



TOWN OF NORTH ATTLEBOROUGH BUILDING DEPARTMENT

43 So. Washington Street, North Attleborough, MA 02760
Phone 508-699-0110 Fax 508-699-0144

Pools

As of May 10, 2023, before any pool permit is issued, all documentation for fencing, gates and alarming of gates and dwelling doors associated with entry to pool area shall be submitted in detailed plans according to the 2015 International Swimming Pool and Spa code.

Martin Furtado
Building Inspector
North Attleborough MA
mfurtado@nattleboro.com

Life Safety is a joint responsibility.



Town of North Attleborough, Massachusetts
Building Department
43 South Washington Street
North Attleborough, MA 02760
Phone (508) 699-0110 Fax (508) 699-0144

GENERAL POOL GUIDELINES

1. Pools are considered structures and need to adhere to the zoning setback requirements for their zone.
 - The link to the Town's Zoning map:
<https://northattleboroughma.mapgeo.io/datasets/properties?abuttersDistance=300&latlng=41.965783%2C-71.325183&panel=themes&themes=%5B%22zoning%22%5D&zoom=12>
 - The link to the By-law Section which defines the setbacks for your zoning district (Pages 21-26).
https://www.nattleboro.com/sites/g/files/vyhlf3566/f/uploads/current_official_zoning_by-laws_thru_march_18_2019_2.pdf
2. All pools, except those specifically exempt as outlined in 780 CMR – 421.1 (copy attached), require a building permit which can be applied for through the Town's Online Permitting software.
<https://northattleboroughma.viewpointcloud.com/>
3. All additional pool regulations are as outlined on the attached guidelines. If you have any additional questions please contact the building department or a licensed installer.

Pool Regulations 2021

780 CMR STATE BOARD OF BUILDING REGULATIONS AND STANDARDS THE MASSACHUSETTS STATE BUILDING CODE

Appendix G, Section AG 105 Outdoor private swimming pool: An outdoor private swimming pool, including an in-ground, above ground 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 finished ground level measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between finished ground level and the barrier shall be two 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 finished ground level, such as an above-ground pool, the barrier shall be at finished ground level, such as the pool structure, or shall be 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 four inches (102 mm).
2. Openings in the barrier shall not allow passage of a four-inch (102 mm) diameter sphere.
3. Solid barriers 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 $\frac{3}{4}$ inches (44 mm) in width. Decorative cutouts shall not exceed 1 $\frac{3}{4}$ 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 four inches (102 mm). Decorative cutouts shall not exceed 1 $\frac{3}{4}$ inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a 1 $\frac{1}{4}$ 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 $\frac{3}{4}$ 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 be not more than 1 $\frac{3}{4}$ inches (44 mm).
8. Access gates shall comply with the requirements of 780 CMR 421.10.1 items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outwards 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:

Pool Regulations 2021

Const.

- (a) the release mechanism shall be located on the pool side of the gate at least three inches (76 mm) below the top of the gate; and
- (b) the gate and barrier shall not have an opening greater than ½ inch (13 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 shall apply:

9.1. 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 audible warning shall commence not more than seven seconds after the door and screen door, if present, are opened and shall sound continuously for a minimum of 30 seconds. The alarm shall have a minimum sound pressure rating of 85 dBA at ten feet (3048 mm) and the sound of the alarm shall be distinctive from other household sounds such as smoke alarms, telephones and door bells. The alarm shall automatically reset under all conditions. The alarm shall be equipped with manual means, such as touch pads or switches, to deactivate temporarily the alarm for a single opening from either direction. Such deactivation shall last for not more than 15 seconds. The deactivation touch pads or switches shall be located at least 54 inches (1372 mm) above the threshold of the door.

9.2. The pool shall be equipped with an approved power safety cover.

10. Where an above-ground pool structure issued as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a fixed or removable ladder or steps, the ladder or steps shall be surrounded by a barrier which meets the requirements of 780 CMR 421.10.1 items 1 through 9. A re-movable ladder shall not constitute an acceptable alternative to enclosure requirements.

421.10.2 Indoor private swimming pool: All walls surrounding an indoor private swimming pool shall comply with 780 CMR 421.10.1, item 9.

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

421.10.4 Exemptions: The following shall be exempt from the provisions of 780 CMR 421.0.

1. A spa or hot tub with an approved safety cover.
2. Fixtures which are drained after each use.

421.11 Diving boards: Minimum water depths and distances for diving hoppers for pools, based on board height above water, shall comply with Table 421.11(1) for public pools and Table 421.11 (2) for private pools. The maximum slope permitted between point D₂ and the transition point shall not exceed one unit vertical to three units horizontal (1:3) in private and public pools. D₁ is the point directly under the end of the diving boards. D₂ is the point at which the floor begins to slope upwards to the transition point.

THE MASSACHUSETTS STATE BUILDING CODE

421.1 General: Swimming and bathing pools shall conform to the requirements of 780 CMR 421.0 provided that 780 CMR 421.0 shall not be applicable to any such pool less than 24 inches (610 mm) deep or having a surface area less than 250 square feet (23.25 m²), except where such pools are permanently equipped with a water-recirculating system or involve structural materials. For the purposes of 780 CMR, pools are classified as private swimming pools, public swimming pools or *semi-public swimming pools*, as defined in 780 CMR 421.2. Materials and constructions used in swimming pools shall comply with the applicable requirements of 780 CMR.

421.2 Definitions: The following words and terms shall, for the purposes of 780 CMR 421.0 and as used elsewhere in 780 CMR, have the meanings shown herein.

Pools, swimming, hot tubs and spas

Above-ground/on-ground pool: See definition of private swimming pool.

Barrier: A fence, a wall, a building wall or a combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool. (*Refer to M.G.L. c. 140, § 206 for required enclosure of public or semi-public, outdoor, inground swimming pools.*)

Hot tub (special purpose pool): A unit designed for recreational and therapeutic use which is shallow in depth and not meant for swimming or diving. These pools are not drained, cleaned or refilled for each user. It may include, but not be limited to hydrojet circulation, hot water, cold water mineral baths, air induction bubbles, or any combination thereof. Industry terminology for such a pool includes but is not limited to, therapeutic pool, hydrotherapy pool, whirlpool, hot spa, hot tubs, float tanks, etc. This standard excludes residential units and facilities used or under the direct supervision and control of licensed medical personnel.

In-ground pool: See definition of private swimming pool.

Private swimming pool: Any structure that contains water over 24 inches (610 mm) in depth and which is used, or intended to be used, for swimming or recreational bathing in connection

Public outdoor, inground swimming pool: Any swimming pool which is used, or intended to be used, for swimming or recreational bathing by the general public. Refer to M.G.L. c. 140, § 206 for requirements pertaining to public or semi-public, outdoor, inground swimming pool enclosures, safety equipment, inspection, and penalties for violations.

Public swimming pool, outdoor: Any public swimming pool that is not defined as an outdoor, inground swimming pool.

Semi-public outdoor, inground swimming pool: (as defined by M.G.L. c. 140, § 206) any swimming or wading pool on the premises of, or used in connection with, a hotel, motel, trailer court, apartment house, country club, youth club, school, camp, or similar establishment where the primary purpose of the establishment is not the operation of the swimming facilities.

Semi-public outdoor, inground swimming pool shall also mean a pool constructed and maintained by groups for the purposes of providing bathing facilities for members and quests only. Refer to M.G.L. c. 140, § 206 for requirements pertaining to public or semi-public, outdoor, inground swimming pool enclosures, safety equipment, inspection, and penalties for violations.

Semi-public swimming pool, outdoor: Any semi-public swimming pool that is not defined as a semi-public outdoor, inground swimming pool.

Spa: See definition of private swimming pool.

Wading Pool: A pool of water in a basin having a maximum depth of less than two feet intended chiefly as a wading place for children. It does not include any residential pool as herein defined.

421.3 Permits and construction documents: A swimming pool or appurtenances thereto shall not be constructed, installed, enlarged or altered until construction documents have been submitted and a permit has been obtained from the code official. The approval of all city, county and state authorities having jurisdiction over swimming pools shall be obtained before applying to the code official for a permit. Certified copies of these approvals shall be filed as part of the supporting data for the permit application.



NOTICE of New Federal Pool Requirements The Virginia Graeme Baker Pool & Spa Safety Act



The provisions of the new law are designed to prevent serious injuries and fatalities associated with suction entrapment in pools and spas.

By December 19, 2008, in accordance with the new federal law

- **ALL** public, semi-public and special purpose swimming pool drain/grate covers **MUST** conform to the American National Standard ASME A112.19.8 – 2007 Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs, or any successor standard, published by the American Society of Mechanical Engineers (ASME);
- **EVERY** public, semi-public and special purpose swimming pool with a single main drain, other than an unblockable drain (interpreted by the Consumer Product Safety Commission to have minimum dimensions of 18 inches by 23 inches or have a diagonal measurement of 29 inches or more), **MUST** be equipped with one or more additional systems or devices designed to prevent suction entrapment. As outlined in the law these additional systems or devices may include a safety vacuum release system (SVRS), suction limiting vent system, gravity drainage system, automatic pump shut-off, or any other system determined by the CPSC to be equally effective in preventing suction entrapment;
- If a public, semi-public or special purpose pool can not comply by December 19, 2008, the CPSC requires that the pool or special purpose pool shut down until the proper covers are installed and, when applicable, an additional suction entrapment prevention device or system is installed as outlined in the law; and
- Non-compliance with these federal provisions may result in the imposition of civil or criminal penalties under sections 20 or 21 of the Consumer Product Safety Act.

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By December 19, 2008, in accordance with regulation 105 CMR 435.00

- Anti-vortex drain covers must be replaced if they do not meet ASME A112.19.8 – 2007;
- Gravity drainage systems are **NOT** exempt from the drain/grate cover provisions;
- Drain disablement is **NOT** an acceptable suction entrapment prevention option, pursuant to 105 CMR 435.00 Minimum Standards for Swimming Pools, State Sanitary Code, Chapter V;
- An operating permit, pursuant to 105 CMR 435.21, should **NOT** be issued to any public, semi-public or special purpose pool that does not comply with the requirements;
- Variances pursuant to 105 CMR 435.46 shall **NOT** be granted since the federal law implies preemption of state requirements;
- Public, semi-public and special purpose swimming pools that are not open on December 19, 2008 are not required to be in compliance until the day that they re-open; and
- It is the pool operators' **RESPONSIBILITY** to provide written confirmation that pool drain/grate covers conform to the American National Standard ASME A112.19.8 – 2007.

For more information please visit the MDPH – Community Sanitation Program website www.mass.gov/dph/dcs or contact the Massachusetts Department of Public Health, Bureau of Environmental Health at **617-624-5757**.

above-ground electric utility lines, or encroach upon any privately owned property without the written consent of the owner of the encroached-upon property, space or above-ground electric utility lines. Towers shall be equipped with climbing and working facilities in compliance with TIA-222. Access to the tower sites shall be limited as required by applicable OSHA, FCC and EPA regulations.

SECTION 3109 SWIMMING POOL ENCLOSURES AND SAFETY DEVICES

3109.1 General. Swimming pools shall comply with the requirements of Sections 3109.2 through 3109.5 and other applicable sections of this code.

3109.2 Definition. The following term is defined in Chapter 2:
SWIMMING POOLS.

3109.3 Public swimming pools. Public swimming pools shall be completely enclosed by a fence not less than 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not *permit* the passage of a 4-inch-diameter (102 mm) sphere. The fence or screen

enclosure shall be equipped with self-closing and self-latching gates.

3109.4 Residential swimming pools. Residential swimming pools shall be completely enclosed by a barrier complying with Sections 3109.4.1 through 3109.4.3.

Exception: A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346 need not comply with this section.

3109.4.1 Barrier height and clearances. The top of the barrier shall be not less than 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The vertical clearance between grade and the bottom of the barrier shall be not greater than 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the vertical clearance between the top of the pool structure and the bottom of the barrier shall be not greater than 4 inches (102 mm).

3109.4.1.1 Openings. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

3109.4.1.2 Solid barrier surfaces. Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

3109.4.1.3 Closely spaced horizontal members. 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 be not greater than $1\frac{3}{4}$ inches (44 mm)

in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than $1\frac{3}{4}$ inches (44 mm) in width.

3109.4.1.4 Widely spaced horizontal members. 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 be not greater than 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than $1\frac{3}{4}$ inches (44 mm) in width.

3109.4.1.5 Chain link dimensions. Mesh size for chain link fences shall be not greater than a $2\frac{1}{4}$ -inch square (57 mm square) unless the fence is provided with slats fastened at the top or the bottom that reduce the openings to not more than $1\frac{3}{4}$ inches (44 mm).

3109.4.1.6 Diagonal members. Where the barrier is composed of diagonal members, the opening formed by the diagonal members shall be not greater than $1\frac{3}{4}$ inches (44 mm).

3109.4.1.7 Gates. Access doors or gates shall comply with the requirements of Sections 3109.4.1.1 through 3109.4.1.6 and shall be equipped to accommodate a locking device. Pedestrian access doors or gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Doors or gates other than pedestrian access doors or gates shall have a self-latching device. Release mechanisms shall be in accordance with Sections 1010.1.9 and 1109.13. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the door or gate, the release mechanism shall be located on the pool side of the door or gate 3 inches (76 mm) or more, below the top of the door or gate, and the door or gate and barrier shall be without openings greater than $\frac{1}{2}$ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

3109.4.1.8 Dwelling wall as a barrier. Where a wall of a *dwelling* serves as part of the barrier, one of the following shall apply:

1. Doors with direct access to the pool through that wall shall be equipped with an alarm that produces an audible warning when the door or its screen, if present, are opened. The alarm shall be *listed* and labeled in accordance with UL 2017. In dwellings not required to be *Accessible units, Type A units* or *Type B units*, the deactivation switch shall be located 54 inches (1372 mm) or more above the threshold of the door. In dwellings required to be *Accessible units, Type A units* or *Type B units*, the deactivation switch shall be located not higher than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the threshold of the door.
2. The pool shall be equipped with a power safety cover that complies with ASTM F 1346.

ARTICLE 680
Swimming Pools, Fountains, and Similar Installations

Part 1. General

680.1 Scope. The provisions of this article apply to the construction and installation of electrical wiring for, and equipment in or adjacent to, all swimming, wading, therapeutic, and decorative pools; fountains; hot tubs; spas; and hydromassage bathtubs, whether permanently installed or storable, and to metallic auxiliary equipment, such as pumps, filters, and similar equipment. The term *body of water* used throughout Part I applies to all bodies of water covered in this scope unless otherwise amended.

680.4 Inspections After Installation. The authority having jurisdiction shall be permitted to require periodic inspection and testing.

Additional Clarification:

Extension cords are *NOT* an approved method of wiring for “pools”. Refer to the above article.