



---

Interim Amendments to Ontario's 2012  
Building Code  
Electric Vehicle Charging, Plumbing and  
Sewage Systems

August 17, 2017

# Notice

This presentation is intended for general information purposes only. It is not intended as legal or technical advice and it should not be relied on as such.

This presentation only highlights certain interim changes to the 2012 Building Code – O.Reg. 139/17. Code users are advised to consult the source documents, including:

- [The Building Code Act, 1992](#); and
- [The 2012 Building Code \(O. Reg. 332/12\) as amended](#)

These documents are available from:

- [e-Laws](#) (official versions of the Act and Code)
- [Publications Ontario](#), where a Building Code compendium (Act, Code and additional materials) can be bought.

# Interim Changes

The Building Code (O.Reg. 332/12) was recently amended by O.Reg. 139/17





Among other changes, the amending regulation includes new requirements for the following:

1. Retirement homes
2. Two-unit houses (secondary suites)
3. Electric vehicle charging requirements for houses and workplaces
4. Water pipe sizing
5. Gravelless leaching chambers

# Content

- This presentation covers the following new requirements:
  1. Electric vehicle charging requirements for houses and workplaces
  2. Water pipe sizing
  3. Gravelless leaching chambers
- Separate slide decks are provided for the other new requirements.

# Symbols Used in Slides

LEGEND		
Symbol		Denotes
	=	Revision
	=	Moved/incorporated
	=	New/expanded
	=	Deletion
1.2.3.4.(5)	=	2012 Building Code Reference

# Electric Vehicle Charging Requirements

The following slides describe changes to the 2012 Building Code relating to Electric Vehicle Charging requirements.

The effective date is January 1, 2018.



# Division A

## 1.4.1.2.(1)(c)

### **Electric Vehicle Charging**

### **Definitions**

New definition of electric vehicle supply equipment added:

*Electric vehicle supply equipment* means electric vehicle supply equipment as defined in Rule 86-100 of the Electrical Safety Code adopted under Ontario Regulation 164/99 (Electrical Safety Code) made under the *Electricity Act, 1998*.



# Division B

## 3.1.21. and 9.34.4.

### **Electric Vehicle Charging**

#### **Part 3 and Part 9 requirements:**

- Electric Vehicle Charging – Subsection 3.1.21.
- Electric Vehicle Charging – Subsection 9.34.4.





## Division B

### 3.13.1.21.1.(1) and 9.34.4.1.(1)

## Electric Vehicle Charging

### Sentences 3.1.21.1.(1) and 9.34.4.1.(1):

Except for *houses* and apartment *buildings*, if vehicle parking spaces are located within a *building*, not less than 20 per cent of the parking spaces must be provided with *electric vehicle supply equipment* installed in accordance with Section 86 of the *Electrical Safety Code*.



## Division B 3.1.21. and 9.34.4.

### Electric Vehicle Charging

#### Sentences 3.1.21.1.(2) and 9.34.4.1.(2):

Except for *houses* and apartment *buildings*, the remaining 80 per cent of parking spaces located in a *building* must be designed to permit future installation of *electric vehicle supply equipment* that conforms to Section 86 of the *Electrical Safety Code*.



## Division B

### 3.1.21.1.(3) and 9.34.4.1.(3)

## Electric Vehicle Charging

### Sentences 3.1.21.1.(3) and 9.34.4.1.(3):

Every *house* served by a garage, carport or driveway, shall be provided with:

- (a) a minimum 200 amp panelboard,
- (b) a conduit that is not less than 27 mm trade size and is equipped with a means to allow cables to be pulled into the conduit, and
- (c) a square 4-11/16 in. trade size electrical outlet box.



## Division B

### 3.1.21.1.(4) and 9.34.4.1.(4)

## Electric Vehicle Charging

### Sentences 3.1.21.1.(4) and 9.34.4.1.(4):

The 4-11/16 in. trade size electrical outlet box referred to in sentence (3) shall be installed in the garage or carport or adjacent to the driveway.



## Division B

### 3.1.21.1.(5) and 9.34.4.1.(5)

## Electric Vehicle Charging

### Sentences 3.1.21.1.(5) and 9.34.4.1.(5):

The electrical conduit and square electrical outlet box referred to in sentence (3) shall provide an effective barrier against the passage of gas and exhaust fumes.



## Division B

### 3.1.21.1.(6) and 9.34.4.1.(6):

## Electric Vehicle Charging

### Sentences 3.1.21.1.(6) and 9.34.4.1.(6):

The requirement to install the panel board conduit and outlet box described in sentence (3) does not apply to a house if it:

- (a) is not connected to a distribution system, as defined in subsection 2(1) of the *Electricity Act, 1998*, or
- (b) is used or intended to be used as a seasonal recreational *building* described in Section 9.36.

# Water Pipe Sizing Requirements

The following slides describe changes to the 2012 Building Code relating to water pipe sizing.

The effective date is January 1, 2018.



# Division A

## 1.4.1.2.(1)(c)

### **New definition of *House* is added**

*House* means a detached house, semi-detached house or row house containing not more than two *dwelling units*.

The Building Code has been amended to incorporate the new definition of *house* throughout. These are amendments to various provisions that were only applicable to single *dwelling units*. The provisions have been amended to include *houses* that contain one or two *dwelling units* where applicable.





# Division A

## 1.4.1.2.(1)(c)

### Definitions

The definition of *private sewer* in Clause 1.4.1.2.(1)(c) of Division A of the Regulation is amended for clause (d) and (f) as follows:

Clause (d) has been revised:

- **a sewer that carries only the sanitary waste or *storm sewage* from semi-detached houses each containing not more than two *dwelling units*,**

Clause (f) has been revised to replace the term 'single family residence' with *dwelling unit*:

- **a sewer that carries only the sanitary waste or *storm sewage* from a row housing complex having five or fewer *dwelling units*.**



## Division B

### 7.5.5.5.(2)

## Provision for Future Installations

**Replacement of terms “building” and “single family dwelling” with “house”:**

- Requirement for a 1-1/2” *vent pipe* to be extended from the *basement* to the upper-most *storey* where a *plumbing system* is installed in a *house* for the provision of future plumbing connections.



## Division B

### 7.6.1.4.(1)

## Shut-off Valves

### Updated terminology:

- In the requirement for a shut-off valve, **single family dwelling** is replaced by **house** containing not more than one dwelling unit.
- This provision applies only to a house with one dwelling unit.
- Shut off valves are required in both dwelling units if a house contains two dwelling units.



## Division B

### 7.6.3.4.(5)

## Water Service Pipe Size

- Sentence (5) will now address the hydraulic load calculation requirements for *plumbing fixture units* in a residential building containing **more than one dwelling unit**.
- Table 7.6.3.4. is now applicable to water pipe sizing for *buildings* containing **more than one dwelling unit**.



## Division B

### 7.6.3.4.(6)

#### Water Service Pipe Size

- A new sentence is incorporated to address minimum incoming water service pipe *size* for a *house* containing only one *dwelling unit*.
- The intent is to avoid oversizing of the incoming water service pipe when a house contains **only one** *dwelling unit*.
- Minimum pipe *size* 3/4”.
- Calculation of hydraulic load is set to not more than 26 *fixture units* when sizing the *water distribution system*.

# Gravelless Leaching Chambers

The following slides describe changes to the 2012 Building Code relating to gravelless leaching chambers.

The effective date is January 1, 2018.



# Division A

## 1.4.1.2.(1)(c)

### Definitions

The Building Code definitions for *absorption trench*, *chamber*, *distribution box*, *leaching bed*, *leaching bed fill*, *shallow buried trench* and *Type A dispersal bed* are amended to reflect the inclusion of requirements for leaching chambers.



# Division A

## 1.4.1.2.(1)(c)

### Definitions

- New definition of *leaching chamber* added.
- The *leaching bed* definition now incorporates “leaching chamber” as well as the existing reference to *distribution pipe*.
- The definition of *leaching bed fill* has been amended to include “leaching chamber” as well as the existing *distribution pipe*.





# Division A

## 1.4.1.2.(1)(c)

### Definitions

- *Shallow buried trench* definition amended to incorporate “leaching chamber”.
- *Type A dispersal bed* definition amended to incorporate “leaching chamber”.



## Division B

### Table 1.3.1.2. and Article 8.7.2.3.

#### Referenced Standards

- New referenced standard for plastic *leaching chambers* has been added to the existing Table 1.3.1.2. of Division B.
- Issuing agency is IAPMO (International Association of Plumbing and Mechanical Officials).
- Document number is PS 63-2014.
- Code Reference to the Standard points to sentence 8.7.2.3.(3).



## Division B

### 8.2.1.6.(2) and Table 8.2.1.6.B.

## Clearances for Class 4 or 5 Sewage System

- Sentence 8.2.1.6.(2) and Table 8.2.1.6.B. amended to include the clearances for *leaching chambers* as well as distribution piping for a Class 4 or 5 *Sewage System*.



## Division B

### 8.6.1.3.

## Pumps and Siphons

- Sentence 8.6.1.3.(1) is amended to include *leaching chamber*.
- Article 8.6.1.3 is amended by adding the new sentences (1.1) and (5). The change requires dosing of the effluent for a *chamber system* when the length exceeds 150 m and that an alarm to be installed in the pump chamber to prevent a malfunction from going unnoticed.



## Division B

### 8.7.2.3.

## Leaching Chambers within Leaching Beds

New Article added to address *leaching chambers* as a method of distributing effluent:

- 8.7.2.3. Leaching Chambers within Leaching Beds.
- *Leaching chamber* design criteria are described within this Article.



# Division B

## 8.7.3.1.A

### Length of Leaching Chamber

New Article added to Subsection 8.7.3. to address the length of the leaching chamber:

- 8.7.3.1.A Length of Leaching Chamber.
- This Article describes calculation methods for *leaching chambers*.



## Division B

### 8.7.3.2.(1)(d)

## Absorption Trenches

- Clause 8.7.3.2.(1)(d) has been amended to describe the minimum centreline dimensions for *absorption trenches* related to Type I and Type II *leaching chambers*.



## Division B

### 8.7.3.2.(1)(f)

## Absorption Trenches

- Clause 8.7.3.2.(1)(f) is amended to include a *leaching chamber*.





## Division B

### 8.7.3.3.(6)

## Distribution Pipe

- Article 8.7.3.3. is amended by adding a new sentence (6), to exclude from that Article *distribution pipe* within a *leaching chamber*.



## Division B

### 8.7.3.4.

## Leaching Chamber

Subsection 8.7.3. is amended by adding the new Article 8.7.3.4. “Leaching Chamber” to address *leaching chamber* construction requirements.



## Division B

### 8.7.4.2.(1)(b) and 8.7.4.2.(3)(b)

#### Construction Requirements

- The proposed change amends Clause 8.7.4.2.(1)(b) and 8.7.4.2.(3)(b) by prescribing the limits of *leaching bed fill* for leaching chambers.
- The purpose is to ensure that there is existing *soil* at the site where the *leaching bed* is to be constructed.



## Division B

### 8.7.4.2.(7) and 8.7.4.2.(8)

#### **Construction Requirements**

- Sentence 8.7.4.2.(7) is amended to include *leaching chamber*.
- Sentence 8.7.4.2.(8) is amended to include *leaching chamber*.



## Division B

### 8.7.5.3.

#### Filter Beds – Construction Requirements

- Sentence 8.7.5.3.(2) is amended to include *leaching chamber* as well as describing the maximum centreline spacing based on the distribution method.
- Sentence 8.7.5.3.(3) is amended to include filter medium depth requirements for *leaching chambers*.
- Sentence 8.7.5.3.(5) is amended to include *leaching chambers* in the filter bed separation requirements.
- Sentence 8.7.5.3.(7) is amended to include *leaching chambers* in the vertical clearance distance requirements.



## Division B

### 8.7.6.1.

## Shallow Buried Trench – Construction Requirements

- Sentence 8.7.6.1.(5) is amended to include *leaching chambers* in the cross-sectional centre point height requirements.
- Sentence 8.7.6.1.(6) is amended to state that *leaching chambers* shall contain only one pressurized *distribution pipe*.



## Division B

### 8.7.7.1.

## Type A Dispersal Beds – Construction Requirements

- Subclause 8.7.7.1.(4)(c)(i) is amended to *include leaching* chambers in the stone layer area calculations.
- Clause 8.7.7.1.(5)(a) is amended to include *leaching chamber* in the sand layer extension calculations.
- New sentence 8.7.7.1.(6.1) is added to address the design and construction requirements for *leaching chambers* used in a *Type A Dispersal Bed*.



## Division B

### 8.7.7.1. Continued

## **Type A Dispersal Beds – Construction Requirements**

- Sentence 8.7.7.1.(7) is amended to reference the new design and construction requirements for leaching chambers used in a Type A Dispersal Bed.
- New sentence 8.7.7.1.(8.1) is added to address the limit of effluent distribution area.



# Summary of Effective Dates for Interim Building Code Amendments

**2017**

Long-Term Affordable Housing Strategy Changes

**In-effect date: July 1, 2017**

- establishing a specific occupancy classification and construction standards for retirement homes
- amendments regarding houses with secondary suites that are intended to increase the affordability of secondary suites in newly constructed houses

**2018**

Climate Change and Environmental Changes

**In-effect date: January 1, 2018**

- water pipe *size* requirements
- electric vehicle charging requirements for homes and workplaces
- On-site sewage gravelless *leaching chambers*

# More Information

- [www.ontario.ca/BuildingCode](http://www.ontario.ca/BuildingCode)
- Sign up for [Code News](#)
- Follow the Ministry of Municipal Affairs on [Twitter](#)
- Buy the Building Code from [Publications Ontario](#) or view on [e-Laws](#) (O. Reg. 332/12 as amended)
- Contact your [local municipality](#)
- [Contact the Building and Development Branch](#) at [codeinfo@ontario.ca](mailto:codeinfo@ontario.ca) or by dialling 416-585-6666 (TTY 1-866-220-2290 for the hearing impaired)