

POOL – SINGLE FAMILY & DUPLEX POOLS - APPLICATION FORM
(Pools, Hot Tubs, Spas)

FOR OFFICIAL USE ONLY	TOTAL FEE	
PERMIT APPLICATION NO	_____	
1 —	BLDG _____	
_____	PLRV _____	
SUBMITTED _____	CERT _____	
_____ / _____ /	ARCH _____	
NOTIFIED _____		
_____ / _____ /		
ZONING _____		
_____	WEB www.aurora-il.org	DIVISION OF BUILDING & PERMITS
	FAX (630) 256-3139	65 WATER STREET
	TELEPHONE (630) 256-3130	AURORA, ILLINOIS 60505

LAND / PARCEL INFORMATION

PROPERTY ADDRESS _____

COUNTY <input type="checkbox"/> KANE <input type="checkbox"/> DuPAGE <input type="checkbox"/> TOWNSHIP 11 12 04	TOWNSHIP SECTION # _____
(CHECK ONE) <input type="checkbox"/> KENDALL <input type="checkbox"/> WILL (CIRCLE ONE) 14 15 07	
(Call tax assessor's office with questions) 03 01	BLOCK # (if known) _____ LOT# (if known) _____

PROPERTY OWNER _____ **PHONE #** () _____

OWNER'S ADDRESS _____ **FAX #** () _____

_____ **E-MAIL ADDRESS** _____

ZONING / DEMOGRAPHICS INFORMATION

Dwelling Type Detached Two Family Townhouse

Number of Bedrooms in This Unit _____

Number of Dwelling Units in Building _____

Garage Improvements Attached Detached

REQUIRED SUBMITTAL ITEMS

COPY OF MANUFACTURERS INSTRUCTION

PROPOSED PLAT OF SURVEY WITH TOPOGRAPHICAL AND SETBACK INFORMATION

POOL MANUFACTURER INFORMATION

NAME OF MANUFACTURER _____

MODEL OF POOL _____

SIZE _____ **HEIGHT** _____ **INCHES**

MANUFACTURER'S MAX WATER LEVEL _____ **INCHES**

ANY METAL IN POOL STRUCTURE/LINER? Yes No

POOL HEATER INCLUDED? Yes No

MANUFACTURER'S WEBSITE ADDRESS _____

TOTAL COST OF POOL & INSTALLATION \$ _____

TYPE OF POOL, HOT TUB, SPA

N/A Yes

IF You are installing a below ground pool/spa (any pool that is even partially dug into the ground) please fill out **Safety Affidavit & Meet (Swimming Pool Barrier & Electrocutation Prevention-Permanent Pool)** (POLB).

IF Manufacturer's specification sheets indicate that the pool's maximum depth is less than 24 inches high, or in absence of the Manufacturer's info if the walls of the pool are less than 24 inches high, then no permit/registration is required. **WE STRONGLY RECOMMEND THAT YOU REVIEW THE MANUFACTURER'S SAFETY INFORMATION AND COMPLETE READING THE SAFETY TIPS BELOW TO PREVENT TRAGEDIES.**

IF You are installing a non-metallic above ground Storable/Collapsible pool (removed annually) please fill out **Safety Affidavit & Meet (Swimming Pool Barrier & Electrocutation Prevention-Storable Pool)** (POLS).

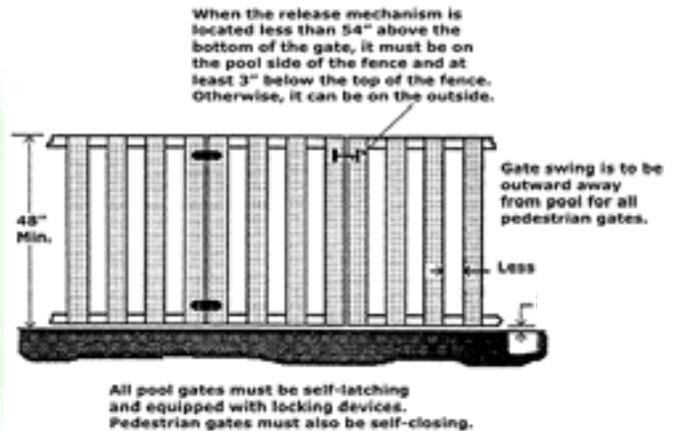
IF You are installing an above ground pool/spa please fill out **Safety Affidavit & Meet (Swimming Pool Barrier & Electrocutation Prevention-Permanent Pool)** (POLA).

Swimming Pool Barrier and Entrapment Protection Fact Sheet

Barrier Requirements:

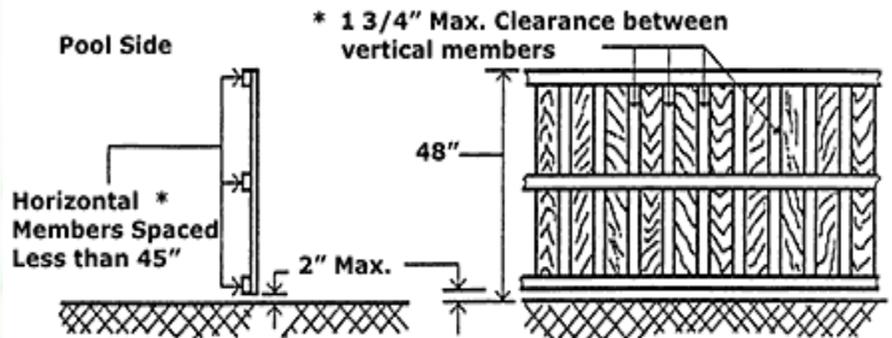
An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following: Seasonal Isolation fence <http://www.allsafepool.com/pool-fences/> OR permanent fence.

1. The top of the barrier shall be at least 48 inches 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, measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier is permitted to be at ground level such as the pool structure, or mounted on top of the pool structure.
 - a. 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.

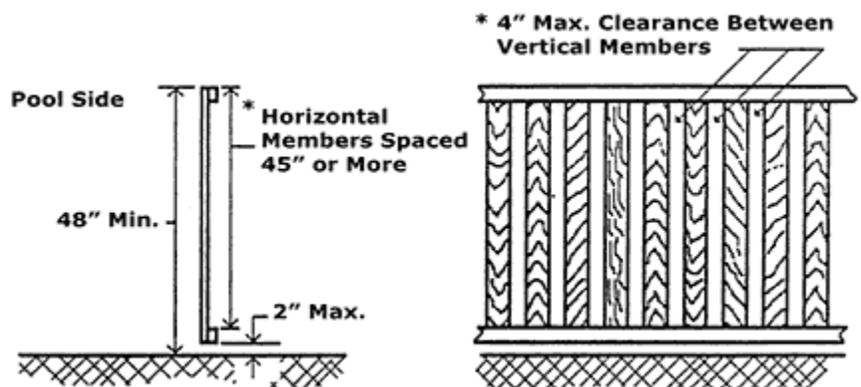


2. Openings in the barrier shall not allow passage of a 4-inch-diameter sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

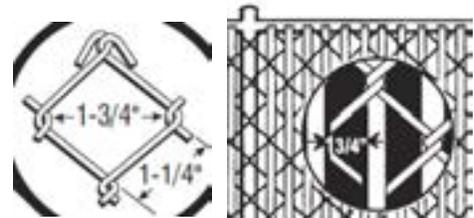
4. **Narrow spacing fence:** Where the barrier is comprised of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1 3/4 inches in width. Where there are decorative cutouts within vertical members, spacing within cutouts shall not exceed 1 3/4 inches in width.



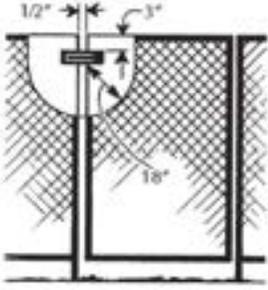
5. **Wide spacing fence:** Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches or more, spacing between vertical members shall not exceed 4 inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 3/4 inches in width.



6. Maximum mesh size for **chain link fences** shall be a 2 1/4-inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1 3/4 inches.

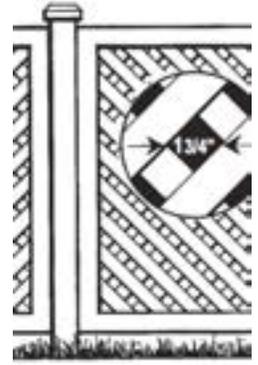


7. Where the barrier is composed of diagonal members, such as a **lattice fence**, the maximum opening formed by the diagonal members shall not be more than 1 ¼ inches.



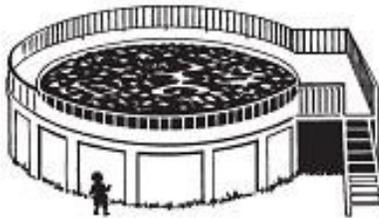
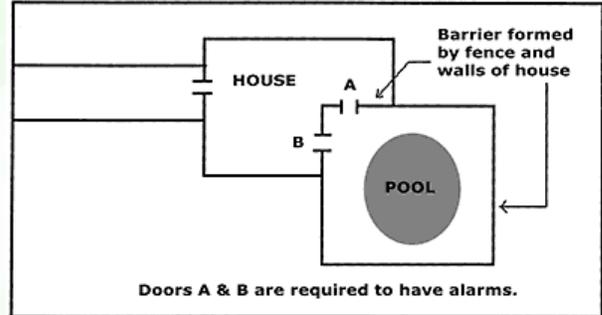
8. Access gates shall comply with 1 through 7 above, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, the release mechanism and openings shall comply with the following:

- The release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate, and
- The gate and barrier shall have no opening greater than ½ inch within 18 inches of the release mechanism.



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

- The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or
- All 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 its screen, if present, are opened. The alarm shall sound continuously for a minimum of 30 seconds immediately after the door is 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 touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches above the threshold of the door; (<http://www.poolguard.com/> <http://www.allsafepool.com/door-gate-alarms/>) OR
- Other means of protection, such as self-closing doors with self-latching devices, which are approved by the department of building inspections, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by the previously described methods.



10. Where an aboveground 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, then:

- The ladder or steps shall be capable of being secured, locked or removed to prevent access. When the ladder or steps are secured locked or removed any opening created shall not allow the passage of a 4-inch diameter sphere; or
- The ladder or steps shall be surrounded by a barrier which meets the requirements of 1 through 9 above.

Entrapment Protection Requirements:

Some pools may have circulation systems that may create hazardous entrapment situations for swimmers if not protected. The following are some of the entrapment protection requirements:

1. Suction outlets are 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.
2. Pool and spa suction outlets shall have a minimum 18-inch by 23-inch drain grate or other approved system to protect against user entrapment.
3. Single or multiple outlet circulation systems shall be equipped with an atmospheric vacuum relief should grate covers located therein become missing or broken.
4. Single or multiple circulation systems shall have a minimum of two suction approved outlets at least 3 feet apart. These suction outlets shall be piped so that the water is drawn through them simultaneously through a vacuum-relief-protected line to the pump(s).
5. Where provided, vacuum or pressure-cleaner fitting(s) shall be located in an accessible position(s) at least 6 inches and not more than 12 inches below the minimum operational water level or as an attachment to the skimmer(s)
6. NOTE: If you are not familiar or are uncomfortable with these requirements, please seek a professional's service.

Swimming Pool Electrocutation Prevention Fact Sheet

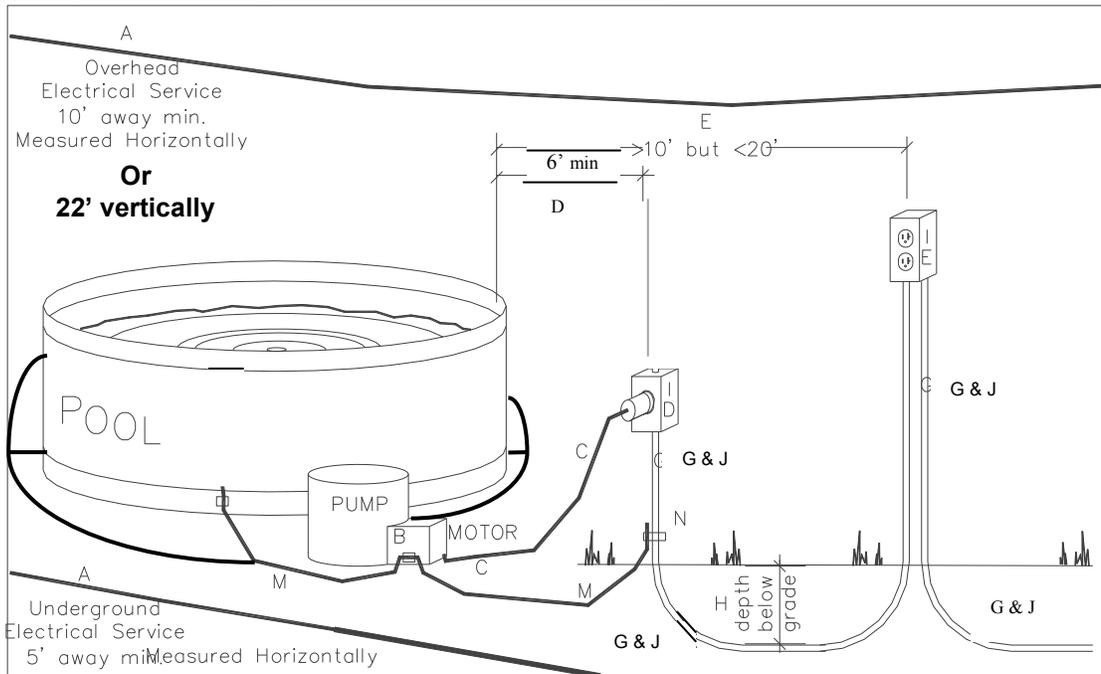
Storable Pools

Electrical Code Requirements for Non-Metallic Storable Pools:

1. At least one grounded - Ground Fault Circuit Interrupter (GFCI) protected, 125-volt, 15- or 20-ampere general purpose receptacle shall be located between 10 and 20 feet from the pool.
2. Electrical Service and Utility lines: The pool will be a min. 5 feet horizontally from underground electrical service lines and a min.10 feet horizontally from overhead service lines. Call J.U.L.I.E. 811 or <http://www.illinois1call.com/> to locate underground power lines.
3. The pump must be a double insulated pump and must be unplugged at the time of pool use. It must be plugged into the grounded GFCI receptacle without the use of an extension cord.

Permanent Pools

Electrical Code Requirements for Permanent Pools (In-ground, partially in-ground, and Metallic Component pools capable of storing more than 42 inches of water):



Electrical Service

- A. Underground electric service must be 5' or more horizontally from pool. Overhead electric service must be 10 feet or more from pool horizontally or not less than 22 feet in any direction to the water's edge of the swimming pool. NEC 680.8 & 680.10 or IRC Sections E4203.6 & E4203.7

Pump

- B. Pump motor shall be listed (UL 1081) for a pool application NEC 110.3 (b) or IRC Section E3403.3 and City Ordinance Section 12-43.
- C. Permanently installed pools require the cord on pump motor to be a min. #12 wire, not longer than 3 feet and w/ a twist lock NEC 680.7 or IRC Section E4202.2.
- D. Pump Receptacle shall be a minimum of 6 feet from the pool wall (NEC 680.22 (a) or IRC Section E4203.1.1 & protected with a GFCI (breaker, faceless, or GFCI outlet rated for hp at the pump (NEC 680.22(b) or IRC Section E4203.1.3). Cover for receptacle shall be an in use cover NEC 406.8(B)(1) or IRC Section E4002.10.
- E. For permanently installed pools, a general purpose GFCI Receptacle shall be provided between 6 feet and 20 feet from pool. NEC 680.22(A)(3) or IRC Section E4203.1.2
- F. Provide disconnecting means a minimum of 5 feet away from inside wall of pool. NEC 680.12 or IRC Section E4203.3

Raceway, Conduit & Boxes

- G. Raceway shall be Rigid heavy wall metal conduit, intermediate metal conduit or rigid non-metallic conduit (gray PVC) and listed for electrical use. NEC Articles 300 & 110.3(b) or IRC E4203.7. Raceway shall be buried 6 inches below grade for RMC & IMC or 18 inches below grade for PVC or 24 inches below grade for direct burial. NEC 300.5 or IRC Section E4203.7. Risers and first elbow in the ground at risers and last riser in the ground at the home shall be rigid pipe. City Ordinance 12-57(b)
- H. If RNC (PVC) pipe and boxes are used, they must be listed for electrical use, sunlight resistant and shall be supported as required per NEC Article 352 or IRC Section E3801.4. All boxes and appurtenances shall be securely supported on a wall or post with 42" deep footing.

Grounding

- I. Raceway equipment grounding conductor shall be a min of #12 Ga. and must be green. NEC 680.25 (b)(1) & 250.119 or IRC Section E4205.6
- J. Equipment grounding conductor from the equipment grounding terminal in the panel board shall tie into all junction boxes, light fixtures, pump motors, transformer enclosures, switches, and outlets, etc. NEC 680.24(F) IRC Section E4502

Equipotential Bonding

- M. The parts specified in 680.26(B)(1) through (B)(7) shall be bonded together using solid copper conductors, insulated covered, or bare, not smaller than 8 AWG or with rigid metal conduit of brass or other identified corrosion-resistant metal. Connections to bonded parts shall be made in accordance with 250.8. An 8 AWG or larger solid copper bonding conductor provided to reduce voltage gradients in the pool area shall not be required to be extended or attached to remote panel boards, service equipment, or electrodes.

Conductive Pool Shells: Bonding to conductive pool shells shall be provided as specified in 680.26(B)(1)(a) or (B)(1)(b).

Poured concrete, pneumatically applied or sprayed concrete and concrete block with painted or plastered coatings shall all be considered conductive materials due to water permeability and porosity. Vinyl liners and fiberglass composite shells shall be considered to be nonconductive materials.

- (A) **Structural Reinforcing Steel.** Unencapsulated structural reinforcing steel shall be bonded together by steel tie wires or the equivalent. Where structural reinforcing steel is encapsulated in a nonconductive compound, a copper conductor grid shall be installed in accordance with 680.26(B) (1) (b). http://www.erico.com/products/ERITECH_prefab_mesh.asp
- (B) **Copper Conductor Grid.** A copper conductor grid shall be provided and shall comply with (b) (1) through (b) (4).
 - (1) Be constructed of a minimum 8 AWG bare solid copper conductors bonded to each other at all points of crossing
 - (2) Conform to the contour of the pool and the pool deck
 - (3) Be arranged in a 300-mm (12-in.) by 300-mm (12-in.) network of conductors in a uniformly spaced perpendicular grid pattern with a tolerance of 100 mm (4 in.)
 - (4) Be secured within or under the pool no more than 150 mm (6 in.) from the outer contour of the pool shell (2) Perimeter Surfaces. The perimeter surface shall extend for 1 m (3 ft) horizontally beyond the inside walls of the pool and shall include unpaved surfaces as well as poured concrete and other types of paving. Bonding to perimeter surfaces shall be provided as specified in 680.26(B)(2)(a) or (2)(b) and shall be attached to the pool reinforcing steel or copper conductor grid at a minimum of four (4) points uniformly spaced around the perimeter of the pool.

For Nonconductive Pool Shells: bonding at four points shall not be required.

(A) **Structural Reinforcing Steel.** Structural reinforcing steel shall be bonded in accordance with 680.26(B)(1)(a).

- (B) **Alternate Means.** Where structural reinforcing steel is not available or is encapsulated in a nonconductive compound, a copper conductor(s) shall be utilized where the following requirements are met:
 - (1) At least one minimum 8 AWG bare solid copper conductor shall be provided.
 - (2) The conductors shall follow the contour of the perimeter surface
 - (3) only listed splices shall be permitted.
 - (4) The required conductor shall be 450 to 600 mm (18 to 24 in.) from the inside walls of the pool.
 - (5) The required conductor shall be secured within or under the perimeter surface 100 mm to 150 mm (4 in. to 6 in.) below the subgrade. NEC 680.26 or IRC E4204. Bonding conductor connections shall be burial rated (no Zinc parts).

An intentional bond of a minimum conductive surface area of 9 square inches shall be installed in contact with the pool water. This bond shall be permitted to consist of conductive parts such as metal fittings, metal drain, metal lights, etc. that are required to be bonded. NEC Article 680.26(C) or IRC Section E4204.3. <http://bondsaf680.com/aboveground.html>

Pool Lighting

- A. In a permanent pool with water depth capacity of greater than 42 inches, if lighting is provided it must be hardwired in compliance with NEC Article 680.23 or IRC Section E4205.2.

Mechanical Code Regulations for Gas Fired Pool Heaters:

- 1. Gas piping shall be (below grade approved) schedule 40 epoxy coated gas pipe and buried 12 inches below grade **OR** Gas piping shall be plastic piping conforming to ASTM D 2513 with min. 18 AWG tracer and buried a minimum 12 inches below grade. Risers shall be anodeless and meet Cat. 1 of ASTM D2513.
- 2. Pool heaters shall be installed by a technician who can certify that they have had training in pool heater installations and piping, or a licensed Mechanical (HVAC) Contractor will be required.

Call J.U.L.I.E. (Joint Utility Locating Information for Excavators):

Dial 811 or <http://www.illinois1call.com/>

JULIE is a free service that will locate all member utilities that may have facilities in your proposed area of excavation. Notification must be made a minimum of 48 hours (two business days) prior to any excavating.

UTILITY/TYPE OF PRODUCT	IDENTIFICATION COLOR
Gas, Oil, Steam, Petroleum	Yellow
Electric	Red
Potable Water	Blue
Communication, TV	Orange
Sewer and Drain Lines	Green
Reclaimed Water, Irrigation	Purple
Temporary Survey	Pink
Proposed Excavation	White
	Black on snow