



This guide is designed to assist customers who wish to install swimming pools, spas, and hot tubs on residential sites. For answers to questions about permits, inspections, and design plans for your installation, please contact our Permits Technicians at **252-972-1110/1109/1119** or via email at [devserv@rockymountnc.gov](mailto:devserv@rockymountnc.gov).

Please read our frequently asked questions on pools, spas, and hot tub installation to learn about the steps needed to build, construct, or install a residential style pool.

## FAQ's

### What is classified as a “pool?”

According to the 2018 NC Residential Code a swimming pool is any structure intended for swimming or recreational bathing that contains water over 24 inches (610 mm) deep including:

- In-ground
- Above-ground/on-ground
- Hot tubs
- Spas

### Who makes the rules for pools, spas, and hot tubs?

The [2018 North Carolina Residential Code](#) states design requirements in Appendix V. These structures must also comply with guidelines set forth in [2018 NC Building Code](#), the [2018 International Swimming Pool and Spa Code](#) and the Rocky Mount Land Development Code (*see* [Sec. 507 of the LDC](#)).

### What use does a pool structure have in Rocky Mount?

These types of structures are recognized as an “Accessory Use” and must meet all required zoning specifications associated with each permitted zoning district (*i.e., A-1, R-15, R-10, R-8, R-6, O-I, PUD or B-4*).

### Are design plans required?

Architectural plans will need to be submitted to our Development Services Department for approval depending on the pool style, type, build requirements, and total project cost. Plans should show all setbacks, accessory structures on the lot, and a sketch of the pool barrier. Please refer to our [Development Procedures](#) for more information on plans requirements and submittal.

### Do I need a permit to install a pool structure?

Depending on the type of pool structure and its installation or build requirements including [but not limited to] the total project cost, and location, permits and inspections may be required. As with any residential construction project, as pertaining to N.C. G.S. 160A-417 the construction, reconstruction, alteration, repair, movement to another site, removal, or demolition of any building or structure shall not commence without first securing all permits required, which will also need to be inspected. The possible permits needed are:

- Building Permit
- Mechanical Permit
- Plumbing Permit

Electrical Permit

Fence Permit

Zoning Permit

Obtaining the proper permits and inspections ensures that the highest safety measures have been taken to warrant that all equipment has been installed correctly, highlighting all safeguards to prevent injuries and deaths due to drowning, near-drowning, and electrocution. Click [here](#) to download all permits, forms, and applications for your project.

## What inspections are generally needed?

Again, depending on the size and scope of the project and location the general inspections for pools, spas, and hot tubs, will cover (if necessary):

Electrical

Proper Barrier Protection

Entrapment protection

Pool heater = clearances/gas piping/venting

Mechanical

Building Final

## Do I need to install a barrier for my pool structure?

To comply with State protection requirements, whenever a pool, spa, or hot tub is either in-ground, above-ground, or on-ground it must be surrounded by a fence or solid barrier (*see [2018 North Carolina Residential Code - Appendix V Swimming Pools, Spas, and Hot Tubs](#)* ).

All residents located in jurisdiction of the city of Rocky Mount must construct barriers with a height of at least 60 inches (5 feet) above grade as listed in the (*see [Rocky Mount Land Development Code Sec. 710. – Fences and Walls. A. 10](#)*).

## General Information

- It is the responsibility of both the owner and contractor to ensure that the installation is done in compliance with all applicable laws and regulations.
- Water must **NOT** be added to pool until the barrier has been inspected and approved by the city for compliance with Appendix V of the North Carolina Residential Code.

## Electrical Inspection for Pools

Electrical work must comply with Article 680 of the National Electrical Code. Typical inspections are listed below. Other inspections may be required depending upon the specific equipment and installation.

**Electrical Groundwork Inspection** includes, but is not limited to:

- Bare copper ties to wall rebar
- Potting compound at underwater lights
- Bare copper ties to metal light fixture shells, cups for ladders, handrails, etc.
- Other bonding & grounding depending on type of pool
- Junction boxes
- Underground conduits
- Underground copper ties from house/electrical panel to pool equipment
- Equipotential bonding of perimeter surfaces

**Electrical Final Inspection** includes, but is not limited to:

- Pool equipment grounding
- Ground fault protection
- Junction boxes
- Required receptacles, required distances

- Completion of electrical work

## Electrical Inspections for Spas and Hot Tubs

Electrical work must comply with Part IV of Article 680 of the North Carolina Electrical Code, which includes all pertinent sections of Parts I and II. Typical inspections are listed below. Other inspections may be required depending upon the specific equipment and installation.

**Electrical Groundwork** includes, but is not limited to:

- Required on spas and hot tubs installed outside (equipotential bond and power to tubs or spas).

**Electrical Final Inspection** includes, but is not limited to:

- Pool equipment grounding
- Junction boxes
- Completion of electrical work
- Ground fault protection
- Required receptacles, required distances.

## Mechanical Inspection for Pools, Spas, and Hot Tubs (if applicable)

If the pool, spa, or hot tub is fueled by natural or propane gas, then the mechanical gas piping work must comply with the North Carolina Mechanical and Fuel Gas Codes.

**Mechanical and Gas Piping Rough-In Inspections** includes but is not limited to:

- Inspection of heating equipment components (verify clearances, etc.)
- Inspection of gas piping that will be concealed (ex. underground/under slab/under patio)
- Gas piping pressure test of any gas piping that will be concealed (visual inspection/pressure gauge)

**Mechanical and Gas Piping Final Inspections** includes but is not limited to:

- Inspection of fuel fired equipment and components (verify clearances, combustion air etc.)
- Inspection of complete gas piping system
- Gas piping pressure test of total complete system (visual Inspection/pressure gauge)

## Building Inspections for Pools Spas and Hot Tubs

Building inspections for residential pools, spas, and hot tubs are performed to verify compliance with the barrier and entrapment protection requirements set forth in [Appendix V](#) of the North Carolina Residential Code (NCRC). Some requirements are listed below.

**Building Final Inspection** includes, but is not limited to:

BARRIERS (provide a sketch of the existing or proposed fence for this property)

- Height of fences or solid barriers shall be at least 60 inches above grade
- Maximum clearance under the barrier is 2 inches
- Openings must not allow passage of a 4-inch diameter sphere
- Horizontal members of fences must be at least 45 inches apart with 4-inch space between vertical members

- Horizontal members of fences less than 45 inches apart require 1<sup>3</sup>/<sub>4</sub> inches or less between vertical members
- Decorative cutouts in barrier must not exceed 1<sup>3</sup>/<sub>4</sub> inches
- Solid barriers shall not have protrusions or indentations that can be used for climbing
- Gates shall be self-closing, self-latching device, and open away from pool
- Release mechanism height is required to be at least 54 inches
- Release mechanism heights less than 54 inches require gate and barrier to have openings no greater than 0.5 inches for 18 inches on each side of the mechanism and 3 inches below the top of gate on the pool side
- If the wall of a dwelling serves as part of the barrier, the pool must be secured with a powered safety cover (*see [AV105.2 Outdoor Swimming Pool - #9](#)*) OR, any door with direct pool access must have an alarm that is listed and labeled in accordance with UL 2017, must activate within 7 seconds, is audible for 30 seconds, and can be heard throughout the house.
- The deactivation switch is allowed that at 54 inches above the door threshold and lasts for not more than 15 seconds
- Self-closing, self-latching doors may be used instead of an alarm if the opening mechanism is at least 54 inches above the door threshold
- Ladders or steps to an above-ground pool must be capable of being secured, locked, or removed, or have a barrier surrounding the pool access point

***EXCEPTION: Spas or hot tubs may have a safety cover complying with ASTM F 1346***

## Entrapment Protection

- Suction fittings must comply with ANSI /ASME A112.19.8M or must have covers at least 18 inches x 23 inches
- Safety vacuum release systems must conform to ASME A112.19.17
- Two required suction outlets shall be at least 36 inches apart
- Suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum-relief-protected line to the pump or pumps
- Pool cleaner fittings shall be in an accessible location between 6 inches and 12 inches below the minimum operable water level

## Things to Know...

**Outdoor Residential Swimming Pools...** must comply with all stipulations set forth in the [City of Rocky Mount Code of Ordinances](#) and the [2018 North Carolina Residential Code Appendix V](#). Among other items, these, and other applicable regulations mandate that:

1. Permanent Pool Barriers must be constructed in specific manners, dimensions, and locations to prevent individuals from passing over, under, or through them.
2. Permanent Pool Barriers must be located as to prohibit permanent structures, equipment, or similar objects from being used to climb them. Climbable structures must remain at least 36” from the pool barrier.
3. Temporary Barriers must be installed throughout construction, around all pool excavations, filled or unfilled.
4. Swimming in the pool is prohibited until all inspections are approved and the Certificate of Occupancy is obtained by the property owner or the pool contractor; and
5. An “as-built” survey may be required to ensure pool and or barrier location.
6. If you are a homeowner acting as the contractor for your project, the [Owner Exemption Affidavit](#) is required.

7. Nash and Edgecombe County residents located outside of the city limits and ETJ will need to comply with county guidelines on pool structure installation. Take note that a Zoning Permit may be required. Individuals with septic and well must contact Environmental Health.

More information regarding additional safety tips for pools can be found in the International Code Council *Guide*. Please contact the Department of Development Services for information concerning your project by calling **252-972-1110/1109/1119** or via email at [devserv@rockymountnc.gov](mailto:devserv@rockymountnc.gov)