

Code Enforcement Office
99 Main Street, PO Box 85
East Bloomfield, New York 14443
Office (585) 657-5455 Fax (585) 657-7276

Requirements for Building Permit Application

For Above ground, In-ground Swimming Pools

1. One copy of the Building Permit Application completely filled out.
2. One copy of Site Plan, showing placement of pool and lot line distances.
3. **Pools must be behind the front line of the house.**
4. Certificate of Insurance for contractor, if hiring a contractor.
5. Affidavit of Exemption, if completing the work yourself. (Note: Code Enforcement Officer can notarize this form)
6. Return to Code Enforcement Officer for review and approval.
7. Fee is \$75 for pool permit. Make checks payable to the Town of East Bloomfield.

SWIMMING POOL PERMIT

Date _____ Zone _____ Permit # _____

Name _____

Address _____

Phone # _____

Manufacturer _____ Model # _____

Serial # _____ Above Ground _____ In Ground _____

Approximate Cost _____ Tax Acct. # _____

Furnish Site plan showing lot lines, distance from house, diameter etc.

Above ground pools do not need a fence if, they are 46" above the ground and have fold up steps.

In ground pools must have a 48" fence, with a lockable gate.

All pools must have gountd facult electrical system.

_____ Approved _____ Permit Fee

_____ Disapproved Applicant Signature _____

Code Enforcement Officer _____

Town of East Bloomfield / Village of Bloomfield

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Electrical Requirements

For Above ground & In-Ground Swimming Pools

ALL IN-GROUND POOLS AND ABOVE GROUND POOLS CAPABLE OF HOLDING 42" OR MORE OF WATER ARE CONSIDERED PERMANENTLY INSTALLED POOLS

1. Wiring for pump motor shall not have less than **# 12 AWG insulated copper grounding wire**, and to be in conduit, except when entering building can change to NM cable **680.21 (A) (1-4)**. If using 15 amp breaker may be 14 gauge wire for hot and neutral but ground must be # 12.
2. If the pump motor receptacle is located from **6' to 10'** from outside pool wall, the receptacle must be **single, twistlock, 15 or 20amp, GFCI protected with watertight inuse cover. 680.22(A)(1) (1-4)**
3. Pump motor cord **shall not exceed 3'** and shall have a grounding wire of not smaller than **# 12 AWG copper. 680.7**
4. Circuit line for pump motor shall be a continuous circuit going directly to panel box and **shall have no other receptacles. 430-22(A)**
5. A receptacle used unattended in a wet location shall have a **watertight in use cover 406.8 (B)(1)**
6. All underground UF wire and PVC conduits must be 18" deep, unless circuit is protected by GFCI upstream then 12" deep, **300.5** Only electric specific to the pool is allowed less than 5" feet to the water's edge and must be **18" deep** and be installed in a approved raceway. **680.10**
7. At least one convenience **receptacle must be located between 6 and 20 feet** from the waters edge and must be GFCI Protected. Existing outlets between 6 and 20 feet shall be GFCI protected. **680.22(A)(1-5)** This can be wired with any approved wiring method.
8. All metal parts must be **bonded together with a No. 8** or larger, solid copper wire must be used. (Motor, ladders, pool frame, diving board, lights, etc.) **680-22 / E4104.1**
9. **A minimum of 9 square inches** of metal must be in contact with the water to bond water.
10. PERIMETER EQUIPOTENTIAL BONDING all pools shall have **#8 CU 18-24 inches out 4-6 inches** deep if no concrete with wire or mesh in it. **680.26 (B) (2)** This wire must circle pool.
11. When bonding pool frame or any metal parts to main bonding wires or wire mesh, you must use listed **non-corrosion clamps. 680-22(A) (B) / E4104.1**
12. For dry niche, wet niche, no niche lighting fixtures, **680-20,680-25 (B) / E4106**
13. For any lighting fixtures outside of pool. **680-6 (b) (1) (2) (3) / E4103.4.3**
14. **Time Clocks** shall be installed so that the pump can be set to run in the off-peak electric demand period and can be set for the minimum time necessary to maintain the water in a clear and sanitary condition in keeping with the health standards. **Section 504.3.3**

15. Swimming Pool Alarms:

Each residential 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 gives 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 the Underwriter's Laboratory, Inc to reference standard ASTM F2208, Entitled Standard Specification for Pool Alarms, as adopted in 2002;
- (5) is not an alarm device which is located on person(s) or which is dependant on device(s) located on person(s) for its proper operation.

All swimming pool applications must:

- be submitted and approved by the Code Enforcement Office, prior to the installation of any pool.
- Meet NYS Electrical Code and Barrier/Fencing Requirements.

Contact the Code Enforcement Office to receive a swimming pool permit application.

Pre-inspection check list

Complete / review this list before calling a Certified Electrical Inspector for an inspection.

The Code Enforcement Officer can not do the Electrical Inspection

1. ___ Have pool permit available to inspector
2. ___ Pool Pump Twist lock plug if between 6 and ten feet from waters edge, ___ water tight bubble cover. ___ Pump cord 12 gauge wire no longer than 3 feet with water tight connector at pump.
3. ___ Convenience receptacle located between 6 and 20 feet. GFCI protected with bubble stle cover.
4. ___ Ditch open in a few spots ___ 12 inches deep of GFCI protected wires. ___ 18 inches if not. ___ PVC conduit with 3 THHN-THWN conductors (Black, White, Green) Green must be #12 AWG wire for pool pump. ___ UF wire ok for Convenience receptacle.
5. ___ All metal parts bonded to pump with #8 solid CU wire. NO GROUND RODS !! ___ If no metal is water bonded 9 Sq inch
6. ___ Perimeter equipotential bonding all pools # 8 solid CU 18-24 inches from pool edge 4-6 inches deep and bonded to pool pump lug.
7. ___ All existing receptacles within 20 feet of pool must be GFCI protected. ___ None can be closer than 6 feet.
8. ___ All ground wires must be mechanically fastened in junction boxes with wire nuts or other approved fasteners. ___ Metal boxes must be bonded to grounding wires.
9. ___ If a breaker is used for pool pump make sure it is Ground fault GFCI nor Arc Fault AFCI. A blank face GFCI can also be used.
10. ___ Town will look for pool alarm and barrier/fence.

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**Barrier/Fence Requirements
For Above ground & In-ground Swimming Pools**

§PM 303.3 Outdoor swimming pool. 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:

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 aboveground 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 2 inches (51 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 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 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 1.75 inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a 1.25-inch (32 mm) 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 (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 1.75 inches (44 mm).

8. Access gates shall comply with the requirements of Section §PM 303.3, 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 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 (1372 mm) 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 (76 mm) below the top of the gate, and

8.2. The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) 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:

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 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 (1372 mm) 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 §PM 303.3, 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.

2010 New York Energy Code for all Pools.

Swimming Pools

Heated pools:

- Pool heaters must have an ON-OFF switch
- Must be equipped with a pool cover
 - Exception: if pool is heated 20% by a non-depletable source (yes, this is difficult to determine and will ultimately be up to the jurisdiction)

All pools:

- Time clocks for circulation pumps - allows pump to be run at times when electric demand is lower and can be set to run for the minimum time necessary to keep the water clean and sanitary

Benefits of a pool cover

For outdoor pools:

- eliminates evaporative losses
- covers can save up to 50% on energy consumption

For indoor pools:

- eliminates evaporative losses
- reduces or eliminates the need for humidity control

Pump Operation

For circulating hot water systems, an on-off switch is required to turn the pump off when the system is not in operation.

Pipe Insulation

Minimum Pipe Insulation (thickness in inches)

SERVICE WATER-HEATING TEMPERATURES (°F)	PIPE SIZES ^a			
	Noncirculating runouts	Circulating mains and runouts	1.5" to 2"	Over 2"
170-180	Up to 1"	Up to 1.25"	1.5	2.0
140-169	0.5	0.5	1.0	1.5
100-139	0.5	0.5	0.5	1.0

http://www.energycodes.gov/training/res_wbt/swh.stm