



TOWN OF NISKAYUNA SWIMMING POOL REQUIREMENTS

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Niskayuna, New York 12309
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A building permit is required. Proof of insurance is required. Please review our **Insurance Requirements** document to ensure contractors and homeowners have filed all appropriate documents with the Building Department.

BUILDING CODE AND ZONING ORDINANCE REQUIREMENTS

THIS SUPPLEMENT IS TO BE ACCOMPANIED BY A PERMIT APPLICATION

1. Swimming pool plans must show the following:
 - a. Size and shape of pool
 - b. Type of pool
 - c. Aprons, platforms or decks around the pool
 - d. Accessory equipment related to pool
 - e. Location in relation to property lines
 - f. Other structures on property (ie. House, garage, shed)
- Plans should be on either 8-1/2 x 11 or 11 x 17 paper. Plans from a pool company, home improvement center or lumberyard may be acceptable if sufficient detail is provided.
2. Grading plan must be submitted and approved by Superintendent of Public Works.
3. Any structure intended for swimming or recreational bathing that contains water over 24 inches deep must meet the Zoning Ordinance. This includes in-ground, aboveground and on-ground swimming pools, hot tubs, and spas.
4. Swimming pools are accessory structures. Three accessory structures are permitted on a lot.
5. The maximum area of coverage and minimum setbacks for swimming pools are by Zoning Ordinance and shown on back.
6. Swimming pools must not be located within utility and drainage easements. It is the owner's responsibility to verify the location of property lines for issuance of permit.
7. Swimming pools may not be located in front of the principal building.
8. Above-ground pools with rigid walls and at least 48 inches between pool top and adjoining grade do not need separate enclosures if the only access to the pool is by a ladder which can be removed or blocked in an approved manner.
9. All other pools must be enclosed with a minimum 48 inch high fence, equipped with self-closing, self-latching, and lockable gates. Chain-link fences may not have openings greater than 2.25 inches. Some styles of picket-type fences may not have openings greater than 1.75 inches. The bottom of fences cannot be higher than 2 inches above the ground. All fences must meet the Zoning Ordinance. See Section AG105 of the Residential Code of New York State for additional requirements.
10. Walls and decks used as part of a swimming pool enclosure must meet applicable building codes.
11. Call for excavation inspection once an in-ground swimming pool hole is dug. Call for final inspection when complete. If electrical is run to the swimming pool, call for final building inspection after electrical inspection is complete.
12. Electrical work requires permits and inspections through any of the Town approved electrical inspectors. See the list of approved electrical inspectors on our website.

**Before digging, call Dig Safely New York excavation notification center
at 1-800-962-7962 to locate utilities. All utilities
(gas, electric, phone, cable TV, etc) will be located free of charge.**

SWIMMING POOL SUPPLEMENT TO PERMIT APPLICATION

Plans and all of the following information are required with swimming pool permit applications.

Address of property _____

a. Size of swimming pool _____

b. Type of swimming pool above-ground _____ ht _____ soft wall _____ ht _____
 rigid wall _____ ht _____ inground _____

c. Distance to property lines:
 Side 1 _____
 Side 2 _____
 Rear _____
 Other _____

d. Are there any other accessory structures on the property?
 Fence yes no height _____
 Shed yes no size _____
 Other yes no size _____

e. Type of fence enclosure (if applicable) _____

Zoning District	maximum total coverage of accessory structures	side & rear setback if 120 sq. ft. or less	side setback	rear setback	side setback to a street
R-R	NA	5 feet	35 feet	40 feet	no closer than side of house
R-1	2,250 sq. ft. or less if lot is less than 18,000 sq. ft.	5 feet	20 feet	25 feet	no closer than side of house
R-2, R-3 or R-P	1,350 sq. ft. or less if lot is less than 9,000 sq. ft	5 feet	15 feet	20 feet	no closer than side of house

Applicants Signature: _____ **Date:** _____

(For office use only)

Area of lot _____

Maximum accessory structure coverage allowed _____

Total accessory structure coverage actual _____

Maximum lot coverage allowed _____

Total lot coverage actual _____

Residential Code of New York State

Section R326.3 Swimming Pools

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

R326.3.2 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 shall be designed and constructed in conformance with ANSI/NSPI-3 (Standard for Permanently Installed Residential Spas, 1999).

R326.4.2 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, aboveground 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, aboveground 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 $1\frac{3}{4}$ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the 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 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1\frac{3}{4}$ inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a $2\frac{1}{4}$ -inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than $1\frac{3}{4}$ 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 not be more than $1\frac{3}{4}$ inches (44 mm).
8. Gates shall comply with the requirements of Section R326.5.3, 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 (1372 mm) 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 R326.5.3, 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.

R326.5.4 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Section R326.5.3, 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 A12.19.8M, or an 18 inch by 23 inch (457 mm 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 (Standard Specification for Pool Alarms), 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.

Section R326.8 Standards

R326.8.1 General. The following table lists the standards that are referenced in Section R326 that are neither listed in Chapter 44 of the 2015 IRC (International Residential Code), nor Chapter 10 of the Supplement. The standards are listed by the promulgating agency of the standard, the standard identification, the effective date and title, and the section(s) of Section R326 that reference the standard. Referenced standards that have been incorporated by reference into 19 NYCRR (New York Code Rules and Regulations) Parts 1220 through 1228 are located in Chapter 10 of the Supplement. Application of referenced standards shall be as specified in Section 102.5.

Standard Number	Title	Where Referenced
ASTM	ASTM International 100 Barr Harbor Dr, West Conshohocken, PA 19428	
ASTM F2208-2008	Standard Specification for Pool Alarms	R326.7.1
NSPI	National Spa and Pool Institute 2111 Eisenhower Avenue, Alexandria, VA 22314	
ANSI/NSPI-3-99	Standard for Permanently Installed Residential Spas	R326.4.1
ANSI/NSPI-4-99	Standard for Above-ground/On- ground Residential Swimming Pools	R326.3.2
ANSI/NSPI-5-03	Standard for Residential In- ground Swimming	R326.3.1
ANSI/NSPI-6-99	Pools Standard for Residential Portable Spas	R326 4.2
UL	Underwriters Laboratories, Inc.	

Plot Plan (survey) information for in-ground pools

- The as-built plan should show the finished floor elevation of the garage, denoted GFF (Garage Finished Floor) or GFE (Garage Floor Elevation). Use this for the “benchmark elevation”.
- Take some spot shots (grade elevation readings) in the area where the proposed construction or grading activity is to take place to confirm that the as-built base plan is up to date and accurate. Revise the plan (correct the contour lines) if it is outdated or inaccurate.
- Draw on this base plan the location of what is being proposed. Make sure it is drawn in the right location and drawn to scale. (The scale of the base plan should be clearly noted on the plan sheet, for instance, 1 inch = 10, 20, 30, or 40 feet). If the base plan has been photo reduced or enlarged to some unusual scale, it will need to be adjusted to a common scale (in multiples of 10 feet).
- Show spot elevations of proposed work such as the elevation of a deck or the corners of a patio as well as “high points” and “low points”.
- Draw in proposed contour lines.
- Illustrate swales if applicable.
- Provide typical cross-section detail of proposed underground utilities (such as drainage pipes).
- Clearly illustrate (to proper scale) the location of any easements crossing or abutting the property.
- Show the location of any structures such as catch basins, manhole covers, power poles, etc. located in or near the proposed construction/grading site.
- Illustrate the “limits of disturbance” (beyond which nothing will be altered in any fashion).
- Provide appropriate dimensions, such as setbacks and lengths of fencing, etc.
- If this work seems beyond your capability, then hire a surveyor, engineer or architect who is qualified to prepare the plan.
- NOTE: This list is not necessarily comprehensive; we may ask for more. For instance, if there are wetlands, they should be clearly and accurately delineated. This requires expert knowledge to properly delineate such features.