Swimming Pools, Hot Tubs & Spas Information Sheet

Building Permits
Required for all swimming pools, spas or hot tubs installed in the Town of Irondequoit.

Definition
Swimming Pool - Any structure, basin, chamber or tank which is intended for swimming, diving, recreational bathing or wading and which contains, is designed to contain, or is capable of containing water more than 24 inches (610 mm) deep at any point. This includes in ground, above ground and on ground pools; indoor pools; hot tubs; spas; and fixed in place wading pools.

Permit Application Requirements
1. Completed signed application.
2. Proof of contractor/installers insurance.
3. Copy of a survey map.
4. Specs on pool alarm to be installed according to 19 NYCRR 1220.5
5. Specs on the fencing to be installed according to 19 NYCRR 1228.4

Setbacks
The swimming pool and appurtenances thereto shall be so located as to conform to the setback provisions of this chapter as they apply to accessory buildings, i.e., not less than four feet from any side line or rear line. The distance from any other building or structure on the premises shall not be less than four feet from the pool apron or deck, whichever is closest.

Overhead Electric Lines
Overhead electrical lines must be located at least 10 feet horizontally from the waters edge of the swimming pool, tub or spa and pool decks.

Barriers
An outdoor swimming pool, including an in-ground, above ground or on-ground pool, hot tub or spa shall be surrounded by a temporary barrier during installation or construction and shall remain in place until a permanent barrier in compliance with Section R326.5.3 is provided.

Pool Alarms
A swimming pool or spa installed, constructed or substantially modified after December 14, 2006, shall be equipped with an approved pool alarm. Pool alarms shall comply with ASTM F2208, and shall be installed, used and maintained in accordance with the manufacturer’s instructions.

Exceptions:
1. A hot tub or spa equipped with a safety cover which complies with ASTM F1346.
2. A swimming pool (other than a hot tub or spa) equipped with an automatic power safety cover which complies with ASTM F1346.

Electrical Installations
All electrical installations must be inspected by one of the following approved agencies:
- Middle Department Inspection Agency
  (585)454-5191
- Commonwealth Electrical Inspection Services
  (585)624-2380
- New York Electrical Inspection Agency
  (585)436-4460

It is strongly recommended that the electrical agency be selected and consulted with during the planning stage of your project.

Required Inspections
Pre – Outside edge of pool/spa must be marked
Electrical – Third party (listed above)
Final – Certificate of Compliance
SECTION R326: SWIMMING POOLS, SPAS & HOT TUBS

SECTION R326.1 GENERAL
R326.1 General. The provisions of this Section shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

SECTION R326.2 DEFINITIONS
R326.2 Definitions. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool".

BARRIER, PERMANENT. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

BARRIER, TEMPORARY. An approved temporary fence, permanent fence, the wall of a permanent structure, any other structure, or any combination thereof that prevents access to the swimming pool by any person not engaged in the installation or construction of the swimming pool during its installation or construction.

HOT TUB. See "Swimming pool".

IN-GROUND POOL. See "Swimming pool".

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling or a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE. See "Swimming pool".

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SUBSTANTIAL DAMAGE. For the purpose of determining compliance with the pool alarm provisions of this appendix, any repair, alteration, addition or improvement of a swimming pool, the cost of which equals or exceeds 50 percent of the market value of the swimming pool before the improvement or repair is started. If a swimming pool has sustained substantial damage, any repairs are considered substantial modification regardless of the actual repair work performed.

SWIMMING POOL. Any structure, basin, chamber or tank which is intended for swimming, diving, recreational bathing or wading and which contains, is designed to contain, or is capable of containing water more than 24 inches (610 mm) deep at any point. This includes in-ground, above-ground and on-ground pools; indoor pools; hot tubs; spas; and, fixed-in-place wading pools.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION R326.3 SWIMMING POOLS
R326.3.1 In-ground pools. In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5.

R326.3.2 Above-ground and on-ground pools. Above-ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4.

SECTION R326.4 SPAS AND HOT TUBS
R326.4.1 Permanently installed spas and hot tubs. Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section R326.8.

R326.4.2 Portable spas and hot tubs. Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6.
SECTION R326.5
BARRIER REQUIREMENTS
R326.5.1 Application. The provisions of this section shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drowning and near-drowning by restricting access to swimming pools, spas and hot tubs.

R326.5.2 Temporary barriers. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a temporary barrier during installation or construction and shall remain in place until a permanent barrier in compliance with Section R326.5.3 is provided.

Exceptions:
1.) Above-ground or on-ground pools where the pool structure is the barrier in compliance with Section R326.5.3.
2.) Spas or hot tubs with a safety cover which complies with ASTM F 1346, provided that such safety cover is in place during the period of installation or construction of such hot tub or spa. The temporary removal of a safety cover as required to facilitate the installation or construction of a hot tub or spa during periods when at least one person engaged in the installation or construction is present is permitted.

R326.5.2.1 Height. The top of the temporary barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool.

R326.5.2.2 Replacement by a permanent barrier. A temporary barrier shall be replaced by a complying permanent barrier within either of the following periods:
1.) 90 days of the date of issuance of the building permit for the installation or construction of the swimming pool; or
2.) 90 days of the date of commencement of the installation or construction of the swimming pool.

R326.5.2.2.1 Replacement extension. Subject to the approval of the code enforcement official, the time period for completion of the permanent barrier may be extended for good cause, including, but not limited to, adverse weather conditions delaying construction.

R326.5.3 Permanent barriers. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

1.) The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

2.) Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
3.) Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
4.) Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1 ¾ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 ¾ inches (44 mm) in width.
5.) Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 ¾ inches (44 mm) in width.
6.) Maximum mesh size for chain link fences shall be a 2 ¼-inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1 ¾ inches (44 mm).
7.) Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1 ¾ inches (44 mm).
8.) Gates shall comply with the requirements of Section R326.5.2, Items 1 through 7, and with the following requirements:
8.1.) All gates shall be self-closing. In addition, if the gate is a pedestrian access gate, the gate shall open outward, away from the pool.
8.2.) All gates shall be self-latching, with the latch handle located within the enclosure (i.e., on the pool side of the enclosure) and at least 40 inches (1016 mm) above...
grade. In addition, if the latch handle is located less than 54 inches (1372 mm) from the bottom of the gate, the latch handle shall be located at least 3 inches (76 mm) below the top of the gate, and neither the gate nor the barrier shall have any opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the latch handle.

8.3.) All gates shall be securely locked with a key, combination or other child proof lock sufficient to prevent access to the swimming pool through such gate when the swimming pool is not in use or supervised.

9.) Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:

9.1.) The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or

9.2.) Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touch pad or switch, to temporarily deactivate the alarm for a single opening. Deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372mm) above the threshold of the door or

9.3.) Other means of protection, such as self-closing doors with self-latching devices, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.

10.) Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:

10.1.) The ladder or steps shall be capable of being secured, locked or removed to prevent access; or

10.2.) The ladder or steps shall be surrounded by a barrier which meets the requirements of Section R326.5.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

R326.5.4 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Section R326.5.2, Item 9.

R326.5.5 Prohibited locations. Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.

R326.5.6 Barrier exceptions. Spas or hot tubs with a safety cover which complies with ASTM F 1346 shall be exempt from the provisions of this appendix.

SECTION R326.6 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

R326.6.1 General. Suction outlets shall be designed to produce circulation throughout the pool or spa. Single-outlet systems, such as automatic vacuum cleaner systems, or multiple suction outlets, whether isolated by valves or otherwise, shall be protected against user entrapment.

R326.6.1.1 Compliance alternative. Suction outlets may be designed and installed in accordance with ANSI/APSP-7.

R326.6.2 Suction fittings. Pool and spa suction outlets shall have a cover that conforms to ANSI/ASME A112.19.8M, or an 18 inch by 23 inch (457mm by 584 mm) drain grate or larger, or an approved channel drain system.

Exception: Surface skimmers.

R326.6.3 Atmospheric vacuum relief system required. Pool and spa single- or multiple-outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. This vacuum relief system shall include at least one approved or engineered method of the type specified herein, as follows:

1.) Safety vacuum release system conforming to ASME A112.19.17; or

2.) An approved gravity drainage system.

R326.6.4 Dual drain separation. Single or multiple pump circulation systems have a minimum of two suction outlets of the approved type. A minimum horizontal or vertical distance of 3 feet (914 mm) shall separate the outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum-relief-protected line to the pump or pumps.

R326.6.5 Pool cleaner fittings. Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least 6 inches (152 mm) and not more than 12 inches (305 mm) below the minimum operational water level or as an attachment to the skimmer(s).
SECTION R326.7
SWIMMING POOL AND SPA ALARMS

R326.7.1 Applicability. A swimming pool or spa installed, constructed or substantially modified after December 14, 2006, shall be equipped with an approved pool alarm.

Exceptions:
1. A hot tub or spa equipped with a safety cover which complies with ASTM F1346.
2. A swimming pool (other than a hot tub or spa) equipped with an automatic power safety cover which complies with ASTM F1346.

Pool alarms shall comply with ASTM F2208, and shall be installed, used and maintained in accordance with the manufacturer's instructions and this section.

R326.7.2 Multiple alarms. A pool alarm must be capable of detecting entry into the water at any point on the surface of the swimming pool. If necessary to provide detection capability at every point on the surface of the swimming pool, more than one pool alarm shall be provided.

R326.7.3 Alarm activation. Pool alarms shall activate upon detecting entry into the water and shall sound poolside and inside the dwelling.

R326.7.4 Prohibited alarms. The use of personal immersion alarms shall not be construed as compliance with this section.

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TABLE E4203.6 OVERHEAD CONDUCTOR CLEARANCES

<table>
<thead>
<tr>
<th>Voltage to Ground</th>
<th>ALL OTHER SUPPLY OR SERVICE DROP CONDUCTORS (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15kV</td>
<td>Greater Than 15 to 50 kV</td>
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</table>

<table>
<thead>
<tr>
<th>Clearances</th>
<th>Insulated Supply or Service Drop Cables, 0-750 Volts to Ground, Supported On and Cabled Together With an Effectively Grounded Bare Messenger or Effectively Grounded Neutral Conductor (feet)</th>
<th>Insulated Supply or Service Drop Cables, 0-750 Volts to Ground, Supported On and Cabled Together With an Effectively Grounded Bare Messenger or Effectively Grounded Neutral Conductor (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Clearance in any direction to the water level, edge of water surface, base of diving platform, or permanently anchored raft</td>
<td>22.5</td>
<td>25</td>
</tr>
<tr>
<td>B. Clearance in any direction to the diving platform</td>
<td>14.5</td>
<td>17</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 304.8 mm.
Chapter 235. Zoning Article XIII. Supplementary Regulations

§ 235-71. Private swimming pools.
A. Accessory structure. Any swimming pool, as defined in this chapter, shall be deemed an accessory building or structure under all applicable provisions of this chapter, and no such swimming pool shall be constructed or maintained unless such pool conforms to applicable provisions of this chapter and other applicable provisions of this Code.

B. Plans to be filed. No permit shall be issued for the construction or maintenance of any such swimming pool unless or until the construction plans, plumbing plans, filtering system plans and a location map have been filed with the Building Inspector in conformity with the following provisions:

1.) The swimming pool and appurtenances thereto shall be so located as to conform to the setback provisions of this chapter as they apply to accessory buildings, i.e., not less than four feet from any side line or rear line. The distance from any other building or structure on the premises shall not be less than four feet from the pool apron or deck, whichever is closest.

2.) Percentage of lot occupancy. The area of the principal and accessory buildings (inclusive of in ground or permanent aboveground swimming pools) on any lot measured horizontally shall not exceed 50% of the area of the lot. This condition may be waived for portable aboveground swimming pools, provided that all other requirements are in compliance.

3.) Fencing. Swimming pools shall be enclosed by a fence or other barrier meeting all applicable requirements of the Residential Code of New York State and shall otherwise comply in all respects with such Residential Code.

[Amended 2-4-1997 by L.L. No. 1-1997; 7-17-2007 by L.L. No. 4-2007]

4.) The drainage facilities for such pool shall not interfere with the public water supply system, existing drainage and sewage facilities, the property of others or with the public highways.

5.) (Reserved) [1] Editor’s Note: Former Subsection B(5), regarding the structural stability of a pool, was repealed 7-17-2007 by L.L. No. 4-2007

6.) The filtering equipment shall be adequate to permit the maintenance of good quality water in the pool. The Building Inspector shall be governed by the recommendations or the approval of the appropriate Health Department.

7.) The use or maintenance of swimming pools shall comply with the following in such character, intensity and duration as not to be detrimental to the life or health of any individual or contrary to the public welfare, as herein set forth.

a) Lighting. Any outdoor lighting used or maintained in connection with a swimming pool of any type must be so placed or positioned that the directed light therefrom is not directed toward any abutting properties.

b) Noises.

[1] The operation of any radio, phonograph or other electronic device in such a manner or with such volume as to annoy or disturb the quiet, comfort or repose of persons in any dwelling, hotel or other type of residence shall be prohibited.

[2] No person using a private swimming pool shall indulge in disorderly or noisy or disturbing conduct or act in any manner as to annoy, disturb or be offensive to any neighboring householder.

C. Waiver by Board of Appeals. The Board of Appeals may waive the provisions of Subsection B as to size and location of such pool, after a public hearing duly called for such purpose, upon a determination that the neighboring property shall not be adversely affected thereby.

D. Other pools or tanks. Any type of private pool, tank or other enclosure of water not defined as a swimming pool which, however, has electrical equipment shall require a permit which shall be issued in conformance with Chapter 98, Building Construction and Fire Prevention.

[2] Editor’s Note: Former § 130.63E, which regulated existing pools and immediately followed this subsection, was deleted 2-4-1997 by L.L. No. 1-1997.E. (Reserved) [3]

Editor's Note: Former Subsection E, Portable pools, was repealed 7-17-2007 by L.L. No. 4-2007.

F. Corner lot. Any swimming pool of any type installed or erected on a corner lot shall be contained within an area behind the building line as measured from each street. No pool shall be less than four feet from any property line.
SAFETY BARRIER TIPS & GUIDELINES FOR RESIDENTIAL POOL GATES

A successful pool barrier prevents a child from getting OVER, UNDER, or THROUGH and keeps the child from gaining access to the pool except when supervising adults are present.

How To Prevent a Child from Getting OVER or UNDER a Pool Barrier
A young child can get over a pool barrier if the barrier is too low or if the barrier has handholds or footholds to use when climbing. The top of a pool barrier should be at least 48 inches above grade, measured on the side of the barrier which faces away from the swimming pool. For any pool barrier, the maximum clearance at the bottom of the barrier should not exceed 4 inches above the surface or ground when the measurement is done on the side of the barrier facing away from the pool. Industry recommends that if the bottom of the gate or fence rests on a non-solid surface like grass or gravel, that measurement should not exceed 2 inches.

For a Chain Link Fence the mesh size should not exceed 1¼ inches square unless slats, fastened at the top or bottom of the fence, are used to reduce mesh openings to no more than 1¾ inches.
Self Closing, Self Latching Gates

Pedestrian Gates are the gates people walk through. Swimming pool barriers should be equipped with a gate or gates which restrict access to the pool. Access gates to the pool should be equipped with a locking device. Pedestrian access gates should open outward, away from the pool, and should be self-closing and have a self-latching device.

When the release mechanism of the self-latching device on the gate is less than 54 inches from the bottom of the gate, the release mechanism for the gate should be at least 3 inches below the top of the gate on the side facing the pool. Placing the release mechanism at this height prevents a young child from reaching over the top of a gate and releasing the latch.

Also, the gate and barrier should have no opening greater than 1/2 inch within 18 inches of the latch release mechanism. This prevents a young child from reaching through the gate and releasing the latch.

The weak link in the strongest and highest fence is a gate that fails to close and latch completely. For a gate to close completely every time, it must be in proper working order.

For more information on Fencing:


ASTM F 1908-08
Standard Guide for Fences for Residential Outdoor Swimming Pools, Hot Tubs, and Spas:
http://www.astm.org/Standards/F1908.htm

ASTM F 2286-05
Standard Design and Performance Specifications for Removable Mesh Fencing for Swimming Pools, Hot Tubs, and Spas:
http://www.astm.org/Standards/F2286.htm