



TO: Development Services Customers

SUBJECT: **INFORMATION BULLETIN 170**
Swimming Pool Permits

DATE: January 8, 2010
Revised February 24, 2012/August 1, 2014/November 18, 2015

CREATED BY: Plan Review Division

Purpose:

As a customer service initiative the Development Services Department (DSD) has created this **revised** bulletin to update Information Bulletin (IB) 170 on swimming pool permits. This bulletin has been updated to modify the changes made to the 2015 International Residential Code and 2015 International Energy Conservation Code as it applies to swimming pool permits, plan review, and inspections. DSD developed this IB to describe the process and some of the minimum requirements for obtaining swimming pool permits.

Scope:

I. Residential Swimming Pools

Where a residential swimming pool is installed on the lot of a one- or two-family dwelling, the applicant is to submit the following to DSD:

- a. A completed “General Repair/Residential Permit Application” signed and dated by the applicant.
- b. A site plan drawn to scale showing the dimensions and size of the lot, the location of the existing structure(s), easements and the proposed location of the residential swimming pool. The site plan shall also show the location of the required barrier as prescribed in 2015 *International Residential Code (IRC)*, Section R326.1 and the 2015 *International Building Code (IBC)* (see attachment for summary of requirements). A plat is not required when applying for a residential swimming pool permit. However, a 5’ building set back will be required from the swimming pool waterline (inside wall of the pool) to the property line or lot line.

The residential swimming pool application will be reviewed and issued over the counter generally on the same day of the application. Once the permit is approved, paid for and issued, the applicant may begin construction of the swimming pool and its associated required barrier(s).

II. Commercial Swimming Pools

Where a public or semi-public swimming pool is to be installed, the applicant is to submit a commercial building permit application and a commercial checklist located in [Information Bulletin 103](#). Per Chapter 15, Article VIII of the City Code, public or semi-public swimming pools are defined as follows:

- *Public swimming pool*: any swimming pool, spa or sauna which is open to the general public.
- *Semipublic swimming pool*: (1) Any privately owned swimming pool or spa which is open to the general public for a fee; or (2) Any swimming or wading pool, spa or sauna, serving a private club, motel, hotel, apartment building, school, child care facility, recreational or physical fitness facility, institution, home owner's association, or other similar activity or structure, the use of which is limited to members, residents, students, or clients and their guests.

Public or semi-public swimming pools located outdoors and on ground level are processed and reviewed through the Minor Plans Team and are generally assigned a ten (10) calendar day turnaround for initial reviews. Public or semi-public swimming pools located inside a building or on a building roof are generally assigned a twenty (20) day turnaround for initial reviews. During the review process, the applicable review disciplines will review the proposed swimming pool for compliance with the applicable City codes (Building Code, Health Code, Stormwater/Flood Plain regulations, Fire Code, etc.). Once the permit is approved, paid for and issued, the applicant may begin construction of the swimming and associated required barrier(s).

III. General Information

The applicant shall ensure that proper trade permits are obtained as needed (i.e., electrical, plumbing, etc), that licensed contractors perform the work and that required inspections are scheduled through DSD.

Applicants should refer to the following websites to identify the applicable code requirements for swimming pools:

- Metro Health <http://www.sanantonio.gov/Health/HealthyEnvironment/Pools.aspx>

Note: The City of San Antonio Health Department and Inspection staff will be reviewing for State requirements and other department requirements. DSD Plan review staff will be reviewing project compliance base on adopted City Building Codes, Amendments, and Zoning Ordinances.

- <https://www.sanantonio.gov/Portals/0/Files/health/HealthyEnvironment/BasicPoolGuidelines.pdf>
- Building-Related Codes - [City Amendments to the Building-related Codes](#)
 - 2015 *International Building Code*
 - 2015 *International Residential Code*
 - 2015 *International Plumbing Code*
 - 2015 *International Fuel Gas Code*
 - 2015 *International Mechanical Code*
 - 2015 *International Energy Conservation Code*
 - 2014 *National Electrical Code*
 - 2015 *International Fire Code* with [City Local Fire Amendments](#)

To assist you in your design and submittal, please note the following list of common denial comments for public or semi-public swimming pool applications:

- Failure to include gas piping plan for pool heater in construction document submittal (i.e., distance to source, btu load, pipe size, etc). Lack of details indicating pool filler backflow preventer and waste discharge location.
- Proposed pool barrier does not meet applicable requirement of 2015 IBC or 2015 IRC and/or City health code. If a new or existing building structure is being utilized as part of the barrier, then details of all windows and doors shall comply with barrier safety requirement.
- Incomplete electrical information in construction document package. Plans are required to demonstrate proposed methods for compliance with all Bonding requirements in Article 680 of the 2014 National Electrical Code. Plans shall also include a 20ft radius area surrounding the pool (show any existing or proposed structures as well as electrical fixtures and equipment installed in this area). Panel Schedule (include required GFCI protection), panel location, and load calculations. Missing clear details of equipotential bonding of pool shell size/type of bonding grid, perimeter bonding grid, and bonding of all other metal components. Provide diagrammatic details for the required equipotential bonding (pool shell) and perimeter bonding (area extending 3 feet beyond Pool), and bonding of all fixed metal components within 5ft of pool/ spa/ fountains (as part of a pool).
- Proposed pool layout and equipment location drawings provided are not to scale. Scaled drawings are required in order to verify proper distances from J-boxes, light fixtures, receptacles, motors, and objects from inside wall of pool.
- Insufficient/incorrect information regarding type, quantities and hazard classification of any pool chemicals to be stored/handled on site (see Fire Code). Provide product chemical codes in order to verify approved maximum quantities and correct chemical classifications.

If you have any questions on this process, please contact the Plan Review Staff at DSDPlansManagement@sanantonio.gov

Summary:

This Information Bulletin is for informational purposes only.

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SAFETY BARRIER AND ENERGY CONSERVATION **REQUIREMENTS FOR RESIDENTIAL PRIVATE SWIMMING POOLS**

Address: _____ AP No. _____

The City of San Antonio (COSA) requires that private residential swimming pools installed on the lot of a one- or two-family dwelling comply with the 2015 *International Residential Code* (IRC), Section R326.1, Section 3109 of the 2015 International Building Code (IBC), and the 2015 *International Energy Conservation Code* (IECC), each as currently adopted by COSA. As part of these minimum safety requirements, the 2015 IRC requires that residential swimming pools be surrounded by barriers meeting minimum design criteria which are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools. Also, as part of the minimum energy conservation requirements, the 2015 IECC requires heated pools to include special provisions to conserve energy. This summary was developed to serve as a reminder to the applicant/contractor of some of the residential swimming pool barrier requirements found in 2015 IRC Section R326.1 and the 2015 International Building Code. **This summary is not all inclusive and construction must meet all applicable codes.**

Definitions:

- **Barrier.** A permanent fence, wall, building wall or combination thereof which completely surrounds the swimming pools or spa and obstructs access to the swimming pool. The term, “permanent” shall mean not being able to be removed, lifted, or relocated without the use of a tool.
- **Swimming Pool.** Any structure intended for swimming or recreational bathing that contains water over 24 inches deep. This includes in-ground, above-ground and on ground swimming pools, hot tubs, spas, and fixed in place wading pools.
- **Residential.** That which is situated on the premises of a detached one- or two-family dwelling or a one-family townhouse not more than three stories in height.

Barrier Requirements (2015 IRC Section R326.1 and Section 3109 of the 2015 IBC):

- An **outdoor swimming pool**, including an in-ground, above-ground or on-ground pool, hot tub, spa, and fixed in place wading pools, shall be surrounded by a barrier as follows:
- **Top of barrier:** Must be at least 48 inches above grade measured on the side of the barrier that faces away from the swimming pool.

Bottom of barrier: Maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches 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.

- **Openings:** Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
- **Solid barriers:** (e.g., masonry or stone wall) May not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
- **Fences:** Chain link: Maximum mesh size for chain link fences shall be a 2 ¼-inch square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1¾ inches.
Diagonal members: (e.g., lattice fence) Maximum opening formed by the diagonal members shall not be more than 1¾ inches.
- **Gates:** Pedestrian access gates shall open outward away from the pool, be self-closing and self-latching. Locks may be used in conjunction with the self-latching device however are not permitted as a substitution for a self-latching device.
- **Self-latching device:** The release mechanism of the self-latching device must be located at least 54” from the bottom of the gate OR the release mechanism must be located on the pool side of the gate at least 3 inches below the top of the gate and the gate and barrier must not have an opening greater than ½ inch within 18 inches of the release mechanism.
- **Dwelling wall used as barrier:** Where a wall of a dwelling serves as part of the barrier, one of the following shall be provided: 1) the pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or 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 and labeled in accordance with UL 2017 and the deactivation switch(es) shall be located at least 54 inches above the threshold of the door); or 3) other means of protection, such as self-closing doors with self-latching devices, which are approved by the City, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 1 or 2 described above.

Above-ground pool structure used as barrier: 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, the ladder or steps shall be capable of being secured, locked or removed to prevent access; or the ladder or steps shall be surrounded by a barrier which meets the requirements of IRC Section R326.1 and Section 3109 of the 2015 IBC.

- When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter sphere.

Walls surrounding an **indoor swimming pool** shall comply with section, “**Dwelling wall used as barrier**” section above).

Energy Conservation Requirements for Heated Pools (2015 IECC–Section R403.10)

- **Pool heaters:** All pool heaters shall be equipped with a readily accessible on-off switch to allow the shutting off the heater without adjusting the thermostat setting. Pool heaters fired by natural gas shall not have continuously burning pilot lights.
- **Time switches:** Time switches that can automatically turn off and on heaters and pumps according to a preset schedule shall be installed on swimming pool heaters and pumps, Except 1) where public health standards require 24-hour pump operation, or 2) pumps are required to operate solar- and waste-heat-recovery pool heating systems.
- **Pool covers:** Unless more than 70 percent of the energy for heating is from site-recovered energy or solar energy source heated pools shall be equipped with a vapor-retardant pool cover or other approved vapor-retardant means.

Inspection Requirements:

Trade	Type	Verification
Building	Foundation	Site location, setbacks, easements
Building	Final	Barriers, audible alarm, self-latching devices, pool cover or other approved vapor retardant means
Electrical	Rough-in	Bonding grid, perimeter bond, conduit and underwater luminaries rough-in, equipment location
Electrical	Final	GFCI protection, over current protection sizing, water bond, equipment location and disconnecting means
Plumbing	Rough-in	Water supply piping rough-in and proposed equipment location.
Plumbing	Final	Water supply backflow protection and equipment location.
Gas	Rough-in	Gas piping rough-in, air test, proposed location of equipment. If an underground fuel tank is proposed, the gas line will be inspected from tank to pool equipment connections.
Gas	Final	Air test, equipment connections, and energy compliant shut off switches
***Note: A Fire Department permit and inspections will be required for underground propane tanks installed.		