



## Town of Walworth, New York

Building & Zoning Department  
3600 Lorraine Drive, Walworth NY 14568  
Phone: 315.986.1400 Fax: 315.986.1440  
[www.townofwalworthny.gov](http://www.townofwalworthny.gov)

### Swimming Pools, Hot Tubs & Spas Information Sheet

#### Definition

Swimming Pool - any structure intended for swimming or recreational bathing that is capable of containing water over 24 inches deep. This includes in ground, aboveground and on ground swimming pools, hot tubs and spas.

#### Building Permits

Required for all swimming pools, spas or hot tubs installed in or on the lot of a one and two-family dwelling.

#### Fees

\$50.00 due at time of permit request plus \$100.00 escrow fee. Once the electrical inspection and a final inspection have been completed, the escrow fee will be refunded.

#### Electrical Inspections

All electrical installations must be inspected by one of the following Town of Walworth approved agencies:

- Commonwealth Electrical Inspection Service, Inc.  
(800) 437-5799  
Local person - Mike Shumway  
(585) 729-2779 (cell phone)  
(585) 367-2779
- Middle Department Inspection Agency  
(800) USE-MDIA  
Local person - Rick Cascarano  
(315) 524-8759  
(800) 641-6342

#### Inspections

Site - outside edge of pool/spa must be marked

Electrical - (see above)

Final - Certificate of Compliance

#### Temporary Fencing

Pool excavation must be protected during construction with approved fencing. Temporary approved fencing must be in place and secured at all time until approved permanent fencing is in place and pool use begins

#### Barrier Requirements

(per Appendix G - Residential Code of New York State)

**AG-105.1 Application.** The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

**AG105.2 Outdoor swimming pool.** An outdoor swimming pool, including an in-ground, aboveground or an on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

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 which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground, 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.
2. Openings in the barrier shall not allow the 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. 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, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches 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 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 1.75 inches in width.
6. Maximum mesh size for chain link fence shall be 2.25 inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 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 1.75 inches.

8. Access gates shall comply with the requirements of Section AG105.2, Items 1 through 7, and 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. Pedestrian access gates shall be 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 is located less than 54 inches from the bottom of the gate, the release mechanism and openings shall comply with the following:

8.1 The release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate, and

8.2 The gate and barrier shall have no opening greater than 0.5 inch width 18 inches of the release mechanism.

9. Where the 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 F1346; or

9.2 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 a 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; or

9.3 Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, 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 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:

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 AG105.2, 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 sphere.

**AG105.3 Indoor swimming pool.** All walls surrounding an indoor swimming pool shall comply with Section AG105.2, Item 9.

**AG105.4 Prohibited locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

**AG105.5 Barrier exceptions.** Spas or hot tubs with a safety cover which complies with ASTM F1346 shall be exempt from the provisions of this appendix.

## Energy Conservation

(per Energy Conservation Construction Code of new York State)

**504.3 Swimming Pools.** Swimming pools shall be provided with energy-conserving measures in accordance with Sections 504.301 through 504.3.3.

**504.3.1 On-Off switch** All pool heaters shall be equipped with an ON-OFF switch mounted for easy access to allow shutting off the operation of the heater without adjusting the thermostat setting and to allow restarting without relighting the pilot light.

**504.3.2 Pool covers.** Heated swimming pools shall be equipped with a pool cover.

**Exception:** Outdoor pools deriving over 20 percent of the energy for heating from renewable sources (computed over an operating season) are exempt from this requirement.

**504.3.3 Time clocks.** Time clocks shall be installed so that the pump can be set for the minimum time necessary to maintain the water in a clear and sanitary condition in keeping with applicable health standards.

## FAQ's

**If I have a cover on my hot tub/spa, does this satisfy the barrier exception AG 105.5?**

- Not necessarily, to qualify for the **AG105.5 Barrier exception**, the safety cover must comply with ASTM F1346. To determine this, the cover **must** have a permanently affixed label stating both "ASTM F1346" & "Manual Safety Cover".

**Can the "temporary inflatable pools" that are sold in department stores be assembled, filled and used without additional barriers installed?**

- **Absolutely Not!!** If the pool is capable of holding more than 24 inches of water then the Barrier Requirements outlined on pages 1 & 2 must be met.

**If I replace my old pool with a new pool, do I need a permit?**

- Yes, an inspector will have to verify setback and barrier compliance.

**How far from the house or other structures does the pool have to be?**

- There is no minimum distance that the pool must be from a structure. However, the pool must be a minimum 4 feet from any window, door or walking surface (decks, porch, etc.) that is not part of the pool barrier.

## FAQ's Continued

### I have an above ground pool whose walls are 48 inches high, are further barrier requirements necessary?

- No, but remember that the ladder or steps shall be capable of being secured, locked or removed to prevent access. **\*Exception: Inflatable 4 foot pools do require a barrier.**
- Also, be careful about backfilling around the edge of the pool with mulch, stones, etc., the required 48 inch distance is measured by swinging a 48 inch radius about the top rail of the pool. In other words, a 12 inch log placed on the ground 1 foot from the pool edge would interfere with the 48 inch radius therefore, not allowed.

## IMPORTANT NOTICE!!

Effective 12/14/2006, New York State Title 19 (NYCRR), Sections 1920.5 & 1921.3 requires that all swimming pools be equipped with an alarm as follows:

### Swimming Pool Alarms. (amended text 12/14/2006)

(a) **Purpose.** Paragraph (b) of subdivision (14) of section 378 of the Executive Law, as added by Chapter 450 of the Laws of 2006, requires that the New York State Uniform Fire Prevention and Building Code (the Uniform Code) provide that any "residential of commercial swimming pool constructed or substantially modified after the effective date of this paragraph (December 14, 2006) shall be equipped with a acceptable pool alarm capable of detecting a child entering the water and of giving an audible alarm. "The Introducer's Memorandum in Support of Chapter 450 states in pertinent part, that "drowning is the second leading cause of unintentional injury-related deaths in children between the ages of one and fourteen nationwide, and the third leading cause of injury related deaths of children in New York... (T)echnological advances have produced several different types of pool alarms designed to sound a warning if a child falls into the water. When used in conjunction with access barriers, these alarms provide greater protection against accidental pool drowning."

(b) **Definitions.** (see page 1)

(c) **Pool alarms.** Each residential swimming pool installed, constructed or substantially modified after December 14, 2006 and each commercial swimming pool installed, constructed or substantially modified after December 14, 2006, shall be equipped with an approved pool alarm which:

(1) is capable of detecting a child entering the water and giving an audible alarm when it detects a child entering the water;

(2) is audible poolside and at another location on the premises where the swimming pool is located;

(3) is installed, used and maintained in accordance with the manufacturer's instructions;

(4) is classified by Underwriter's Laboratory, Inc. (or other approved independent testing laboratory) to reference standard ASTM F2208, entitled "Standard Specification for pool alarms," as adopted in 2002 and editorially corrected in June 2005, published by ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428; and

(5) is not an alarm device which is located on person(s) or which is dependent on device(s) located on person(s) for its proper operation.

(d) **Multiple pool alarms.** A pool alarm installed pursuant to subdivision © of this section 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 installed.

**NOTE:** Hot tubs or spas with a safety cover which complies with ASTM F1346 or swimming pools equipped with an automatic power safety cover in compliance with ASTM F1346 shall be exempt from the provisions of the Swimming Pool Alarm requirement.



Town of Walworth, New York

Building & Zoning Department

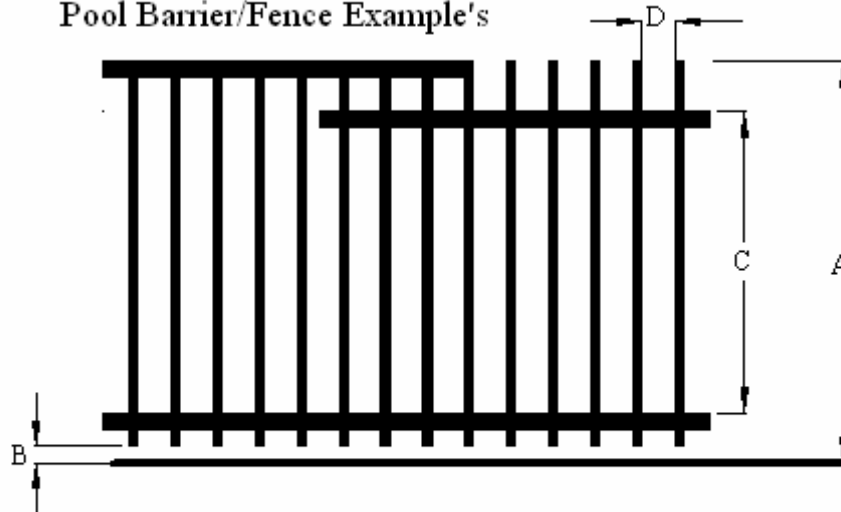
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If a wall of the house serves as part of the barrier, contact the building inspector for requirements.

### Pool Barrier/Fence Example's



Dimension "A" must be 48 inches minimum from a standing surface to the top of fence.

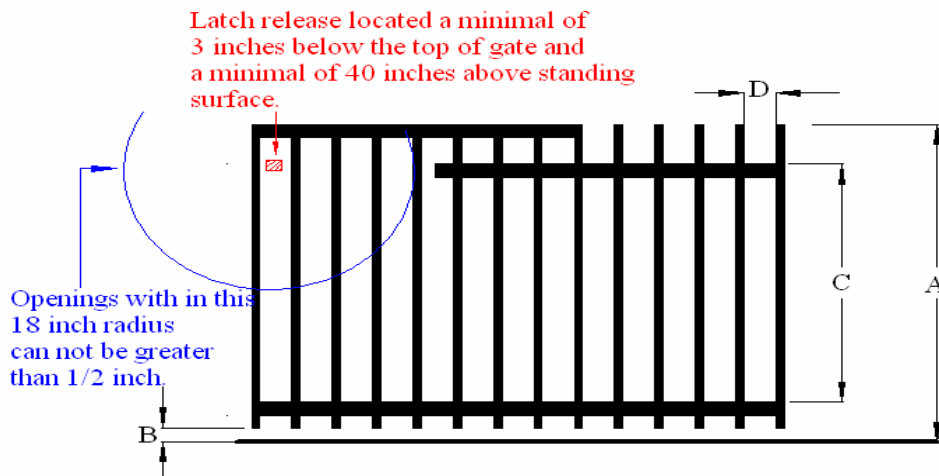
Dimension "B" may be 2 inches maximum from standing surface to the bottom of fence.

If dimension "C" is less than 45 inches, dimension "D" cannot be greater than 1-3/4 inches.

Dimension "D" can never be greater than 4 inches.

### Pool Barrier Gate Example,

with latch release less than 54 inches above a standing surface and located on the pool side.



Dimension "A" must be 48 inches minimum from a standing surface to the top of gate.

Dimension "B" may be 2 inches maximum from standing surface to the bottom of gate.

If dimension "C" is less than 45 inches, dimension "D" cannot be greater than 1-3/4 inches.

Dimension "D" can never be greater than 4 inches.

# ELECTRICAL WIRING REQUIREMENTS FOR SWIMMING POOLS

2008 National Electrical Code / 2010 Residential Code of New York State

[www.InspectNY.com/codes](http://www.InspectNY.com/codes)

**PERMANENTLY INSTALLED SWIMMING POOLS** ARE THOSE THAT ARE CONSTRUCTED IN THE GROUND OR PARTIALLY IN THE GROUND, AND ALL OTHERS CAPABLE OF HOLDING WATER WITH A DEPTH GREATER THAN 42 INCHES (1067 MM)

## 1) Pool Pump Receptacle (Outlet) and Wiring Method

- a. If a pump motor receptacle is located between 6' – 10' from the inside pool wall, the receptacle must be a single twist-lock outlet, grounded, and Ground Fault Circuit Interrupter (GFCI) protected.
- b. Receptacle must have a weatherproof cover that can be closed when the cord is plugged in. (In-use type cover)
- c. The circuit line for the pump motor must be a continuous line going directly to the panel box, and is to be isolated from all other receptacles.
- d. Wire for the pump motor shall not be less than #12 AWG insulated copper grounded wire, and must be in conduit. (except when entering a building the wire can change to NM) (Cannot use NM wire in conduit)
- e. Conduit
  - i. PVC – All PVC conduit\* must be buried at least 18" deep
  - ii. Metal – All Rigid Metal Conduit\* must be at least 6" deep

\* Wires used in conduit must be single strand wires (ex: THWN, XHHN, etc - NO NM or UF CABLE in Conduit)

## 2) Convenience Receptacle (Outlet) and Wiring Method

- a. At least one (1) 15- or 20-ampere convenience receptacle must be located not closer than 6' but not further than 20' from the outside pool wall (Can be existing and/or wired with any approved wiring method)
- b. Convenience receptacle must be Ground Fault Circuit Interrupter (GFCI) protected.
- c. Must have a weatherproof cover where exposed to the weather (In-use type cover required on used, unattended, receptacles in wet locations)
- d. Must be separate from the pool pump receptacle wiring.
- e. Wiring
  - i. UF cable if buried must be at least 24" deep
  - ii. PVC – All PVC conduit\* must be buried at least 18" deep
  - iii. Metal – All Rigid Metal Conduit\* must be at least 6" deep

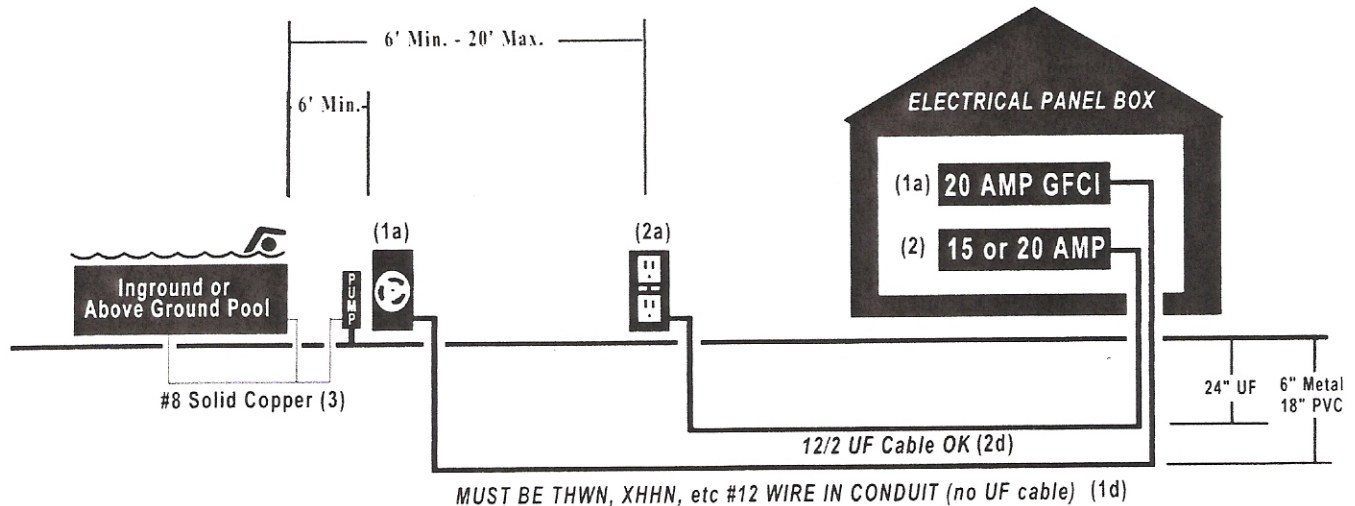
\* Wires used in conduit must be single strand wires (ex: THWN, XHHN, etc - NO NM or UF CABLE in Conduit)

## 3) Bonding The Pool

- a. All metal parts must be bonded together using a #8 (or larger) solid copper wire.
- b. Must use non-corrosive clamps.
- c. A minimum of nine (9) square inches of metal must be in the water to bond the water
- d. Recommend bonding in two (2) spots going halfway around the pool.
- e. Equipotential Bonding is required on all pools with conductive shells using a #8 (or larger) solid copper wire

## 4) Other

- a. Building Permits are required. Secure a Building Permit prior to beginning work from your municipality
- b. Pool Alarms are required (Check with your local Building Department for additional information)
- c. Pool Pump Timers (Check with your local Building Department for additional information)



PLEASE CONTACT YOUR LOCAL INSPECTOR IF YOU HAVE ANY QUESTIONS

**Fritz Gunther – Professional Electrical Inspector**

2767 Dewey Avenue, Rochester, New York 14616 ~ (585) 436-4460 [www.InspectNY.com](http://www.InspectNY.com)

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