

ONTARIO HOME BUILDERS ASSOCIATION

Highlights of Amendments to Ontario's 2012 Building Code

For Low Rise Housing

Ontario Regulation 88/19, amending Ontario's 2012 Building Code, was filed on May 2, 2019. The amendment will better align the Ontario Building Code with the National Building Code of Canada. The above documents are available on the Government of Ontario's e-laws site (<https://www.ontario.ca/laws/regulation/R19088>).

The amendment includes changes to the following parts of Division B in the Building Code:

- Part 3 (Fire Protection, Occupant Safety and Accessibility)
- Part 4 (Structural Design)
- Part 5 (Environmental Separation)
- Part 6 (Heating, Ventilating and Air-Conditioning)
- Part 7 (Plumbing)
- Part 8 (Sewage Systems)
- Part 9 (Housing and Small Buildings)

Amendments will come into force on January 1, 2020. All amendments related to stairs, guards and handrails provisions will come into force on January 1, 2022.

Please refer to the regulation for the complete list of changes. Below is a summary of selected changes:

PLEASE NOTE: THIS IS A CONVENIENCE DOCUMENT AND IS NOT INTENDED TO ACT AS A SUBSTITUTE FOR THE SPECIFIC REQUIREMENTS OF THE BUILDING CODE OR THE NEW REGULATION. PLEASE REFER TO THE NEW REGULATION (Ontario Regulation 88/19, amending Ontario's 2012 Building Code). PLEASE CONSULT YOUR AUTHORITY HAVING JURISDICTION.

Division A / 1.4.1.2.(1) – Defined Terms

A number of definitions have been inserted or have changed. These include:

- Apparent Sound Transmission Class (ASTC),
- Flight,
- Run,
- Solid Masonry,
- Solid Masonry Units,
- Tapered Tread

Division B / Table 1.3.1.2. – Documents Referenced in the Building Code

A number of standards referenced in the Building Code and set out in Division B, Table 1.3.1.2., are updated. They are now more consistent with those listed in the National Building and Plumbing Codes. Certain redundant standards have been withdrawn, edition references have been revised, and new standards have been added.

Division B / 4.1.5.14. – Loads on Guards and Handrails

Note: All amendments related to stairs, guards and handrails provisions will come into force on January 1, 2022.

Part 4 guard design clarifies the structural requirements of guard elements.

Division B / 6.2.2.4. - Air Contaminants

Clarifications have been made to the requirements that are intended to reduce the level of indoor air contaminants.

Division B / 6.2.3.4. – Duct Coverings, Linings, Adhesives and Insulation

A new requirement has been added to allow the use of foamed plastic insulation, under certain conditions, to insulate heating ducts in Part 9 residential buildings.

Division B / 6.2.3.12. - Supply, Return, Intake and Exhaust Air Openings

Outdoor air intakes must be located so that they are separated a minimum distance from sources of contaminants in accordance with Table 6.2.3.12.

Division B / Table 6.2.3.12.

Table 6.2.3.12
Minimum Separation Distances between Exhaust and Air Intake Openings
 Forming Part of Sentence 6.2.3.12.(6)

<u>Location</u>	<u>Minimum Separation Distances, in m</u>
<u>Garage entry of a garage for 5 or more motor vehicles, automobile loading area and drive-in queue</u>	<u>4.5</u>
<u>Truck loading area or dock, and bus parking</u>	<u>7.6</u>
<u>Driveway, street or parking space</u>	<u>1.5</u>
<u>Thoroughfare, arterial road, freeway, and highway</u>	<u>7.6</u>
<u>Garbage storage/pick-up area, dumpsters</u>	<u>4.5</u>
<u>Discharge from evaporative cooling tower, evaporative fluid cooler and evaporative condenser</u>	<u>7.6</u>
<u>Sanitary vent</u>	<u>3.5</u>
<u>Kitchen cooking exhaust</u>	<u>3.0</u>
<u>Vent for combustion products</u>	<u>3.0</u>

Division B / 7.2.6.10. to 7.2.6.15., 7.3.2.8., and 7.3.4.3.(2) – Stainless Steel Related Requirements

New requirements have been added for stainless steel pipes and fittings. The new requirements address applicable standards, welding, and support of the stainless-steel piping and joints.

Division B / 9.6.1.3. - Structural Sufficiency of Glass

Changes have been made that remove the reference to an outdated CGSB standard and provides additional options for the design of glass to either Part 4 or to new Part 9 prescriptive tables based on various 1-in-50 hourly wind pressures and building location.

Division B / 9.8.3.1. – Straight and Curved Runs in Stairs

Changes have been made that clarify permitted stair configurations including straight flights, curved flights, and spiral stairs. The use of winders and tapered treads has been clarified.

Division B / 9.8.4.2. - Dimensions for Runs and Rectangular Treads

Note: All amendments related to stairs, guards and handrails provisions will come into force on January 1, 2022.

The run dimension of stairs serving single dwelling units have been increased as shown in Table 9.8.4.1.

Minimum tread was 235 mm (9 ¼"); New minimum tread = 255 mm (10")
Minimum run was 210 mm (8 ¼"); New minimum run = 255 mm (10")

Division B / 9.8.4.3. - Dimensions for Angled Treads

This change clarifies the required dimensions for tapered treads.

Division B / 9.8.4.4. - Uniformity and Tolerances for Risers and Treads

This change clarifies the requirements for tolerances for treads and runs for rectangular and tapered treads and for risers.

Tapered treads in a flight must have a uniform run within the stipulated tolerances when measured at a point 300 mm from the centre line of the handrail.

Division B / 9.8.4.4.A - Uniformity of Runs in Flights with Mixed Treads within a House or Dwelling Unit

This change clarifies the requirements for tolerances for runs for mixed treads (rectangular and tapered treads within the same flight of stairs) in dwelling units. Tread uniformity is measured at a point 300 mm from the centre line of the inside handrail.

Division B / 9.8.4.5.A – Spiral Stairs

A new article has been provided that regulates the use of spiral stairs in dwelling units.

Division B / 9.8.7. - Handrails

Note: All amendments related to stairs, guards and handrails provisions will come into force on January 1, 2022.

New requirements have been added that increase the maximum height of a handrail and clarify ergonomic design provisions.

Division B / 9.8.7.1. – Required Handrails

Clarification has been provided for required handrails in dwelling units.

Division B / 9.8.7.2. – Continuity of Handrails

For handrails serving a house, requirements for continuity have been clarified.

Division B / 9.8.7.4. – Height of Handrails (See Appendix A)

Based on research, handrails installed at a height of up to 1 070 mm perform as well as those installed at the current height limit of 965 mm. The maximum handrail height has been adjusted to align with the height of guards.

Division B / 9.8.7.5. – Ergonomic Design

This change clarifies requirements for handrail design. The clearance between a handrail and the surface behind it shall be not less than 50 mm, or 60 mm where the surface is rough or abrasive.

Division B / 9.8.7.7 – Design and Attachment of Handrails

Requirements in the Code have been clarified on the design and attachment of handrails.

Division B / 9.8.8.1 – Required Guards

Requirements for guards for windows have changed.

Division B / 9.10.16.1 – Required Fire Blocks in Concealed Spaces

Requirements for fire blocks in concealed spaces have been clarified.

Division B / 9.10.19.1. and 9.10.19.8 - New Residential Fire Warning Systems

A provision has been added to address the use and installation of residential fire warning systems.

Division B / 9.11. - Sound Transmission

A new Apparent Sound Transmission Class rating has been introduced to take into account flanking sound transmission as an alternative method in addition to the Sound Transmission Class (STC) rating.

This includes three compliance paths, one of which is new and an enhanced prescriptive method that uses existing STC ratings and additional prescriptive requirements to reduce noise transferred through flanking wall and floor assemblies.

Division B / 9.13. – Dampproofing and Waterproofing

New dampproofing and waterproofing provisions have been added to the Code.

Division B / 9.15.5.3. – Pilasters

Requirements for filling the top of pilasters have changed.

Division B / 9.20.6.5. – Parapet Walls

Clarification has been made for provisions relating to the construction of parapet walls.

Division B / 9.20.8.5. – Projection of Masonry Veneer Beyond Supporting Members

Requirements for then projection of masonry veneer resting on a bearing support have changed.

Division B / 9.25.5.1. – General

The requirements in Article 9.25.5.1. aim to reduce the risk of condensation being introduced into wall assemblies due to the water vapour permeance of the outboard materials. Research has confirmed that the reduced condensation potential of exterior continuous insulation with a thermal resistance of at least $0.7 \text{ (m}^2\cdot\text{K)/W}$ and a water vapour permeance between 30 and 1 800 $\text{ng}/(\text{Pa}\cdot\text{s}\cdot\text{m}^2)$ compares to reference assemblies without exterior insulation in a given geographic location and climatic exposure.

Division B / 9.26.1.1. – Purpose of Roofing

For the purpose of this Section, the term “roof” shall mean sloped or near-horizontal assemblies that protect the spaces beneath them, including platforms that effectively serve as roofs with respect to the accumulation or drainage of precipitation. For the purpose of this Section, the term “roofing” shall mean the primary covering for roofs.

Division B / 9.32.1.1. and 9.32.1.4. - Venting of Laundry – Drying Equipment

A new article has been added that provides a Part 9 alternative method for the venting of laundry drying equipment.

Division B / 9.34.4. - Electric Vehicle Charging

Note: Amendments related to electric vehicle charging requirements in the Building Code came into effect on the date the regulation was filed – May 2, 2019

The current electric vehicle charging requirements pertaining to houses have been deleted.

Division B / 9.35.3.1. - Garages and Carports: Foundation Required

A new requirement has been added prescribing the types of foundations that may be used for small 1 storey detached garages less than 55 m² in floor area that are not of masonry or masonry veneer construction.

Division B / 9.35.3.3. - Garages and Carports: Small Garages

A new requirement has been amended to exempt small garages from complying with the foundation drainage requirements where the finished ground level is at or near the elevation of the garage floor.