



SWIMMING POOL, SPA & HOT TUB GUIDELINES AND PERMIT REQUIREMENTS

A. Adopted construction codes and installation requirements

1. 2015 edition of the International Residential Code and Appendix Q,
2. 2017 edition of the National Electrical Code

B. Submit a completed permit application

The permit application must be filled out completely to include the following:

1. All applicable contractor information.
2. Subcontractors listed on permit must be licensed and currently registered with the City of Murphy.
3. Permit fee- See Murphy Code of Ordinances, Article A9.000 Building, Construction and Development Related Fees

C. Construction Documents

- Submit three (3) pool design plans; with each plan stamp approved by the electric underground utility company. Each plan must also include the installation design, depth of pool and location of equipment, per the above mentioned adopted codes.
- Submit three (3) site plans (a survey plat is required) showing the location of the pool with respect to the property lines, easements and house.
- Construction plans must have stamp of approval by the electric underground utility company.
- Construction plans must include the installation design, depth of pool and type of equipment and equipment location.
- A **fence permit** must also be obtained if a new or reconstructed fence is to be installed.

Sec. 24.07.004 Location of pools and equipment

(a) Swimming pools, water features, slides, and pool equipment located in a single-family residential district, whether underground or above ground, may be located anywhere behind the front building line and shall have a minimum setback of **five feet (5')** from the water's edge, structure and/or equipment to the property line. Swimming pools may not be located in any area which cannot be fenced in accordance with the city or state pool enclosure regulations.

(b) Any decking must have a minimum setback of **five feet (5')** from the property line.

(c) Pools shall be set back from the foundation of the main structure using a **1:1 ratio** of the deepest point in the pool unless approved by a registered professional engineer.

(d) Any drainage swale adjacent to any property line located in the **five-foot (5')** setback must be maintained to prevent drainage of any water onto neighboring properties.

Vent on pool heater shall terminate not less than 4 ft. below or 4 ft. horizontally from, nor less than 1 ft. above any door, operable window, or gravity air inlet into any building or less than 4 ft. from any property line except a public way. No part of pool, equipment or decks will be allowed in easements.

NOTE: Pool setbacks – side to PL = 5', rear to PL = 5', pool to house (one/one ratio = pool excavation depth at the point closest to house = pool setback distance.)

D. Inspection Procedure

To schedule an inspection, Contact the Customer Service Department at 972-468-4050. Inspections requests must be received by 3:00 pm to be scheduled for the following business day.

E. The information listed below must be provided when making an inspection request

- Permit number
- Address
- Contractor name
- Type of inspection

Construction Site Requirements

- Erosion protection required.
- A four-foot (4') temporary fence must be in place at all times during construction until the permanent fence is installed.
- Streets and alleys must be kept free of mud and debris at all times.

Required Inspections

Belly Steel Inspection

- Proper placement of the pool for setback requirements, minimum five feet (5') from property lines. (Pool decks must also be minimum five feet from property lines)
- **Inspection of permanent barriers (fences) around pools for compliance with the code. All deviations of the pool barrier code must be corrected by the Final Inspection.**
- Safety alarm or self-closing devices on residence door will be inspected. (Refer to the 2015 International Residential Code, Appendix Q. Barrier Requirements, Sec. AQ 105.1 – copy attached). The resident must sign a certification document provided by the city, which states that this requirement has been met. This letter must be left with the permit card on the job site at the time of inspection. (Door alarm letter must be signed by the homeowner in front of a notary).
- Windows must be of tempered glass if bottom edge of glass is less than 60 inches above walking surface and within 60 inches horizontally of the water's edge.
- Steel reinforcement inspection.

- Bonding shall be done on the belly steel inspection with a No. 8 or larger solid copper conductor around pool belly and looped a minimum of 4 times up to pool deck steel and fixtures.
- All 120 volt light fixtures shall be bonded with a No. 8 solid copper wire attached to the fixture housing lug. This wire should then be run parallel with the brass pipe and bonded to the pipe with a suitable clamp. Connection shall be made by exothermic welding or by pressure connectors or clamps that are labeled as being suitable for the purpose and are of the following materials: Stainless steel, brass, copper.
- Suction outlets shall be designed and installed in accordance with ANSI/APSP-7

P-Trap

- Filtration system waste water is to be disposed of through a public sewer; a minimum of three inch (3') P-trap shall be required. The tailpiece from the trap shall extend a minimum of three inches (3') above finished grade and below finished floor grade of structure. Traps need not be vented when located on the exterior of the building. The connection between the filter waste discharge piping and the P-trap shall be made by means of an air gap.

Deck Steel Inspection

- Pool decks must be minimum, five feet (5') from property lines.
- Deck steel must be in place (min. #3 rebar on 18" centers) and properly supported with expansion material installed. Any decks placed on top of loose fill dirt will have footing dug around to prevent dirt from eroding from underneath.
- Common bonding grid as well as the brass pipe clamp must be visible. Any metallic material (handrails, slides, diving boards, etc.) must be grounded to the bonding grid with a #8 solid copper wire.
- A static water or air pressure test of not less than twenty-five (25) psi will be required on the deck steel inspection. Piping can be in a manifold and tested separate from equipment.

Pre-plaster/Final Inspection

- Grass, vegetation or approved means of erosion control must be in place at property lines and City property at alleys and parkways.
- All pool related inspections must be completed prior to requesting a Pre-plaster/Final inspection. All equipment shall be wired and ready for operation. **Fence must be in place and meet all the requirements of the attached appendix.**

2015 International Residential Code Appendix Q

Section AQ 105.2

Barrier Requirements

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 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 masonry or stonewall, 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.

Exception: Boards with a minimum 30-degree bevel placed at the top of the horizontal fence members (rails), may be used on existing fences that will become pool barriers. This exception does not apply to fences adjacent to public right of way.

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 2.25-inch (57 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 RAG105.1, Items 1 through 7, and shall be equipped to accommodate a locking device. 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/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, 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 RAG105.1, 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.

Fence barrier exceptions for spas or hot tubs:

Safety covers for spas and hot tubs must comply with ASTM F 1346-91.