



STAFF REPORT ACTION REQUIRED

Use of Tempered Glass as a Swimming Pool Enclosure - Amendments to Toronto Municipal Code Chapter 447

Date:	June 9, 2010
To:	Licensing and Standards Committee
From:	Executive Director, Municipal Licensing and Standards
Wards:	All
Reference Number:	P:\2010\Cluster B\MLS\Ls10021

SUMMARY

This report recommends amendments to the City of Toronto Municipal Code, Chapter 447, Fences, regarding the addition of materials for use as a swimming pool enclosure. These amendments recognize the possible use of a broader range of available fencing materials while maintaining the overall safety provisions of the Municipal Code as it relates to swimming pool enclosures.

RECOMMENDATIONS

The Executive Director Municipal Licensing and Standards recommends that:

- 1) the City of Toronto Municipal Code, Chapter 447, Fences, be amended in accordance with Appendix "A" to this report;
- 2) the City of Toronto Municipal Code, Chapter 441, Fees & Charges, be amended in accordance with Appendix "A" to this report, to include the appropriate fees related to swimming pool enclosures; and
- 3) the appropriate City officials be authorized and directed to take the necessary actions to give effect thereto.

Public notice has been given in a manner prescribed in the Toronto Municipal Code Chapter 162, Notice, Public.

Financial Impact

There are no financial impacts arising from this report beyond what has already been approved in the current year's budget.

DECISION HISTORY

The Licensing and Standards Committee adopted a request from North York Community Council (Item NY34.35 - see the link below) to consider the matter of using tempered glass as a swimming pool enclosure and in so doing, requested the Executive Director, Municipal Licensing and Standards to submit a report to the June 25, 2010, meeting of the Committee proposing by-law amendments that will allow for the use of tempered safety glass as an acceptable material for swimming pool enclosures along with other necessary amendments. The Committee also requested that a public hearing be scheduled for this item.

<http://www.toronto.ca/legdocs/mmis/2010/ls/bgrd/backgroundfile-30602.pdf>

ISSUE BACKGROUND

Due to requests for the use of different types of fencing materials as components of fencing surrounding swimming pools, Municipal Licensing and Standards (MLS) have recently been requested to report to the Community Councils regarding a number of requests for exemptions for the use of these materials.

Given these exemption requests, staff are recommending that the City of Toronto Municipal Code, Chapter 447, Fences, be amended in order that the Municipal Code address these different types of fencing materials to prevent further reporting to the Community Councils on swimming pool enclosure exemptions while maintaining the safety requirements currently contained in the Municipal Code.

COMMENTS

The recommended amendments to the City of Toronto Municipal Code Chapter 447, Fences, will address the current reality regarding the types of materials and construction being utilized as swimming pool enclosures in order to prevent MLS reporting to Community Councils on swimming pool enclosure exemptions, while addressing the safety issues relative to swimming pools in the City of Toronto.

The amendments to the City of Toronto Municipal Code, Chapter 447, Fences, recommended in this report, include the addition of a definition of the term "un-climbable" in order to allow for alternate types of materials, such as tempered glass, to be utilized as a component of a swimming pool enclosure, while maintaining the safety of these enclosures in preventing mishaps regarding swimming pools.

The recommended amendments to the City of Toronto Municipal Code, Chapter 441, Fees & Charges, will place the attendant fees for swimming pool enclosures in the appropriate chapter of the Municipal Code to avoid any confusion regarding these fees. These Municipal Code amendments will also permit masonry walls, built in accordance with the Canadian Safety Standards (CSA) requirements to be utilized as a component of a swimming pool enclosure.

This report was prepared in consultation with the Toronto's City Solicitor and the Chief Building Official.

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ATTACHMENTS

Appendix "A" – Details of Proposed Municipal Code Amendments
Appendix "B" – Proposed Amendments to Municipal Code, Chapter 447, Fences

Appendix “A”

The City of Toronto Municipal Code Chapter 447 be amended as follows:

1. That the following definition be added to 447-1 Definitions:

“NON-CLIMBABLE – Describes a 1.2 metre vertical face presented to the exterior of a swimming pool enclosure. For an enclosure of chain link construction shall mean a mesh which is no greater than 38 millimetres square for a minimum of 1.2 metres vertically. For all other enclosures shall mean that there is no horizontal opening or step greater than 38 millimetres in width for 1.2 metres vertically, or where horizontal components are a minimum of 1.2 metres apart there shall be no opening greater than 100 millimetres.

2. That section 447-3.A(3) be amended by deleting the words “door, window” so the section reads:

(3) Has no opening except a gate that complies with this article.

3. That section 447-3C(1) be amended by deleting the word “principle” and replacing it with the word “all”, changing “entrance” to “entrances” and deleting the word “is” and replacing it with the word “are”, and adding a new section 3C(1.1) so it reads:

(1) A swimming pool enclosure shall be designed and constructed so that all entrances to any building are located outside the enclosed area.

(1.1) Subsection C(1) does not apply to any structure that does not provide access to the exterior of the pool enclosure.

4. That the following section 447-3C(2) be deleted:

(2) Where a wall of a building forms part of a swimming pool enclosure, any access point to the enclosed area in the wall shall: **[Amended 2004-06-24 by By-law No. 557-2004]**

(a) Be no closer than 1.2 metres horizontally to the water’s edge in the pool; and

(b) Where the entrance is a door leading from a garage into the swimming pool area, be supported on substantial hinges, be self-closing and equipped with a lockable, self-latching device located not less than 1.5 metres above grade and be kept locked at all times except when the enclosed area is in use.

5. That section 447-3C(3) be deleted and replaced with the following:

“(3) If the wall of any building, or any portion of it, forms part of the pool enclosure, there shall be no access to the enclosed pool area through the wall.”

6. That section 447-3C(3.2) be amended so it reads:

(3.2) Every owner of a swimming pool shall:

- (a) take all steps necessary to control any access point to the swimming pool area; and
- (b) ensure that if the closing mechanism of a gate is electrically powered it includes a back-up system which shall automatically power the closing mechanism in case of a power disruption.

7. That as sections 447-3C(5), (6) and (7) refer to access into the enclosed swimming pool area through a vehicular access gate, and as the requirement is for a pool to be enclosed on all four sides, it is recommended that these sections be deleted.

8. That section 447-3E(1)(d) be amended by adding the words “an Non-climbable” so it reads:

“Have an Non-climbable facing material installed on the outside of the enclosure which extends from no more than 50 millimetres above grade to the required minimum height of the enclosure, but, if a hard surface such as concrete, asphalt, paving stones or patio slabs extends for a distance of 500 millimetres on each side of a gate, the clearance under the gate may be no more than 100 millimetres.”

9. That the following be added as section 447-3E(2)(d):

A glass panel fence used in a swimming pool enclosure shall be constructed in a good, workmanlike manner as follows:

[1] Glass Panels shall be located so there is no opening of more than 38 millimetres between the panel and the post where horizontal elements are spaced less than 1.2 metres apart and not more than 100 millimetres apart where horizontal elements are spaced more than 1.2 metres apart; and

[2] Horizontal elements shall be supported on substantial posts spaced not more than 2.4 metres apart and embedded in concrete to a minimum depth of 900 millimetres below grade.

[3] Glass Panels used in swimming pool enclosures shall be:

(a) Safety glass of the laminated or tempered type conforming to CAN/CGSB-12.1-M, “Tempered or Laminated Safety Glass”; or

(b) Wired glass conforming to CAN/CGSB-12.11-M, “Wired Safety Glass.”

10. That the following be added as section 447-3E(2)(e):

A masonry wall that is not a part of a building and is used in a swimming pool enclosure shall be constructed in a good, workmanlike manner as follows:

[1] The wall shall present a minimum 1.2 metre Non-climbable surface to the exterior of the enclosed area.

[2] It shall be constructed of a minimum of double course brick or single course concrete block with a minimum width of 200 millimetres, and securely attached to a minimum 1.2 metre deep concrete foundation.

[3] Where the wall abuts a building or gate there shall be no opening between the wall and the building or gate which exceeds 38 millimetres where there are horizontal elements less than 1.2 metres apart, or which exceeds 100 millimetres where there are no horizontal elements or where horizontal elements are in excess of 1.2 metres apart.

[4] All components of a masonry wall used as a part of a swimming pool enclosure shall conform with CSA 9.20.2.1.

11. That section 447-9 be amended by deleting the words “\$30 per hour” and replacing them with “as set out in Chapter 441, Fees and Charges, and shall include” and deleting the word “is” and replacing it with the word “that” so the section reads:

“The remuneration for each of the three fence-viewers shall be as set out in Chapter 441, Fees and Charges, and shall include costs. Each of the three fence viewers shall be paid at that rate for travel time to and from the fence-viewing, and for any attendance required at an appeal hearing.”

12. That paragraph 447-11(3) be deleted as the reference for payment has been transferred to Chapter 441 Fees and Charges.
13. Staff be directed to take any necessary actions to implement and otherwise put into effect the above recommendations, including the re-numbering of the appropriate sections of Chapter 447.

Appendix “B”

§ 447-3. Swimming pool enclosures.

A. Enclosure required.

Subject to the exceptions in Subsection F, every owner of a swimming pool shall erect and maintain a swimming pool enclosure that:

- (1) Complies with this article;
- (2) Completely encloses the area in which the swimming pool is located; and
- (3) Has no opening except a gate that complies with this article.

B. Permits and inspections.

- (1) No person shall excavate for or erect, or cause or permit excavation for or erection of, a swimming pool without first obtaining a permit from the Chief Building Official for a swimming pool enclosure for the proposed pool.
- (2) An application for a permit for a swimming pool enclosure shall be in the form required by the Chief Building Official and shall be accompanied with the non-refundable fee set out in Municipal Code Chapter 441, Fees and Charges, and by plans: [Amended 2004-06-24 by By-law No. 557-2004]
 - (a) Showing the location of the swimming pool in relation to lot lines and adjacent buildings.
 - (b) Providing complete details of the swimming pool enclosure; and
 - (c) Providing any other details and information required by the Chief Building Official for determining compliance with this article.
- (3) The Chief Building Official shall refuse or revoke a permit for a swimming pool enclosure if: [Amended 2004-06-24 by By-law No. 557-2004]
 - (a) The proposed swimming pool enclosure would contravene this article or any other applicable law;
 - (b) It was issued in error or on mistaken, false or incorrect information; or
 - (c) The required application fee under Municipal Code Chapter 441, Fees and Charges, has not been paid.
- (4) Every owner of property on which a swimming pool is under construction shall erect and maintain a swimming pool enclosure that complies with this article in every respect except that it may consist of temporary fencing if authorized by the Chief Building Official or an officer.
- (5) Any authorization to erect temporary fencing is granted on the condition that the temporary fencing shall be replaced with a permanent swimming pool enclosure that fully complies with this article when an officer directs replacement or when construction of the swimming pool is substantially complete, whichever occurs first, and in determining whether to direct replacement of temporary fencing, an officer shall consider, among other factors, whether construction is proceeding expeditiously, whether temporary fencing is being adequately maintained and whether safety might be compromised without a permanent enclosure.

(6) Temporary fencing shall be erected in a good, workmanlike manner and shall consist of steel “T” posts spaced at not more than 1.2 metre centres and embedded at least 600 millimetres into the ground with 38 millimetre plastic mesh fencing at least 1.2 metres high that is securely fastened to the posts at 200 millimetre centres and horizontally secured at the top and bottom by an eleven-gauge steel lacing cable threaded through the mesh and looped and fastened to each post, or any other fence acceptable to an officer.

(7) No person shall fill a swimming pool with water or permit water to collect or remain in a swimming pool until an officer has conducted an inspection and confirmed completion of a permanent swimming pool enclosure that fully complies with this article.

C. Access protection.

(1) Subject to Subsection (1.1), a swimming pool enclosure shall be designed and constructed so that all entrances to any building are located outside the enclosed area.

(1.2) Subsection (1) does not apply to any structure that does not provide access to the exterior of the pool enclosure.

(2) If the wall of any building, or any portion of it, forms part of the pool enclosure there shall be no access to the enclosed pool area through the wall.

[Amended 2007-11-20 by By-law No. 1240-2007]

(3) Subsection C(3)(2) applies to pool enclosures for which a pool enclosure permit was issued more than 30 calendar days after the enactment of that subsection on November 20, 2007 and to any existing fence if a substantial portion of it is demolished or removed, or if it is in such a state of disrepair that it is not practical to repair it. **[Added 2007-11-20 by By-law No. 1240-2007; amended 2008-05-27 by By-law No. 512-2008]**

(3.1) Every owner of a swimming pool shall:

- (a) Take all steps necessary to control any access point to the swimming pool area, and
- (b) Ensure that if the self closing mechanism of a gate is electrically powered it includes a back-up system which shall automatically power the closing mechanism in case of a power disruption.

(4) Every gate in a swimming pool enclosure shall be:

- (a) Constructed in compliance with Subsection E;
- (b) Supported on substantial hinges;
- (c) Self-closing and equipped with a lockable, self-latching device located on the inside near the top of the gate or on the outside at least 1.5 metres above grade; and
- (d) Kept locked at all times except when the enclosed area is in use.

(5) All automatic closing devices and their power back-up systems shall be in compliance with the applicable product and installation standards of the Canadian Standards Association. **[Added 2007-11-20 by By-law No. 1240- 2007]**

D. Enclosure height.

(1) The minimum height of a swimming pool enclosure above the highest outside grade within one metre of the enclosure shall comply with the following Table when measured at any point along the enclosure.

**TABLE 2
MINIMUM HEIGHT OF SWIMMING POOL ENCLOSURES**

Enclosure Type	Pool on Single Residential Property	Pool on Multiple Residential Property	Pool on Non-Residential Property
Metal picket fence	1.2 metres	1.5 metres	1.5 metres
Any other enclosure type	1.2 metres	1.8 metres	1.8 metres

(2) The maximum height of any fence used in a swimming pool enclosure shall comply with § 447-2B.

E. Construction standards.

(1) A swimming pool enclosure, including any gate forming part of the enclosure, shall:

- (a) Be no closer than 1.2 metres horizontally to the water's edge in the pool;
 - (b) Be no closer than one metre to any external condition that may facilitate climbing the outside of the enclosure unless the height of the enclosure is at least 1.8 metres for a distance of at least one metre on each side of the condition;
 - (c) Have no element or attachment between 100 millimetres and 1.2 metres above grade that may facilitate climbing the outside of the enclosure; and
 - (d) Have an Non-climbable facing material installed on the outside of the enclosure which extends from no more than 50 millimetres above grade to the required minimum height of the enclosure, but, if a hard surface such as concrete, asphalt, paving stones or patio slabs extends for a distance of 500 millimetres on each side of a gate, the clearance under the gate may be no more than 100 millimetres.
- (2) Every fence and gate used in a swimming pool enclosure shall be constructed to the following standards:
- (a) A chain-link fence used in a swimming pool enclosure shall be constructed in a good, workmanlike manner and in compliance with the following Table:

TABLE 3
MINIMUM STANDARDS FOR CHAIN-LINK FENCE CONSTRUCTION

Fence Components	Pool on Single Residential Property	Pool on Multiple Residential or Non-Residential Property
MESH SIZE	38 millimetres maximum	38 millimetres maximum
MESH GAUGE (Galvanized wire)	14 gauge galvanized wire and 2 gauge vinyl for 12 gauge total thickness	11 gauge galvanized wire and 2 gauge vinyl for 9 gauge total thickness
GATE & END (TERMINAL) POSTS:		
(1) Diameter (2) Depth of embedment	48 millimetres 760 millimetres (in 200 millimetre diameter concrete)	60 millimetres 760 millimetres (in 200 millimetre diameter concrete)
INTERMEDIATE POSTS:		
(1) Diameter (2) Depth of embedment	38 millimetres 760 millimetres	48 millimetres 760 millimetres
TOP RAIL (Diameter) BOTTOM WIRE (Diameter)	32 millimetres 9 gauge galvanized, threaded through the mesh and looped and fastened to each post	32 millimetres 9 gauge galvanized, threaded through the mesh and looped and fastened to each post
GATE FRAME (Diameter)	32 millimetres	32 millimetres
SPACING OF POSTS	2.4 metres maximum	2.4 metres maximum

(b) A wood fence used in a swimming pool enclosure shall be constructed in a good, workmanlike manner as follows:

- [1] Vertical boards shall be not less than 19 millimetre by 89 millimetre lumber and shall be spaced not more than 38 millimetres apart where horizontal rails are spaced less than 1.2 metres apart and not more than 100 millimetres apart where horizontal rails are spaced at least 1.2 metres apart; and
- [2] Vertical boards shall be attached to horizontal rails that are not less than 38 millimetre by 89 millimetre lumber and that are supported on

substantial posts with a minimum dimension of 89 millimetres spaced not more than 2.4 metres apart and embedded to a minimum depth of 900 millimetres below grade.

(c) A metal picket fence used in a swimming pool enclosure shall be constructed in a good, workmanlike manner as follows:

[1] Vertical pickets shall be spaced not more than 38 millimetres apart where horizontal rails are spaced less than 1.2 metres apart and not more than 100 millimetres apart where horizontal rails are spaced at least 1.2 metres apart; and

[2] Horizontal rails shall be supported on substantial posts spaced not more than 2.4 metres apart and embedded in concrete to a minimum depth of 900 millimetres below grade.

(d) A glass panel fence used in a swimming pool enclosure shall be constructed in a good, workmanlike manner as follows:

[1] Glass Panels shall be located so there is no opening of more than 38 millimetres between the panel and the post where horizontal rails are spaced less than 1.2 metres apart and not more than 100 millimetres where horizontal rails are spaced at least 1.2 metres apart; and

[2] Horizontal rails shall be supported on substantial posts spaced not more than 2.4 metres apart and embedded in concrete to a minimum depth of 900 millimetres below grade.

[3] Glass Panels used in swimming pool enclosures shall be:

(a) Safety glass of the laminated or tempered type conforming to CAN/CGSB-12.1-M, "Tempered or Laminated Safety Glass"; or

(b) Wired glass conforming to CAN/CGSB-12.11-M, "Wired Safety Glass."

(e) A masonry wall that is not a part of a building and is used in a swimming pool enclosure shall be constructed in a good, workmanlike manner as follows:

[1] The wall shall present a minimum 1.2 metre Non-climbable surface to the exterior of the enclosed area.

[2] It shall be constructed of a minimum of double course brick or single course concrete block with a minimum width of 200 millimetres, and securely attached to a minimum 1.2 metre deep concrete foundation.

[3] Where the wall abuts a building or gate there shall be no opening between the wall and the building or gate which exceeds 38 millimetres where there are horizontal elements less than 1.2 metres apart, or which exceeds 100 millimetres where there are no horizontal elements or where horizontal elements are in excess of 1.2 metres apart.

[4] All components of a masonry wall used as a part of a swimming pool enclosure shall conform with CSA 9.20.2.1.

(3) Every fence and gate used as part of a swimming pool enclosure which forms the part of the enclosure that separates the pool from any residential building on the same property shall be constructed of open mesh chain-link fence or equivalent open fence construction that does not restrict visibility of the pool from any door or window that is located on the access level of the building, and which

has a line of sight to the pool, and the materials used must comply with the provisions of this chapter. [Added 2007-11-20 by By-law No. 1240- 2007; amended 2008-05-27 by By-law No. 512-2008]

(4) Nothing shall be erected, planted or otherwise placed in such a way that the visibility of the pool is restricted from any door or window that is located on the access level of a residential building on the same property, and which has a line of sight to the pool. [Added 2008-05-27 by By-law No. 512-2008]

(5) Subsection E(4) applies only to fences and gates used as part of a swimming pool enclosure which forms the part of the enclosure that separates the pool from any residential building on the same property, as described in Subsection E(3). [Added 2008-05-27 by By-law No. 512-2008]

F. Exceptions.

(1) Subsections A through E do not apply to an above-ground pool erected before the day this article comes into force if the pool complies with the following standards:

- (a) The pool is not less than 1.2 metres above grade;
- (b) A guard not less than one metre high is provided around any platform or deck;
- (c) The combined height of the swimming pool structure and any guard is not more than 2.6 metres;
- (d) The outside of the swimming pool structure and any guard is free of any element or attachment that may facilitate climbing;
- (e) No part of the swimming pool structure is closer than 1.2 metres to any lot line; and
- (f) The point where a user of the above-ground pool gains access to the pool is protected by a gated enclosure which complies with the requirements for swimming pool enclosures set out in Subsections B through E, inclusive.

(2) Subsections A through E do not apply to a whirlpool, hot tub or spa if it has a substantial, structurally adequate cover permanently attached to it or to its supporting structure and the cover is securely fastened and locked to prevent access at all times when the whirlpool, hot tub or spa is not in use.

(3) Subsections C(3), E(3), E(4) and E(5) may apply conditionally to a swimming pool enclosure for which an exemption has been granted by Community Council, and such an exemption shall only be granted if: [Added 2008-05-27 by By-law No. 512-2008]

- (a) The reason for seeking the exemption is because one or more of the standards in Subsections C(3), E(3), E(4) and E(5) are not practicable because of a disability, as defined in the *Ontarians with Disabilities Act, 2001*,⁴ of an occupant of the building; and
- (b) The applicant for the exemption agrees to comply with any other conditions imposed by Community Council to prevent a young child from gaining access to the pool area.

(4) Despite Subsection F(3), when the need for which the exemption was sought ceases to exist, the pool enclosure shall be reinstated to comply fully with the provisions in Subsections C(3), E(3), E(4) and E(5). [Added 2008-05-27 by By-law No. 512-2008]