Ontario Building Code

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TODAY’S AGENDA

- The legislation governing building in Ontario
- Strategies for success in the permit application & inspection processes
- Using & applying the Building Code (Ontario)

FIRST SESSION

- The Building Code Act & the OBC: An overview
- Permit applications & inspections
Building Code Act & the Building Code

WHY IS IT IMPORTANT TO US?
- Protects health & safety of people
- Enables construction to happen
- It is the law

ONTARIO BUILDING LAWS
- Building Code Act
- OBC
- Municipal Bylaws
- Referenced Standards

DECISION MAKERS
- Ontario Legislature (Building Code Act)
- MMAH (BC content & amendments)
- Local CBO (Application of BCA & OBC)
- BCC (Disputes over application of OBC)
- Ontario Courts (Disputes over compliance with BCA)
**Building Code Act:**

**What does it do?**
- Holds municipalities accountable & establishes CBO as authority having jurisdiction
- Prohibits illegal building & occupancy
- Establishes the powers of municipal building officials & the rules they must operate by
- Provides remedies for concerns about official’s actions
- Specifies offenses and penalties
- Provides for the OBC & very limited municipal administrative by-laws
- Establishes the BCC & BMEC

**Building Code Act**

**What is a Building?**
- A structure greater than 10 m² in area consisting of a wall, roof or floor, or a structural system serving that function
- A structure less than 10 m² in area which contains plumbing,
- Plumbing or a sewage system alone, or
- Other structures designated in the Code

**Act Reference:** 1.-(1)

**Specific identification of “principal authority” examples are:**

- a) The Crown,
- b) The council of a municipality
- c) An upper-tier municipality that has entered into an agreement under subsection 3(5), 6.1(1) or 6.2(1),
- d) A board of health that has been prescribed for the purposes of subsection 3.1(1), or has entered into an agreement under subsection 6.1(2) or (3) or 6.2(2),
- e) Etc.

**Definition:** 1.-(1)
What constitutes a “Designated Structure”? 

- Retaining walls (>1m high in public areas)
- Sign structures
- Structure that supports wind turbine
- Pedestrian bridges (attached to building)
- Crane runways
- Some exterior storage tank supports
- Antennae/collectors (>5m2 on a building)
- Public pools (>3.5m deep)

**Code Reference:** Division A, 1.3.1.1

Act provides options for municipalities relating to the performance of plan review and/or inspections by Registered Code Agency:

1. Enforcement
2. Appointment

**Act Reference:** 4.2.- (1), (2)

CERTIFICATES

Three new certificates identified in Act.

1. Change certificate
2. Final certificate
3. Plans review certificate

**Act Reference:** 1.- (1) definition
**Building Code Act**

**Who is Accountable?**

- The council of each municipality is responsible for the enforcement of the Act, and shall appoint a chief building official (CBO) and such inspectors as are necessary for its enforcement.

*Act Reference: 3.-(1), 3.-(2)*

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**Code of Conduct**

- Principal Authority shall establish and enforce a code of conduct for the Chief Building Official and Inspectors.

*Act Reference: 7.1-(1)(2)(3)(4)*

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**Building Code Act**

**Prime Directive**

- CBO must issue a building permit or a change of use permit if it complies with applicable law.

*Act Reference: 8.- (2), 10.- (2)*
Building Code Act

Revocation of Permits

CBO may revoke a permit if:
- Issued on the basis of false information
- Work doesn’t start after 6 months or is suspended after starting for >1 year
- Issued by mistake
- Any term of a conditional permit agreement not complied with

Act Reference: 8.- (10)

Building Code Act

Disputes & Appeals

- CBO, RCA or inspectors decisions regarding BC technical requirements may be appealed to the Building Code Commission
- Any affected person may appeal CBO or inspectors decisions to Court within 20 days of action or decision. This appeal automatically terminates any BCC hearing
- Minister may conduct inquiry into any failure in enforcement of the Act or code.

Act Reference: 24.- (1), 25.- (1), 30.- (1)

Building Code Act

Offences

- Knowingly furnishing false information in an application, certificate or any statement
- Failing to comply with an Order
- Contravening the Act, the code, or the authorized municipal building by-law
- Contravening a condition of a CBO’s acceptance of an equivalent material, system, or design

Act Reference: 36.- (1)
Building Code Act

Referrals to OAA and PEO

- CBO or RCA as applicable may send permit application drawings to OAA or PEO if reasonable grounds exist to believe that professional regulations being contravened.
- CBO must release drawings if requested by OAA or PEO.

Act Reference: 8.- (9)

Building Code Act

Municipal By-laws (1)

- Municipality is empowered to pass by-laws prescribing building permit administrative requirements only. ("the building by-law")

Act Reference: 7.- (1)

Building Code Act

Municipal By-laws (2)

- May prescribe administrative standards:
  - Classes of permits
  - Application forms
  - Plans & specifications required
  - Fees and Refunds
  - As-built plan requirements
  - Inspection notice requirements
  - Fences around construction sites
  - Appointments of CBO & inspectors

Act Reference: 7.- (1)(a)-(j)
Building Code Act
Municipal By-laws (3)

Act gives OBC exclusive jurisdiction over demolition & construction standards for new buildings. Municipal by-laws have no effect in this area.

Act Reference: 35.-{(1)}

Building Code Act

Mandatory code knowledge testing for designers & building officials.
- Testing/qualification tied to various building types i.e. BCIN or BCDS
- Standardized permit forms
- Restrictions on permit fees
- Building permit time targets for municipalities, plan review & inspections

Building Code Act

- Standardized municipal inspection service levels
- Expanded role of Building Code Commission & Minister’s rulings
- Provision for outsourcing of plan review and inspection to registered agents (RCA)
Introduction to the Code

2012 Code – Objective Based Format

- New Layout – 2 Volumes
  - Volume 1 – 3 Divisions
    - Division A – Compliance, Objectives and Functional Statements, and Definitions
    - Division B – Acceptable Solutions
    - Division C – Administrative Provisions
  - Volume 2
    - Attribution Tables
    - Supplementary Standards (previously Supplementary Guidelines)
- Still to be released
  - Application and Intent statements – 2015?

Objective Based Code - Division A, 1.2.1.1

1. Compliance with Division B shall be achieved,
   a) by complying with the applicable acceptable solutions in Division B, OR
   b) by using alternative solutions that will achieve the level of performance required by the applicable acceptable solution in respect of the objectives and functional statements attributed to the applicable acceptable solutions in the Supplementary Standard SA-1
Application

Parts 3.4.5, & 6 apply to:
- All A, B and F1 buildings, and to C, D, E and F2/3 buildings >600m2 in building area or 3 storeys in building height

Part 9 applies to:
- C, D, E and F2/3 buildings < =600m2 in building area or 3 storeys in building height

Code Reference: Division A, 1.1.2.2., 1.1.2.4.

Existing buildings

- Part 11 applies only to alterations to buildings at least 5 years old
- If an existing building is renovated, the Code generally applies only to parts altered. There are, however, exceptions in Parts 10 and 11 for specific change of uses, increases in hazard and extensive renovations

Code Ref: Division A, 1.1.2.5., 1.1.2.6.(1)

Energy Efficiency

- Except for farms, all buildings must be designed to energy efficient standards
- The architect or HVAC/electrical consultant may be required by the municipality to certify design for Resource Conservation requirements at time of permit application (SB 10)
- Part 9 residential buildings (SB 12)

Code Reference: Division B, 12.2.1.1.
**Change of Use Permits**

- Specifies circumstances where a change of use permit is required, based on major occupancy, even if no construction proposed
- Exemption from change of use permit where a building permit issued

*Code Reference: Div. A, 1.1.2.5. & Div. C, 1.3.1.4.*

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**Site Documents**

- The approved permit drawings and other documents must be kept at the construction site, and the building permit must be posted
- Intention is that consultants, contractors and owner’s representatives have ready access to approved documents on site
- Municipalities retain copy for own use

*Code Reference: Division C, 1.3.2.1 & 1.3.2.2.*

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**Occupancy Permits**

- An occupancy permit is only required if occupancy is necessary while building still unfinished. An occupancy permit is not necessary at the completion of construction of any building
- Minimum completion standards for occupancy are explicitly listed. CBO must issue occupancy permit if minimum criteria met
- Where RCA appointed, CBO must issue occupancy permit after receipt of a "certificate of occupancy" issued by RCA
- New, Part 9 residential buildings require occupancy permit, even if unfinished.

*Code Reference: Div C 1.3.1.1,1.3.2.2 & 1.3.3.4*
**Design and General Review (1)**

- Requirements for professional design and review determined on the basis of occupancy, height and gross or building area.
- Where professional design is required, general review is also mandatory.

*Code Reference: Division C, 1.2.*

**Design and General Review (2)**

- All A (Assembly) and B (Care & Detention) classified buildings must be designed and reviewed by an architect. No exceptions.
- Other occupancies require professional design & review where specific height and gross area exceeded.

*Code Reference: Division C, 1.2*

**Design and General Review (3)**

- No requirement for an architect for interior space partitioning and other alterations in any building where structure, exits, fire separations and exterior walls exist & are unaffected.
- Architects and engineers can do incidental portions of the other’s responsibilities, and may coordinate each other’s work.

*Code Reference: Division C, 1.2*
2012 Building Code

- New 2012 Building Code (O. Reg. 332/12)
- Eff. January 1, 2014
- No transition period
- Binder & online options

The Building Permit Process

What can Architects do to be successful?

Building Permit Success Strategies

1. Be informed. Know the Building Code and the basic obligations of building officials.

3. Confirm code fundamentals early in design development, and incorporate OAA data matrix on final drawings.

4. Review and understand code issues before consulting with building officials.

5. Perform a final coordination check of the work of the consulting team.

6. Do not release incomplete drawings for a building permit submission.

7. Appoint a coordinator to communicate with municipality on behalf of the owner and design team.

8. Visit site regularly, submit report to Building Inspector and include any deviations in construction.
Permit Applications

Architect's Library

- 2012 Building Code Compendium (Publications Ontario)
- Illustrated Guide to the OBC
- National Building Code of Canada
- ULC 'Fire Resistance Ratings' and 'Firestop systems'
- Fire Ratings of Archaic Materials and Assemblies

Permit Applications

Other Resources

- MMAH Buildings Branch, Code Advisors & sign-up for Ontario CodeNews
- www.oboa.on.ca (Cont Ed - training + SB 10 & SB 12 information)
- Interactive Building Code on CD
- Review checklists
- TACBOC Construction Details and specifications for Part 9 housing
- Building Code/Fire Protection Consultants

Permit Applications

Pre-application Meetings

- Useful to reduce the chance of significant redesign later in the process, and to confirm specific code interpretations
- Best to submit drawings with code issues or questions identified. Provide rationale behind your design solution

Avoid using this process as a general consulting service – employ specialty consultants instead if necessary
Permit Applications
Submission Requirements (1)

Municipal building bylaws usually require “submission of sufficient plans and other documents to enable the CBO to determine if the proposed construction will comply with the code and any other applicable law”

Complete and coordinated A, S, M & E signed & sealed drawings are imperative. CBO cannot practically process drawings not sealed, or if substantially incomplete

A “complete” application now requires a decision by CBO within a prescribed time relating to the permits issuance.

Permit Applications
Submission Requirements (2)

Specifications not generally referred to in detail, however door, hardware and room finish schedules are essential

Provide supporting documentation for any specific fire protection elements (ULC listings, BMEC rulings)

Geotechnical (Soil) Report

Stormwater Mgmt Report (roof storage?)

Completed General Review Commitment & ASHRAE/IES 90.1 forms

Permit Applications
Submission Requirements (3)

Communicating OBC design summary in accordance with OAA Practice Bulletin A.9, and clearly identifying fire separations are highly effective strategies to expedite approval
OAA Code Matrix

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<tr>
<th>SS #</th>
<th>Policy</th>
<th>Code</th>
<th>Matrix</th>
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1-17
Effective: January 1, 2011

Application Form Cont’d

1. Competence and compliance with applicable law
   (a) This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the Building Code (the application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and required schedules, and all required schedules are submitted). Payment has been made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the Building Code Act, 1992, to be paid when the application is made.
   (b) This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(d) of the Building Code Act, 1992.
   (c) This application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(d) of the Building Code Act, 1992 which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.
   (d) The proposed building, construction or demolition will not contravene any applicable law.

Permit Application Filing

- Complete Applications – reviewed within prescribed time frames
- Incomplete Applications – not required to be reviewed within time frame
- Check OBC & Municipal Building By-law (website) for Complete Application requirements
- Unsure, Contact Building Dept.
Permit Applications

Typical approval sequence

1. Zoning & Site Plan
2. Structural (Part 4)
3. Architectural (Part 3)
4. Mechanical (Part 6)
5. Plumbing (Part 7)
6. Fire Department (sprinkler, FA systems)
7. Zoning & Site Plan again
8. Confirmation that applicable laws met

Permit Applications

What are Applicable Laws? (1)

- Applicable laws to a building permit are any Act, regulation or bylaw which would prohibit the construction if not complied with
- Building permit application may run concurrently with some other approval processes

Permit cannot be issued by CBO until all applicable laws are met. Verify before complaining about permit timeliness!
Permit Applications

What are Applicable Laws? (2)

- Development Charges Act
- Planning Act
- Heritage Act
- Conservation Authorities Act
- Environmental Assessment Act
- Ontario New Home Warranties Plan Act
- Public Transportation & Highway Improvement Act
- Etc......

Permit Applications

Approval process

- Planning Act approvals (site plan and zoning) are often the key to the timely issuance of a building permit
- It is essential that architects coordinate and ensure consistency of the final site plan with building permit documents

It is common for building permits to be delayed at a late stage while site plan/building permit inconsistencies and "other approvals" are addressed.

Permit Applications

Fee$

- Building Permit fees (at application)
- Development Charges (at issuance)
- Assessed on the basis of area and can be a significant cost
Permit Applications

Permits (1)

- Building Permit: An unconditional permit authorizing construction of all or part of a building, issued after all applicable laws have been complied with.
- Demolition Permit: An unconditional permit authorizing the demolition of all or part of a building. Usually a routine matter & issued promptly unless heritage or rental housing issues.

Permit Applications

Permits (2)

- Change of Use Permit: A permit authorizing a new use of a different occupancy classification in an existing building. Almost never issued...
- Authority to Occupy Permit: An occupancy permit, usually to allow the occupancy of the completed parts of an incomplete building.

Permit Applications

Permits (3)

- Conditional Building Permit: A discretionary permit authorizing the commencement of construction even though all applicable laws have not been met.
- Commonly issued as foundation permits where Site Plan Approval incomplete.
- CBO may issue to resolve unsafe conditions while approvals in progress.
The Building Permit Process

Construction

Architect’s responsibility:

**GENERAL REVIEWS**

- Role of Municipal Inspectors
- Contraventions and Enforcement
- Occupancy & Completion

Construction

**General Reviews (1)**

- OBC: review is mandatory. Architect’s obligation is to visit, observe and inform as to general conformity.
- Performance standards are set out in Architect’s Act. Scope and frequency of reviews necessary to meet professional obligations is solely the Architects call.
- An owner may not ‘contract out’ of reviews or limit them in scope or frequency.
- Contractors are not entitled to direct when reviews needed.

Construction

**General Reviews (2)**

- Completion of General Review: Commitment binds architect and owner to carry out all reviews architect deems necessary.
- Architect must give immediate written notice to CBO of any limitation or suspension of reviews.
- Inadequate general reviews/inspections are increasingly the source of claims and litigation against architects and officials.
Construction

General Reviews (3)

Essential General Review Report content:

- Project information, date & report no.
- Site conditions
- Progress report
- Observations, describing areas of concern
- Commentary on resolution of concerns identified in previous reports

Role of Municipal Inspectors

- Inspection and enforcement is a shared responsibility between professionals & municipality.
- Municipal inspectors carry out extensive detailed inspection of buildings not requiring professional design & review
- Enforcement is essentially the municipal role. Officials well equipped to respond to and enforce any non-conformance identified by architects and engineers

Enforcement

- Construction without permit:
- Conducting general reviews of construction where no permit has been issued is fundamentally impossible & is considered professional misconduct
- Site instructions could be considered a contravention of the BCA under 8.-(1)
- Look for permit documents on site
Construction Enforcement

Order to Comply - Construction not in accordance with approved drawings or code:

- If news to you (i.e. issues not already reflected on general review reports), scope and frequency of reviews may not be meeting professional standards
- Essential that OTC items be addressed on subsequent reviews
- Architects could be served an Order to Comply if they fail to forward copies of general review reports to the CBO

Construction Occupancy & Completion

- Use OBC s. 1.3.3. to guide client on the appropriate timing of occupancy
- Final review report should document that any deficiencies have been rectified, and that construction has been carried out in general conformity with approved permit drawings. OK to specify exceptions

Questions

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