

Questions and Answers Questions et réponses



Ministry of
Municipal Affairs
and Housing

Ministère des
Affaires municipales
et du Logement

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Ontario Regulations 349/06 and 350/06 *Introduction of the 2006 Building Code*

1. What is the Building Code?

The Building Code is a regulation under the *Building Code Act, 1992*. It sets out technical requirements for, and applies to new construction, renovation and change of use of buildings, but does not generally apply retroactively to existing buildings.

Among other things, the Building Code regulates fire safety, structural requirements, energy efficiency, resource conservation, mechanical systems including plumbing, accessibility and sewage systems. The Building Code also includes certain building safety requirements for electrical systems, elevators and escalators, however the design requirements of these systems are found in the Electrical Safety Code, and regulations under the *Technical Standards and Safety Act* respectively.

The Building Code does not generally regulate fire safety in existing buildings, except in the case of unsafe buildings, as these requirements are set out through the Fire Code under *the Fire Protection and Prevention Act*. Requirements related to natural gas distribution, boilers or pressure vessels are set out through regulations under the *Technical Standards and Safety Act*.

2. What are the highlights of the new Code?

The new Code is written in an objective-based format in order to promote innovation and flexibility in design and construction. It is also the first Ontario Regulation to be written in an objective-based format. The new Code will also include over 700 technical changes from the 1997 edition. Some of the important changes include:

- Significantly increasing the energy efficiency of buildings,
- Making buildings more accessible,
- Facilitating the construction of small care homes, and
- Making small building, especially houses, easier to design and build.

3. Why introduce a new Code?

The current version of the Building Code dates from 1997. A new Building Code addresses the need to recognize changes in construction technologies, methods, and products since that time. The adoption of an objective-based format will further promote innovation and flexibility in design and construction.

Additionally, many of the changes will increase the level of harmonization between Ontario's Code and those in other Canadian jurisdictions, which will help builders, designers and manufacturers seeking work and sales in other parts of Canada.

Changes support Code objectives of public health and safety, fire protection, structural sufficiency, conservation and environmental integrity, and barrier-free accessibility. Other technical changes support Ontario's policy priorities such as energy efficiency, environmental integrity and barrier-free accessibility..

4. What is an objective-based Code? What are the advantages of this format?

Existing Codes are prescriptive - they describe "what" you have to do. The new objective-based Code adds the desired result or "why". For continuity the objective-based Code continues to contain prescriptive requirements known as "acceptable solutions" but these are linked to the higher "objectives" of the Code. Designs and proposals that meet the objectives are considered "alternative solutions".

The advantages of the objective-based Code approach include:

- Increased consistency in the application of the Code,
- Encouraging innovation in design and construction,
- Providing greater certainty for building officials to accept innovative design than the current equivalency powers, and
- Retaining the prescriptive technical requirements assures certainty and continuity since disruption will be minimized and no additional expertise will be required if existing prescriptive requirements are used.

5. What are the objectives of the new Code?

The objectives of the new Code are safety, health, accessibility, fire protection, structural sufficiency, water and sewage protection, resource conservation (including water and energy conservation), environmental integrity and conservation of buildings.

6. What is the structure of the new Code?

The new Code is made up of three divisions:

- Division A outlines compliance, objectives, functional statements and attribution to “acceptable solutions”;
- Division B sets out the “acceptable solutions” (i.e., most of the prescriptive requirements found in Parts 3 – 11 of the 1997 Code) and addresses energy efficiency (in Division B, Part 12); and
- Division C establishes administrative provisions.

7. What is the relationship between the Ontario’s Building Code and the Model National Building Code of Canada?

Under the Canadian constitution building regulation is a provincial responsibility. However, the federal government, through the National Research Council and Canadian Commission on Building and Fire Codes, produces the Model National Building Code and the Model National Plumbing Code.

As model codes, provinces and territories either partially or wholly adopt these model codes as regulations in their jurisdiction, or they can choose to have their own code and seek to harmonize as much as possible with the model codes and the codes of other provinces and territories.

Ontario chooses the latter approach to promote both regulatory harmonization and to permit Ontario to pursue its own policy priorities, such as energy efficiency, environmental integrity and barrier-free accessibility.

8. When does the new Code take effect?

In general, the next edition of the Building Code would come into force on December 31, 2006. In the addition, the Building Code contains a transition provision with respect to permits issued before December 31, 2006, and where the working drawings, plans and specifications are substantially completed before December 31, 2006, and an application for a permit is made before March 31, 2007..

The effective nine month transition to the new Code – a longer period than usual – will allow Code users such as building officials, builders designers and manufacturers time to become familiar with the objective-based format and the new technical provisions.

Some of the provisions dealing with energy efficiency are phased-in over time:

- On December 31, 2008, the Building Code will require that basement insulation in new houses extend down to 15 inches above the basement floor (near-full height basement insulation).

- On December 31, 2011, the Building Code will require new houses to meet standards that are substantially in accordance with EnerGuide 80. The Building Code will also require that new non-residential and larger residential buildings meet standards that are substantially in accordance with energy efficiency levels that are 25% higher than the model National Energy Code for Buildings.

A separate transition regulation that amends the current (1997) Building Code to promote the use of certain green technologies, create more flexibility in the construction of small care homes, and update the list of applicable law came into effect on June 28, 2006.

9. What changes are included to increase barrier-free access?

The barrier-free changes include the following:

- At least 10% of residential suites in apartment buildings and hotels require a barrier-free path of travel from the suite entrance door to the doorway of at least one bedroom and one bathroom;
- Increased minimum width ramps and landings in a barrier-free path of travel and limit the maximum width;
- Provision for interior barrier-free paths of travel to all floors;
- Increased minimum width of a doorway in a barrier-free path of travel;
- Requirement for the international symbol of accessibility for disabled persons to indicate the location of "barrier-free" ramps serving a building;
- Provision for minimum requirements for power door operator controls;
- Requirement for power door operators on doors equipped with self-closing devices that serve a special washroom;
- New requirements for barrier-free showers and bathtubs; and
- Walls of at least one bathroom in all dwelling units are required to be reinforced to permit the future installation of a grab bar.

10. What changes are included to facilitate the construction of small care homes?

The changes on care homes, which took effect on June 28, 2006, include the following:

- Clarifying the exemption for small B-3 Care Occupancies that allows them to be treated as Residential Occupancies;
- Providing an exemption for the installation of fire dampers;
- Allowing the use of residential-type fire sprinkler systems;
- Waiving the requirement for certain fire resistance requirements for corridors and sleeping rooms;
- Exempting small B-3 occupancies from the requirements for an institution-width (1650 mm wide) corridor;
- Exempting small B-3 occupancies from the requirements for exit signs; and

- Recognizing lower structural floor loading requirements for corridors.

11. What changes are included that relate to the construction of small buildings, including houses?

The new Code contains provisions that update and simplify construction requirements for small buildings, including houses. For example, the new Code includes tables that allow designers to pick lintels over two-car garages, or double-height stud walls.

12. What changes are included that relate to applicable law?

The changes to the Building Code list of applicable law, which took effect on June 28, 2006, include:

- The addition of new provisions under the *Ontario Heritage Act*;
- An amendment to the wording of the reference to the *Conservation Authorities Act*, and
- The deletion of Section 9 of the *Environmental Protection Act* and provisions under the *Public Hospitals Act* and *Private Hospitals Act*.

13. What energy changes take effect immediately?

Changes to the Building Code that recognize the use of green technologies are effective immediately. Green technologies include:

- Solar photovoltaic systems;
- Gas-fired emergency generators that can contribute to the power grid;
- Active solar hot water systems;
- Wastewater heat recovery systems;
- Rooftop storm water retention;
- Storm water and grey water use; and
- Motion sensors for room and minimum lighting.

14. What energy changes take effect on December 31, 2006?

The Building Code energy changes for houses that will take effect on December 31, 2006 include:

- Increased insulation requirements for foundation walls, above-grade walls, ceilings and windows;
- Requirements for the installation of high-efficiency gas or propane-fired furnaces; and
- Listing EnerGuide 80 as a compliance alternative.

The Building Code energy changes for non-residential buildings and larger-residential that will take effect on December 31, 2006 provide the following options in building design:

- Compliance with the requirements of the Model National Energy Code for Buildings, 1997, with appropriate modifications to increase energy efficiency, or
- Compliance with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE 90.1 – 2004) standard, with appropriate modifications to meet Ontario’s higher efficiency requirements and to accommodate Ontario’s climate.

As of December 31, 2006, the clarification that large wind turbines are classified as “designated structures” under the Building Code will take effect.

15. What energy changes take effect on December 31, 2008?

The Building Code will require that basement insulation in new houses extend down to 15 inches above the basement floor (near-full height basement insulation).

16. What energy changes take effect on December 31, 2011?

The Building Code will require new houses to meet standards that are substantially in accordance with EnerGuide 80. The Building Code will also require that new non-residential and larger residential buildings meet standards that are substantially in accordance with energy efficiency levels that are 25% higher than the model National Energy Code for Buildings.

17. When will the new Code be available?

The new Code was available electronically on e-laws when it was filed with the Registrar on June 28, 2006 and will be published in the Ontario Gazette in mid-July. A link to E-laws will be available from the ministry website.

ServiceOntario will be responsible for printing the 2006 Building Code and related products. It is anticipated that Ontario Regulation 350/06 will be available for purchase in early August from Publications Ontario at a cost of \$35.00. An Office Compendium of the 2006 Building Code will be available in binder and soft cover formats in the fall of 2006. The Compendium will be available for pre-order from ServiceOntario in September, 2006. For more information, please contact ServiceOntario:

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www.publications.gov.on.ca

18. Will the Province be hosting information sessions?

Yes, the Ministry is planning province wide public information sessions on the new Code through July and August. The Ministry invites you to join us at one of the following sessions in Toronto, Windsor, Thunder Bay, Sault Ste. Marie, London, Ottawa or Sudbury. Additional information on these sessions will be available shortly on the Building Code website at www.obc.mah.gov.on.ca.

19. Will the Province be developing additional technical training on the new Building Code?

Yes, in addition to the province wide public information sessions, the Ministry is preparing supportive training in key areas that will be available in Fall, 2006. In particular, the Ministry is preparing objective-based codes transition training to help designers, building officials, builders and other Code users become familiar with the administration and use of the new Code structure. The Ministry also anticipates the updating of existing technical training courses. This training will be developed in consultation with the building community and is expected to be delivered through our existing network of licensed training organizations.

20. Will the new Code require that building officials, designers and septic installers who have passed ministry examinations be “re-qualified”?

There will be no immediate requirement for the re-qualification of building practitioners, including building officials and designers. However, the Ministry will be consulting with stakeholders on the best way to ensure that the currency of Code knowledge is maintained. The Ministry is very aware of the significant efforts that practitioners have put into demonstrating a high level of Code knowledge over the past 3 years, and will work with them to explore the best ways to maintain this level.