

New 2024 Ontario Building Code Changes Effective January 1st, 2025, Information Guide

Major revision to the Ontario Building Code will come into effect January 1st, 2025.

The Ministry of Municipal Affairs and Housing (MMAH) announced a new 2024 Ontario Building Code (OBC) as it was filed on April 10, 2024. The 2024 OBC will be effective Jan. 1, 2025. The current 2012 OBC has been amended 26 times. Along with the efforts of harmonization among Provincial Codes and the National Building Code of Canada (NBC), one of the desired goals is to reduce red tape and construction barriers.

MMAH staff previously advised there are approx. 2400 code changes (from 2012 OBC) in the new 2024 OBC, in part because of the harmonization and code updates. The 2024 OBC changes included the following factors;

- 1. Housing supply and innovation,
- 2. Health and safety,
- 3. Cost.
- 4. Reduce red tape, and
- 5. Better buildings

To help better understand some of the 2024 OBC changes, here are some highlights we noted and wanted to share. This list is not the complete and final list of code changes!

New OBC Requirements

- 1. Division A and C (Administrative Changes)
- New definitions supporting harmonization, update to existing definitions (definition of 'house' removed)
- General Review by a Professional Engineer required for all underpinning
- Where a conditional permit is issued by the Chief Building Official (CBO) and there is an outstanding Record of Site Condition, occupancy is not permitted.
- Clarified that a demolition permit is not required for farm buildings on farmland, but is still required for a dwelling on farmland.

2. Part 2 - Farm Buildings

- Previously reserved, has been replaced by new technical requirements specific to all farm buildings.
 - i. Large farm buildings greater than 600m² in building area or more than 3 storeys in building height, and
 - ii. All other small farm buildings
- New Farm Building Classifications:
 - i. Group G, Division 1 High-Hazard agricultural occupancies
 - ii. Group G, Division 2 Agricultural occupancies not elsewhere classified in Group G
 - iii. Group G, Division 3 Greenhouse agriculture occupancies
 - iv. Group G, Division 4 Agricultural occupancies with no human occupants

3. Part 3 – Fire Protection, Occupant Safety and Accessibility

• Clarification that part 3 design still applies to smaller restaurants that are permitted to be classified as Group E major occupancies

• Fire Safety:

- i. Standpipe connections to be located within the exits,
- **ii.** Fire alarm systems are required to be installed in buildings in which automatic sprinkler systems are installed, and new audibility requirements are introduced for those with hearing impairments
- **iii.** All storeys below a storey which an automatic sprinkler system is required to also be protected by an automatic sprinkler system (superimposed major occupancies)
- **iv.** Mezzanine and interconnected floor space requirements changes to egress, exits, fire compartments, smoke control and travel distance
- v. Minimum illumination levels of 100 to 200 lx are now required for escalators, moving walkways, and controls, with exemptions for internally illuminated signs

Accessibility:

- **i. Barrier-Free Design**: Clarification were made to define areas exempt from barrier-free design and to require all pedestrian entrances into a barrier-free storey to be accessible.
- **ii. Path of Travel**: A direct, barrier-free path must be provided between building entrances, parking areas, loading zones and public thoroughfares (where they are provided)
- **iii.** Accessibility Signage: Expanded requirements for signs, including braille, tactile characters, and symbols of access for hearing loss, to indicate locations of accessible features like entrances, ramps and parking spaces.
- iv. Exterior Walkways and Doors: Wider exterior walks and doorways on barrier-free paths are now required, along with mandatory power door operators for all barrier-free entrances and doors with self-closing devices
- **v. Ramps:** Minimum ramp width increased to 1000mm, with level landings areas of 1700mm by 1700mm required at top and bottom of ramps.
- vi. Assistive Devices and Facilities: Assistive listening systems are now required at service counters, and at least one universal dressing/shower room must be provided where showering facilities are available
- vii. Service Counters and Water Stations: Service counters must have barrier-free section, and water bottle filling stations (if provided) must be accessible and equipped with automatic controls

4. Part 4 – Structural Design

- Updated descriptions for building importance categories, load combinations, and structural dead loads, ensuring alignment with the NBC
- New provisions for determining snow loads on roofs with solar panels and canopies, and clarified wind load requirements for parapets, balcony guards and cladding
- Introduced new seismic hazard values, and added requirements for Cross-Laminated
 Timber shear walls and other structural systems
- Enhanced earthquake design standards for post-disaster buildings, high importance category buildings and normal importance buildings, improving resistance to frequent earthquakes
- Specifies that foundation designs must be conducted by a professional engineer, and updates preservation treatment standards for wood foundations
- Expanded design requirements for air, cable and frame supported membrane structures and introduced a design basis for storage racks and manure storage tanks.

5. Part 5 – Environmental Separation

- Part 5 now clearly addresses the control of condensation, heat transfer, air moisture and sound transmission
- Updated requirements to ensure that building materials separating different environments or exposed to exterior conditions are designed to withstand environmental and structural loads
- New provisions require air barrier systems to minimize radon and soil gas ingress, with stricter standards for air barrier assemblies in contact with the ground
- Harmonized requirements with the NBC to clarify how materials should resist or dissipate heat effectively
- Revised guidelines now aim to "minimize" rather than "prevent" surface water penetration, reflecting a more practical approach to water control
- Adjustments to sound transmission methods and renumbering of standards ensure consistency with the NBC

6. Part 6 – Heating, Ventilation and Air-Conditioning

- Significant renumbering in Part 6 to align with NBC
- New ANSI/ASHRAE 62.1 standards improve indoor air quality, with updated ventilation requirements for garages, crawl spaces, and heat recovery systems
- Expanded fire safety provisions include new requirements smoke detectors, and carbon monoxide alarms in care and residential occupancies
- Maximum surface temperature for exposed piping has been reduced from 70°C to 52°C to prevent burns where human contact is possible
- Vented combustion products must be discharged away from building to prevent re-entry, maintaining minimum distance from various building features
- New requirements for evaporative cooling towers and system to minimize the risk of legionella

7. Part 7 – Plumbing

- Significant renumbering in Part 7 to align with NBC
- Service connections to allow wastewater and rainwater to be diverted to non-potable water systems and non-potable rainwater harvesting systems
- Polyethylene of Raised Temperature (PE-RT) and Cellular Core PVC have been added as new acceptable plumbing materials
- Reduced the maximum water temperature from 49°C to 43°C in health care facilities and seniors' residences
- Air admittance valves to be located not less than 100mm above the fixture drains being vented.
- Require hot water temperature control devices in childcare centres
- Vent terminal to be a minimum setback of 1.8m to a property line

8. Sewage Systems

- Significant renumbering in Part 8 to align with NBC
- The referenced standard CSA B66 for prefabricated septic and sewage holding tanks
 has been updated to the 2021 edition, now requiring a secondary safety screen beneath
 tank covers to enhance public health and safety
- A new clause allows the use of copper-clad steel light-colored plastic-coated tracer wire to aid in locating the header line and leaching chambers
- The outermost distribution pipe or leaching chamber in filter beds must be located no more than 600 mm from the perimeter of the area, clarifying construction requirements
- Where underlying soil has a percolation time exceeding 15 minutes, the sand layer must extend using suitable materials to ensure proper drainage, extending at least 15m beyond the perimeter

9. Part 9 – Housing and Small Buildings

- Previously defined term "house" has been replaced with the new defined term
 "Secondary suite" or variations such as "a house with a secondary suite" or "individual dwelling unit"
- Two new sentences that permit minimum ceiling heights of 1.95m for secondary suites with clear heights of 1.85m under beams and ducts and over stairs
- A new article that prohibits open stair risers in Part 9 buildings with a few exceptions (dwellings still permitted)
- The triangular openings formed by stair risers, stair treads and bottom elements of a required guard shall be of a size that prevents the passage of a 150mm diameter sphere
- Expanded the scope of 9.10.9 to include fire separations between rooms and spaces in buildings and smoke-tight barriers in houses with a secondary suite
- Expanded Continuous barriers to provide further clarity for the construction of fire separations and smoke tight barriers to ensure the continuity of the separation or barrier is not compromised
- Separation of residential suites has been amended to require the separation between dwelling units in a house and their common spaces with a secondary suite to be constructed as a smoke-tight barrier of not less than 15.9mm Type X gypsum board, in lieu of a 45-minute fire separation
- Where a soffit projection is less than 1.2m from a property line, they shall be protected

- Fire blocking exempted in concealed wall spaces filled with insulation
- Permits wireless technology to be used for the interconnection of smoke alarms in a house with a secondary suite
- Radon rough-in for subfloor depressurization is now required in all new homes
- Additional requirements for anchorage of building frames where braced wall panels are required
- Additional criteria for an air barrier to prevent air leakage from the exterior ground
- New terminology such as "non-heating season ventilation" and "heating season
 mechanical ventilation" are introduced. Sufficient ventilation to be provided during non-heating
 season using either natural or mechanical ventilation. Every house with electrical
 power must be provided with a mechanical ventilation system during the heating season
 and equipped with a principal exhaust system, supplemental exhausts and protection
 against depressurization.
- Limits to the interconnection of air distribution systems in a house with a secondary suite
- Windows 1800mm above adjacent floors need to be 900mm above the finished floor or are required to be unopenable (previously 480mm)
- Insulation to be installed over the full height of foundation walls enclosing a basement or heated crawlspace (previously 200mm gap accepted)

10. Part 10 – Change of Use and Part 11 - Renovation

- Amended to clarify that it is a change in major occupancy when a farm building or part
 of a farm building is changed to another major occupancy other than Group G major
 occupancy
- New clauses specify that when changing to a Group B, Div. 2 or 3 occupancies, HVAC and filtration systems must conform to the requirements of Sentence 6.2.1.1.(1) Good Engineering Practice

11. Part 12 – Resource Conservation and Environmental Integrity

The energy efficiency requirements remain unchanged in the 2024 OBC

Timing and Transition

The new 2024 OBC is effective on Jan. 1, 2025. In some cases, where the construction documents were substantially complete on or before Dec. 31, 2024, an additional 3 months is provided, and applications may be filed on or before March 31, 2025. The 1997 and 2006 OBC's had very similar transition periods where additional time was provided where the construction documents were substantially completed before the effective date of the new Code. i.e. some new buildings and additions.

A consolidated 2024 OBC Compendium (Volume 1 and 2) version is available. https://www.publications.gov.on.ca/301540

Any Questions?

Phone: 705-653-1900

Web: https://www.trenthills.ca/ Address: 66 Front St. S, Campbellford ON