D ⁽⁴⁾ + 1.0E ⁽⁸⁾	0.5L ⁽⁶⁾⁽⁷⁾ + 0.25S ⁽⁶⁾
Column 1	Column 2	Column 3

- Companion Load factor for L or Lxc (cranes) increased to 1.0 by 0.5 for storage areas, equipment areas, and service rooms referred to in Table 4.1.5.3. Revised Sentence 4.1.3.2.(7), Div. B
- Table 4.1.3.2.B (crane loads) revised

Part 4 highlights – Snow Loads:



- Essential guidance relocated from Structural Commentary G to Subsection 4.1.6., including:
 - calculation of the accumulation factor, C_a , (old shape factor)
 - calculation of snow loads due to sliding from upper roofs
 - calculation of snow loads in valleys of curved or sloped roofs
- Method for calculating specific weight of snow in drifts
- Modification of calculating the basic roof snow load factor, C_b
- Prohibition on reducing design snow loads on the basis of snow removal by mechanical, thermal, manual or other means

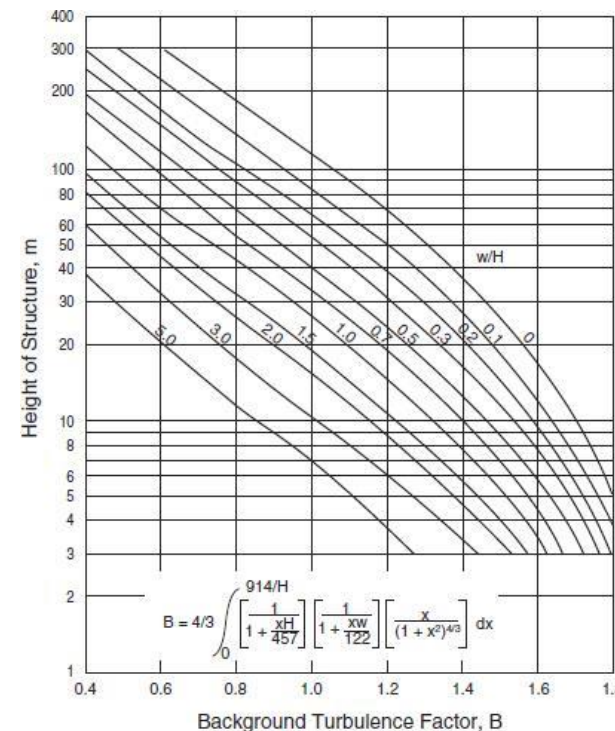


New Sentence 4.1.6.14.(1), Div. B

Part 4 highlights – Wind Loads:



- Guidance relocated from Structural Commentary I to Subsection 4.1.7.
- Clarification that the specified wind loads for a building and its components shall be determined using:
 - the Static Procedure described in Article 4.1.7.3.,
 - the Dynamic Procedure described in Article 4.1.7.8., or
 - the Wind Tunnel Procedure described in Article 4.1.7.12., as permitted by Article 4.1.7.1.
- New topographic factor, C_t , (this used to be considered part of the exposure factor, C_e)
- Wind direction eliminated as a factor in the calculation of wind loads on roof and wall claddings
- New provisions for exterior ornaments, equipment, & appendages
- New provisions for the Wind Tunnel Procedure



Part 4 highlights – Seismic Design:



- *Seismological studies and data indicate that earthquakes up to magnitude 7 can occur even in regions with little earthquake history.*
- Buildings in regions of low seismicity are no longer exempted from being designed for earthquake ground motions

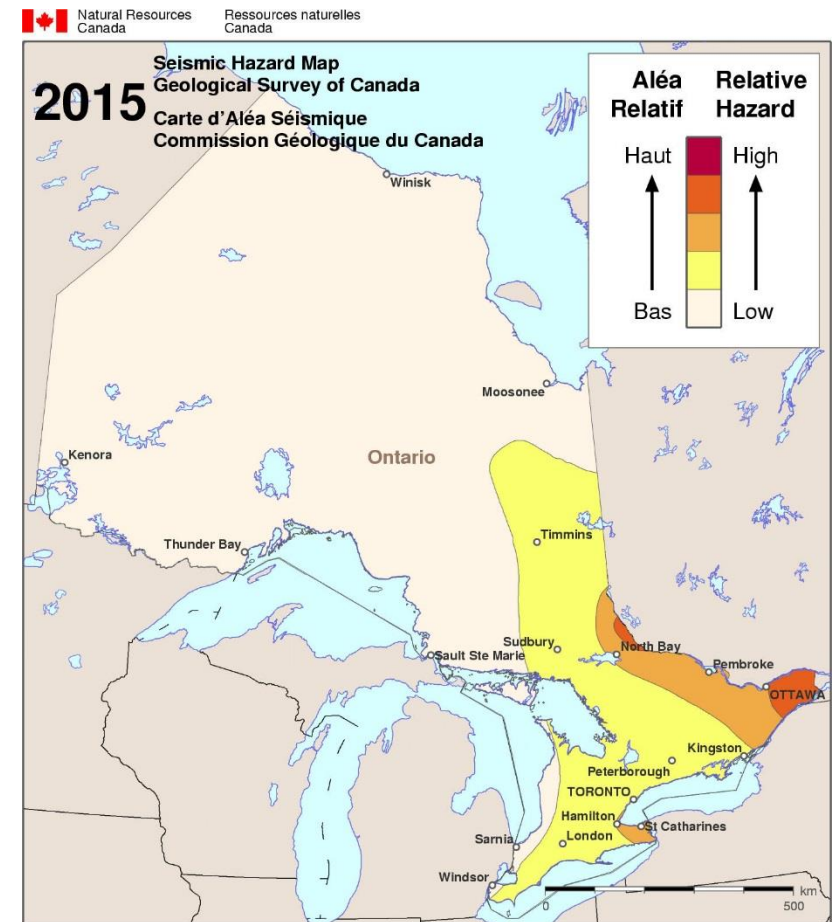
BUT

a new minimum lateral earthquake design force and a simplified analysis path is provided in Article 4.1.8.1. for regions of low seismicity where:

$$I_E F_s S_a(0.2) < 0.16$$

and

$$I_E F_s S_a(2.0) < 0.03$$



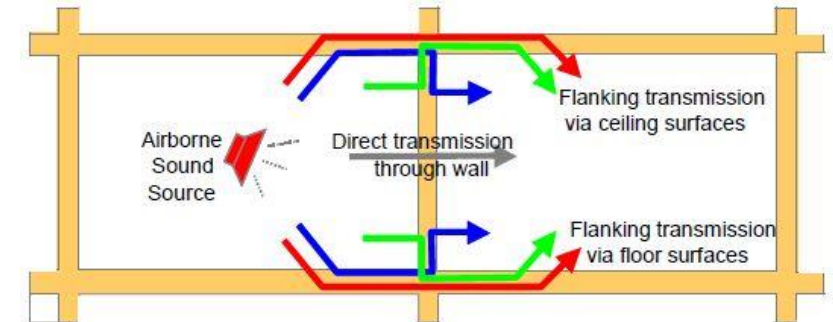
Part 4 highlights – Seismic Design:



- Modified approach to site coefficients for ground motion amplification
- Modified short-period cut-off for the determination of the minimum lateral earthquake design force
- New type of irregularity to address gravity-induced lateral demand
- Additions & modifications to Table 4.1.8.9. (tilt-up structures added)
- New requirements for 4+ storey continuous wood construction
- New requirements for deformations for 1-storey buildings with steel deck or wood flexible roof diaphragms
- Revised higher mode factors and base overturning reduction factors
- Modified foundation provisions
- New design requirements for glass, elevators, & pallet racks
- New design requirements for seismically isolated structures and structures with supplemental energy dissipation systems

Parts 5 & 9 highlights – Sound Transmission:

- Compliance with sound transmission for dwelling units may be achieved by:
 - 47 Apparent Sound Transmission Class (ASTC) rating; or *new!*
 - 50 Sound Transmission Class (STC) rating.
- ASTC introduced to take into account flanking sound transmission in addition to the direct sound transmission.
- Compliance with the ASTC rating is achieved by:
 - measurements or calculations carried out in accordance with Sentence 5.8.1.2.(2); or
 - Compliance with Table 1 or 2 of SB-3, “Fire and Sound Resistance of Building Assemblies”, as applicable, that have a 50+ STC rating in conjunction with flanking assemblies conforming to Article 9.11.1.4.



source: NRC

Parts 5 & 9 highlights – Sound Transmission:

Check the NRC on-line soundPATHS Calculator at:

<https://soundpaths.nrc-cnrc.gc.ca/#/>

- Free to use
- Sound Transmission is relocated to Section 5.8
- Part 9 requirements for sound transmission changed to match Part 5 **Revised Section 9.11., Div. B**

soundPATHS Calculator

Total --	Separating --	Bottom --	Top --	Front --	Back --
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soundPATHS Home Separating Wall Bottom Flanking Top Flanking Assembly Front Flanking Back Flanking

Welcome to soundPATHS!

To start, please define the room orientation and the room dimensions, and select one of the construction presets on this page.

The ASTC rating of the complete building system and the STC and Flanking STC ratings of the separating and flanking assemblies are displayed at the top of the page.

Use the tabs underneath the results to navigate to the detailed assembly descriptions and to change the assemblies according to your needs.

Presets

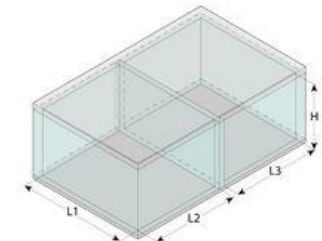
Please choose a preset

Select Room Orientation

Please start by selecting a horizontal or vertical room and setting the dimensions of the system.

Horizontal orientation is selected

Adjust Room Dimensions



Length 1
5

L1 (metres)
Length 2
4

L2 (metres)
Length 3
4

L3 (metres)
Height
2.5

H (metres)

Part 5 highlights – Environmental Separation:

- New Subsection 5.10.4. to address: "Other Fenestration Assemblies"
- Definition:
 - Other fenestration assemblies* means curtain walls, window walls, storefronts and glazed architectural structures.
- Air leakage criteria in Sentence 5.10.4.4.(2) need not apply to:
 - interior windows and interior doors that do not serve as environmental separators,
 - vehicular access doors, including garage doors,
 - storm windows and storm doors,
 - commercial entrance systems,
 - revolving doors,
 - smoke and relief air vents,
 - site-built door systems, and
 - commercial steel doors.

Part 6 highlights – HVAC Design:

- Asbestos banned for HVAC systems or equipment

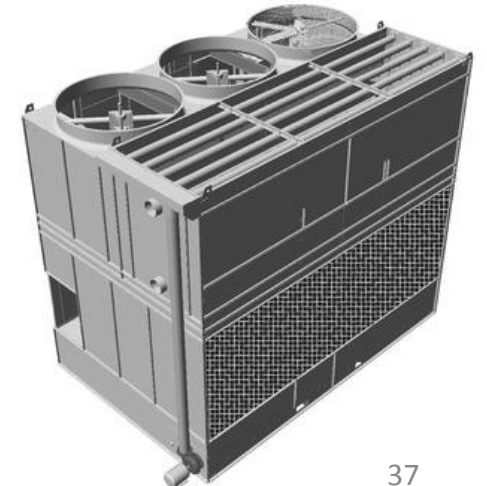
Revised Sentence 6.2.1.10.(1), Div. B

- Drain pans required for dehumidifying cooling coil assemblies and condensate-producing heat exchangers

New Article 6.2.3.1A., Div. B

- Existing Article 6.2.3.14. revised and new Article 6.2.3.14A. added to address the risk of Legionellosis from:

- evaporative cooling towers and evaporative cooling sections
- evaporative fluid coolers and evaporative air coolers
- evaporative condensers
- misters
- atomizers
- air washers
- humidifiers



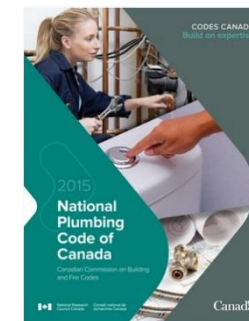
Part 6 highlights – HVAC Design:

new!

Table 6.2.3.12. Minimum Separation Distances to an Air Intake Opening	
Location	Minimum Separation
Garage entry of a garage for 5 or more motor vehicles, automobile loading area and drive-in queue	4.5 m.
Truck loading area or dock, and bus parking	7.6 m.
Driveway, parking space, lane, road and similar locations that carry a low volume of traffic	1.5 m.
Thoroughfare, arterial road, freeway, highway and similar locations that carry a high volume of traffic	7.6 m.
Garbage storage/pick-up area and dumpsters	4.5 m.
Discharge from evaporative cooling tower, evaporative fluid cooler and evaporative condenser	7.6 m.
Sanitary vent	3.5 m.
Kitchen exhaust outlet	3.0 m.
Vent for combustion products from solid fuel-burning <i>appliances</i>	3.0 m.

Part 7 highlights – Plumbing:

- Stainless steel pipe & tube are permitted for plumbing systems



new!

Table 7.2.6.15.

CodeNews.ca abridged version

Where Stainless Steel Tube and Pipe is Permitted

Location / Use	Stainless steel pipe	Stainless steel tube
Underground <i>Water Distribution System</i>	PERMITTED	PERMITTED
Above-ground <i>Water Distribution System</i>	PERMITTED	PERMITTED
<i>Building Sewer</i>	PERMITTED	NOT PERMITTED
Underground <i>Drainage System</i>	PERMITTED	NOT PERMITTED
Above-ground <i>Drainage System</i>	PERMITTED	NOT PERMITTED
Underground <i>Venting System</i>	PERMITTED	NOT PERMITTED
Above-ground <i>Venting System</i>	PERMITTED	NOT PERMITTED



New Articles 7.2.6.10. – 7.2.6.15. and 7.3.2.8., Div. B

Part 7 highlights – Plumbing:

Plumbing Venting:

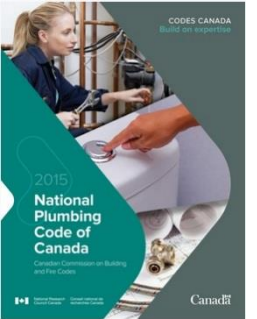
- Min. 1.5" *vent pipe* must extend through all *storeys*, where *plumbing* is or may be installed, in all ~~houses~~ **buildings**.

Revised Sentence 7.5.5.5.(2), Div. B

Automatic Waterflow Shut-off for Public Lavatories:

- Every lavatory in a washroom with *fixtures* for *public use* shall be equipped with a device capable of automatically shutting off the flow of water when the lavatory is not in use.

New Sentence 7.6.4.1.(3), Div. B



Part 7 highlights – Plumbing:



- Maximum flow rates for lavatory faucets reduced:



source: DELTA FAUCET

Table 7.6.4.1. Maximum Flow Rates for Water Supply Fittings		
Fitting	Maximum Flow L/min	Test Pressure kPa
Lavatory Faucets in <i>Residential Occupancy</i>	8.35 5.7	413
Lavatory Faucets in <i>Other Occupancies</i>	8.35 1.9	413
Kitchen Faucet	8.35	413
Shower Heads in <i>Residential Occupancy</i>	7.6	550
Shower Heads in <i>Other Occupancies</i>	9.5	550

Part 9 highlights – Glazing:

Where the *building* has an essentially uniform distribution of paths for air leakage, including operable openings, but no large openings that would permit wind gusts to rapidly enter the *building* and the *building* is not in an exceptionally exposed location such as a hilltop, the maximum area of individual panes of glass for windows and doors is obtained from Tables 9.6.1.3.A. – 9.6.1.3.G.:

Glazing for Windows and Doors for Structural Sufficiency Abridged Selection Guide, based on Article 9.6.1.3., Div. B		
1 in 50 Hourly Wind Pressure	Where the <i>building</i> has a height from <i>grade</i> to the uppermost roof of 12 m or less and is located in a built-up area, no less than 120 m away from the boundary between this area and open terrain, use:	For Open Terrain, use:
< 0.55 <u>kPa</u>	Table 9.6.1.3.A.	Table 9.6.1.3.D.
< 0.75 <u>kPa</u>	Table 9.6.1.3.B.	Table 9.6.1.3.E.
< 1.0 <u>kPa</u>	Table 9.6.1.3.C.	Table 9.6.1.3.F.
Glass in Doors	Table 9.6.1.3.G.	

Revised
Article 9.6.1.3.,
Div. B

Part 9 highlights – Doors:

- Rules for electromagnetic locking mechanisms apply to ALL doors in a means of egress
Revised Clause 9.9.6.7.(1)(b), Div. B
- Where an *exit* door leading directly to the outside is subject to being obstructed by a parked vehicle or storage because of its location, a visible sign prohibiting such obstructions shall be permanently mounted on the exterior side of the door.
New Sentence 9.9.11.2., Div. B



See also corresponding Part 3 requirement in New Sentence 3.4.6.11.(5).

Part 9 highlights – Foamed Plastic:

- New rules for the installation of walk-in coolers or freezers of factory-assembled foam plastic panels. **New Article 9.10.17.10., Div. B**



- *flame-spread rating* of thermosetting foamed plastic insulation in residential factory-assembled doors is reduced from ~~500~~ to **200**.

**Renumbered and revised
Sentence 9.10.17.10.(4), Div. B**



source: HOME DEPOT

Part 9 highlights Residential Fire Warning Systems:



9.10.19.8. Residential Fire Warning Systems

(1) Except where a fire alarm system is installed or required in a *building*, *smoke detectors* forming part of a residential fire warning system installed in conformance with CAN/ULC-S540 “Residential Fire and Life Safety Warning Systems: Installation, Inspection, Testing and Maintenance”, are permitted to be installed in lieu of all *smoke alarms* required by Articles 9.10.19.1. and 9.10.19.3., provided that the fire warning system,

- (a) is capable of sounding audible signals in accordance with Articles 9.10.19.2. and 9.10.19.5.,
- (b) is powered in accordance with Article 9.10.19.4., and
- (c) is equipped with a silencing device conforming to Article 9.10.19.6.

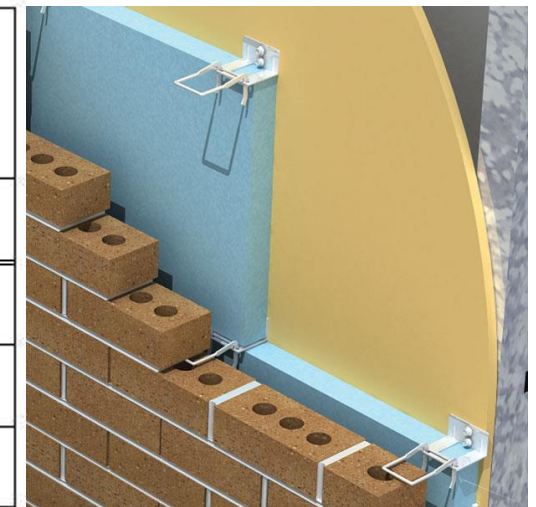
New Article 9.10.19.8., Div. B

For Part 3 Buildings: Similar Provisions in New Article 3.2.4.22A., Div. B

Part 9 highlights – Veneer Tie Spacing:

- Only masonry veneer of *solid masonry units* is permitted to project beyond the supporting base. **Revised Sentence 9.20.8.5.(1), Div. B**
- Spacing dimensions for masonry veneer ties has reverted to imperial dimensions, expressed in soft metric conversions:

Maximum Vertical Spacing	Maximum Horizontal Spacing
400 mm 406 mm	800 mm 813 mm
500 mm 508 mm	600 mm 610 mm
600 mm 610 mm	400 mm 406 mm

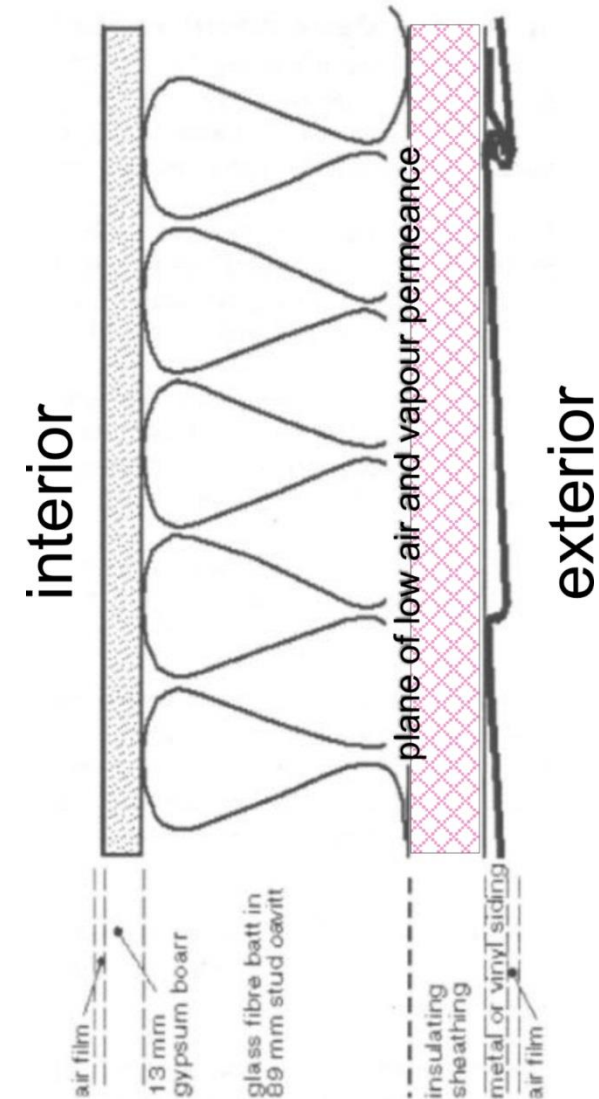


source: Hohmann & Barnard, Inc

Part 9 highlights

Low Permeance Materials:

- Existing Sentence 9.25.5.1.(1) limits the ratio of Outboard Thermal Resistance to Inboard Thermal Resistance where low permeance sheet insulation could trap moisture in the wall
- New research indicates that trapped moisture is not a significant issue under the conditions described in new Sentence 9.25.5.1.(4):
 - Sheet and panel-type materials need not comply with Sentence (1) where,
 - the material has,
 - a water vapour permeance not less than $30 \text{ ng}/(\text{Pa}\cdot\text{s}\cdot\text{m}^2)$, and
 - a thermal resistance not less than $0.7 \text{ (m}^2\cdot\text{K)/W}$, and
 - the heating degree-days of the *building* location, in degrees Celsius, are less than 6 000.



New Sentence 9.25.5.1.(4), Div. B

Part 9 highlights – Detached Garages:

- Subsection 9.35.3. currently permits one-storey detached garages less than 55 m² to be supported on a wood mud sill.
- Revised Sentence 9.35.3.1.(1) permits one-storey detached garages less than 55 m² to be supported on a 100 mm thick concrete floor slab.
- Revised Sentence 9.35.3.3.(1) does not require foundation drainage if the ground slopes away from the one-storey detached garage less than 55 m².



Transition Rules:

FOR CHANGES COMING INTO EFFECT ON JAN. 1, 2020:

- Existing OBC requirements that are in effect on Dec. 31, 2019 continue to apply **if an application for a building permit is made before Jan. 1, 2020 and construction is started within 6 months after the permit is issued.**

Subsection 295.(1) of O. Reg. 88/19

FOR CHANGES COMING INTO EFFECT ON JAN. 1, 2022:

- Existing OBC requirements that are in effect on Dec. 31, 2021 continue to apply **if an application for a building permit is made before Jan. 1, 2022 and construction is started within 6 months after the permit is issued.**

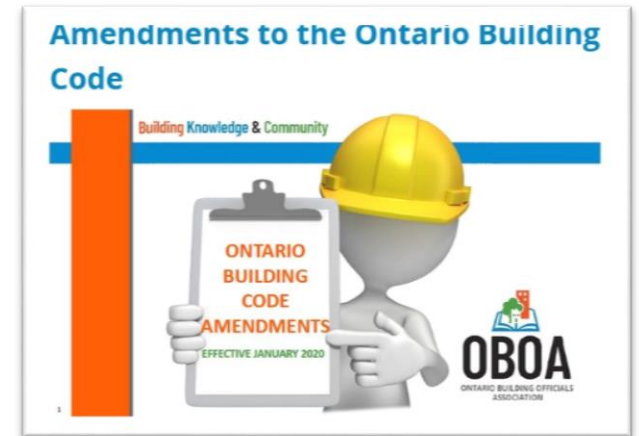
Subsection 295.(2) of O. Reg. 88/19

Amendment package #8 (May 2, 2019 update) to The 2012 Building Code Compendium:

- This amendment package contains 1,220 replacement pages to the 2012 Building Code Compendium Edition and reflects amendments to the Ontario Building Code by O. Reg. 79/18, O. Reg. 388/18, O. Reg. 87/19, and O. Reg. 88/19.
- This free amendment package includes **complete copies** of:
 - Supplementary Standard SB-1 – Climatic and Seismic Data
 - Supplementary Standard SB-2 – Fire Performance Ratings
 - Supplementary Standard SB-2 – Fire and Sound Resistance of Building Assemblies
- Download the 28 MB file from:
https://www.publications.gov.on.ca/store/20170501121/Free_Download_Files/510167_U.pdf

Other O. Reg. 88/19 Resources:

- The OBOA has summarized the amendments included in O. Reg. 88/19 into an easy presentation for your reference.
- Download the free 25 MB OBOA slide deck from:
<https://v0.oboa.on.ca/files/OBOA2020CodeTraining.pdf>
- On May 2, 2019, the Ministry of Municipal Affairs and Housing published 8 Technical Bulletins to explain the amendments.
- Download the bulletins for free from the CodeNews.ca website:
 - [Technical Bulletin - General](#)
 - [Technical Bulletin - Part 3](#)
 - [Technical Bulletin - Part 4](#)
 - [Technical Bulletin - Part 5](#)
 - [Technical Bulletin - Part 6](#)
 - [Technical Bulletin - Part 7](#)
 - [Technical Bulletin - Part 8](#)
 - [Technical Bulletin - Part 9](#)



How to download the latest OBC version:

Go to: <https://www.ontario.ca/laws/>

The screenshot shows the Ontario e-Laws website interface. At the top, there is a navigation bar with the Ontario logo, 'contact us | français', and a 'Topics +' menu. Below this is a search bar labeled 'Browse e-Laws'. The main content area is divided into two columns. The left column contains a 'Browse' section with a grid of letters from A to Z. The letter 'B' is highlighted with a red circle. Below the grid is a 'Filter results:' section with three radio buttons: 'Consolidated law' (selected), 'Current', and 'Repealed/Revoked/Spent'. Below the filters is a 'Results for:' dropdown menu with 'Regulations' selected. At the bottom of the left column is a 'Browse' button. The right column displays 'Consolidated laws' with '19 results found starting with B'. A 'Sort by:' dropdown menu is set to 'Act title A-Z'. The results list includes: 'Broader Public Sector Accountability Act, 2010' (1 regulation), 'Broader Public Sector Executive Compensation Act, 2014' (1 regulation), 'Building Code Act, 1992' (1 regulation), and 'Business Corporations Act' (3 regulations). The regulation 'O. Reg. 332/12: BUILDING CODE' is circled in red. Red arrows and numbers 1 through 4 point to these specific elements: 1. select (points to 'B'), 2. select (points to 'Consolidated law'), 3. select (points to 'Regulations'), and 4. click here (points to the circled regulation entry).

How to download the latest OBC version:

*Voila!
(You can also view
or download
earlier
versions of the
OBC.)*

The screenshot shows the Ontario e-Laws website interface. At the top, there is a dark green header with the Ontario logo, a search bar labeled 'SEARCH LAWS', and a 'SEARCH' button. To the right of the search bar are links for 'contact us' and 'français', and a 'Topics +' menu. Below the header is a breadcrumb trail: 'HOME PAGE / LAWS / O. REG. 332/12: BUILDING CODE'. The main content area is titled 'O. Reg. 332/12: BUILDING CODE' and includes the text 'under *Building Code Act, 1992, S.O. 1992, c. 23*'. A 'Versions' section is displayed, showing a table of dates and their corresponding e-Laws currency dates. The 'current' version is highlighted. Below the table are 'Print' and 'Download' buttons. At the bottom of the page, there is a section for 'Building Code Act, 1992' and 'Loi de 1992 sur le code du bâtiment', followed by 'ONTARIO REGULATION 332/12' and 'BUILDING CODE'. A red note indicates the 'Consolidation Period: From July 20, 2018 to the e-Laws currency date.' and the last amendment is noted as '388/18'.

Version	e-Laws currency date
current	July 20, 2018 – (e-Laws currency date)
	April 3, 2018 – July 19, 2018
	March 6, 2018 – April 2, 2018
	14 more



Thank
you !

The end.

but the story continues

The 2020 National Construction Codes will be published next year.

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is posted at:
www.codenews.ca



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