



netzero
home

The ultimate standard for comfort and efficiency

Building & By-Law Division

Department of Planning, Development and Recreation

In this edition:

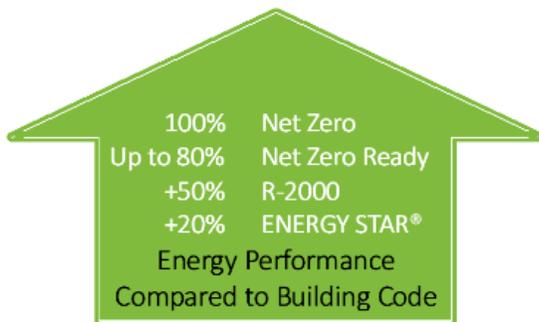
- ❖ OBC AMENDMENTS JAN 1, 2018
- ❖ LOT GRADING
- ❖ BUILDING PERMIT FEE REVIEW
- ❖ SOIL BEARING CAPACITY REVIEW
- ❖ DID YOU KNOW? (NEW)
- ❖ STAFF SPOT LIGHT

December 2017

CodeTECH Newsletter

Volume III

The Ontario Building Code continues to be a vehicle for the energy efficiency mandate in residential housing; ever increasing requirements to the Code are to be expected as the Province strives towards Net Zero Home by the year 2030.



This edition of the CodeTECH Newsletter will provide you with some updates on some upcoming Building Code amendments that will be taking effect on January 1, 2018. Furthermore, it is expected that additional amendments could be released on 6 – 12 month intervals. Increased energy efficiency type amendments can be expected in the next four to five years including; Grey water re-use, water conservation, energy efficiency requirements for renovations, increased continuous insulation, triple-pane windows and sliding doors, air leakage testing to name a few.

Lot Grading has been an issue that has caused some concern in the past and City Staff have been working closely together to develop an efficient way to address this issue. We met with some local contractors and home builders at a recent Building Industry Liaison Advisory Committee (BILAC) to discuss Lot Grading; a communiqué will be sent out shortly.

The BILAC meeting was well attended and we encourage you to participate in these quarterly meetings when your work schedules allow, as these meetings are a valuable tool to increase communication between the Building Industry Community (Contractors, Designers and Developers, etc.) and the Building & By-Law Division and to receive feedback from all stakeholders.



On behalf of everyone in the Building & By-Law Division, we wish you a very prosperous and Happy New Year.

OBC AMENDMENTS – JANUARY 1 ST, 2018:

New changes to the Ontario Building Code will see the introduction of Electrical Vehicle Charging. There will be a new definition added to the Code.

Electric vehicle supply equipment means electrical 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.

Non-Residential Buildings:

If vehicle parking spaces are located within a building, not less than 20% of the parking spaces must be provided with *electrical vehicle supply equipment* and installed in accordance with Section 86 of the Electrical Safety Code. The remaining 80% of the parking spaces must be designed to permit future installation of *electric vehicle supply equipment* (rough-in).



Houses:

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

- A minimum 200 amp panel board;
- A conduit that is not less than 27mm trade size and is equipped with a means to allow cables to be pulled into the conduit; and
- A square 4 11/16" trade size electrical outlet box.

The electrical outlet box shall be installed in the garage, carport or adjacent to the driveway and shall be an effective barrier against the passage of gas and exhaust fumes.

*How this will affect you: Beginning on January 1, 2018, all Building Permit applications will be required to comply with the new requirements for electrical vehicle supply equipment. Building Officials will only be inspecting these items at the **Framing Inspection**. Therefore, ensure that the proper installation is completed prior to scheduling an inspection. Please consult with your electrician for further details.*

LOT GRADING:



Proper lot grading and drainage is important to ensure surface water flows away from a building's foundation to a suitable outlet. Improper lot grading can result in ponding, settlements, basement dampness, insurance claims and conflicts between owners of neighbouring properties.

The Infrastructure Planning Division of the Municipal Works Department is responsible for approving the Lot Grading Plans prior to the issuance of a Building Permit; the Building Division has been working closely with Municipal Works in an effort to help streamline the process. Building Permit applications will require greater detail concerning Lot Grading. More specifically, submissions will require the following geodetic elevations on both a Grading Plan and on a Wall Section, referenced to a Plan of Subdivision or Lot Grading Plan:

- Top of Foundation Wall;
- Finished Grade at Foundation Wall;
- Top of Footing;
- Underside of Footing.

How this will affect you: The Building Division will circulate upon Building Permit application, to Municipal Works for their review and comments. Their reviewed drawings will be attached to your Building Permit. Once the excavation is completed the developer will submit an "as-built" certificate to Municipal Works. This certificate is to be completed by a Professional Engineer, Ontario Land Surveyor or Certified Engineering Technician attesting compliance with the approved Grading Plans. Variances will require a solution to revise the drainage, prepared by a Professional Engineer.

BUILDING PERMIT FEES REVIEW:

The Building & By-Law Division provides a very important service to the Public by ensuring that all buildings being constructed or renovated meet the requirements of the Ontario Building Code (OBC). The Code is essentially a set of minimum provisions respecting the safety of buildings with reference to public health, fire protection, accessibility and structural sufficiency. The primary purpose of the Code is the promotion of public safety through the application of appropriate uniform building standards. As with all services one piece of the puzzle is the fee associated with providing this service.

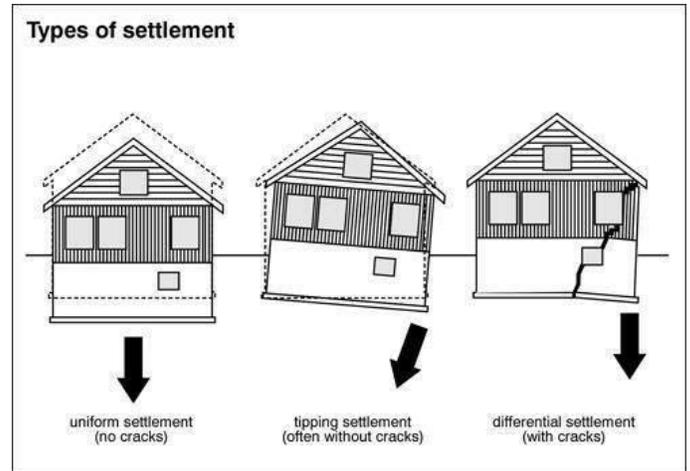


A significant review of Building Permit fees was last conducted in 2011. As the result, fee increments were implemented to increase cost recovery. The general tax base has increasingly been offsetting costs associated with administering and enforcing the Ontario Building Code and Building Code Act. The Building Permit Fee review will examine direct and indirect costs in delivering this service, and will establish a cost recovery fee structure. This new fee structure will be competitive with our regional municipal counterparts.

How this will affect you: The Building & By-Law Division will be undergoing a review of all direct and indirect costs associated with delivering the services required to administer and enforce the Building Code Act within the City of Cornwall. The review will be conducted in early 2018; Building Permit fees will be impacted as necessary to strike balance between revenues and operational expenditures.

SOIL BEARING CAPACITY REPORT:

In geotechnical engineering, bearing capacity is the measure of soil capacity to support the loads applied to the ground. The ability of the soil to support the super imposed load without excessive settlement or failure is called bearing capacity.



The Ontario Building Code requires that all foundations bear on stable undisturbed soil with an allowable bearing capacity of 75 kPa or greater. In the event that the allowable bearing capacity is determined to be below 75 kPa, then the footings and foundations are required to be designed by a Professional Engineer.

How this will affect you: Beginning on March 1, 2018, all new construction will require a soil bearing capacity report prepared by a Geotechnical Engineer, and submitted to the Building Official prior to the pouring of concrete footing. As per the Ontario Building Code, a bearing capacity below 75 kPa requires footings and foundations to be professionally engineered.

DID YOU KNOW?:

This is new section in the CodeTECH newsletter that will focus on a particular code requirement in the Ontario Building Code (OBC). The intention is to provide insight on common Code related matter that is often the subject of misinterpretation.

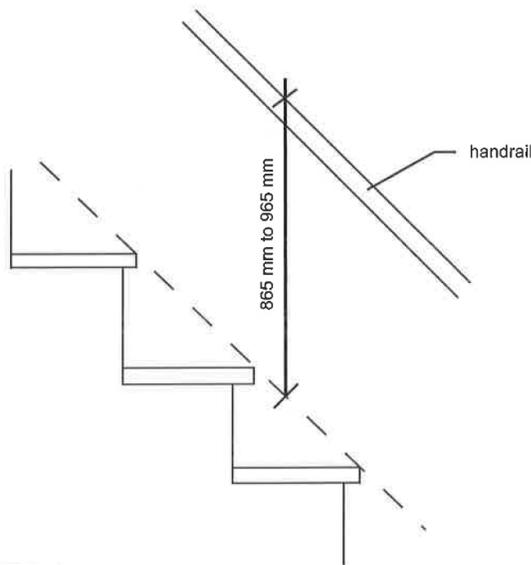
9.8.7.4. Height of Handrails

- (1) The Height of handrails on stairs and ramps shall be measured vertically from the top of the handrail to,
 - (a) a straight line drawn tangent to the tread nosings of the stair served by the handrail, or

(b) the surface of the ramp, floor or landing served by the handrail.

(2) Except as provided in Sentences (3) and (4), the height of the handrails on stairs and ramps shall be,

- (a) not less than 865 mm (34"), and
- (b) not more than 965 mm (38").



9.8.7.4. Height of Handrails

The height of a handrail serving a stair should be not less than 865 mm and not more than 965 mm above a straight line drawn tangent to the tread nosings of the stair served by the handrail to the top of the handrail.

(3) Where guards are required, handrails required on landings shall be not more than 1070 mm (42") in height.

(4) Handrails installed in addition to required handrails need not comply with Sentence (2).

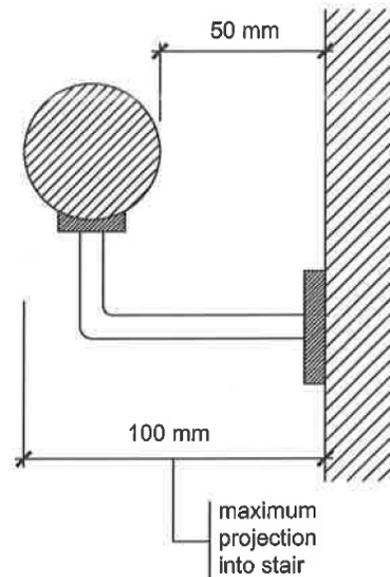
9.8.7.5. Ergonomic Design

(1) A clearance of not less than 50 mm (2") shall be provided between a handrail and any surface behind it.

(2) All handrails shall be constructed so as to be continually graspable along their entire length with no obstructions or above them to break a handhold, except where the handrail is interrupted by newels at changes in directions.

9.8.7.6. Projections into Stairs and Ramps

(1) Handrails and projections below handrails, including handrail supports and stair stringers, shall not project more than 100 mm (4") into the required width of a stair or ramp.



How this will affect you: Common misconception is that the height can be measured anywhere along the depth of the stair tread, Ensure that handrails are installed between 34" and 38" measured from the edge of the nosings as illustrated in the sketch. Also note the height of the railings is taken from the top of the handrail.

STAFF SPOTLIGHT:

LYNNE BEAUCHAMP



As a Building Permit Clerk with the City of Cornwall for over 8 years, Lynne is typically hard at work preparing Building Permits, notifying applicants when permits are ready to be picked up and compiling statistical data for the numerous reports to the various levels of government that the By-Law & Building Division is required to complete each month. Lynne enjoys participating in Zumba in her free time. Make sure to say hi to Lynne when you are dropping into our offices when picking up your permits.