



# DEVELOPMENT SERVICES

TO: Development Services Customers

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

DATE: January 8, 2010  
*Revised May 03, 2023 / October 12, 2023*

CREATED BY: Plan Review Division

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## **Purpose:**

As a customer service initiative, the Development Services Department (DSD) has created this **revised** bulletin to update Information Bulletin (IB) 170 regarding swimming pool and spa permits. DSD developed this IB to describe the process and some of the minimum requirements for obtaining swimming pool and spa permits. This bulletin has been updated to reflect the City adopted 2021 International Swimming Pool and Spa code with City of San Antonio amendments.

## **Scope:**

### **I. Residential Swimming Pools and Spas**

Where a residential swimming pool or spa is installed on the lot of a one- or two-family dwelling, (single-family, duplex and townhome) the applicant is to submit the following to DSD:

- a. You may submit an electronic residential swimming pool or spa application through the [BuildSA Customer Portal](#). The application is located under the Building module tab. Choose “Create an Application”, and then chose the “Residential Improvements Permit Application”. A “Swimming Pool or Spa: is a sub type that is chosen within the application.
- b. Submit an electronic pdf copy (if submitting on-line) or a paper copy (if submitting at 1901 S Alamo) of the 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 / spa. The site plan shall also show the location of the required barrier (if required) and as prescribed in 2021 International Swimming Pool and Spa Code as amended by the City of San Antonio ([see attachment for summary of many requirements](#)). A plat is not required when applying for a residential swimming pool or spa permit. However, a 5’ building set back will be required from the

swimming pool/spa waterline (inside wall of the pool) to the property line or lot line.

- c. Submit the Swimming Pool/Spa Barriers and Safety Devices Compliance Agreement as a pdf during the application. See [SwimmingPoolApplication.pdf \(sanantonio.gov\)](#)

The residential swimming pool/spa application will be reviewed and issued within three business days if submitted on-line or issued same day over the counter. The applicant may then begin construction of the swimming pool and its barrier(s) if appropriate.

Residential Swimming Pools and Spas are defined as follows:

- *Residential swimming pool:* A pool intended for use which is accessory to a residential setting and available only to the household and its guests.
- *Spa:* A product intended for the immersion of persons in temperature-controlled water circulated in a closed system, and not intended to be drained and filled with each use. A spa usually includes a filter, an electric, solar or gas heater, a pump or pumps, and a control, and can also include other equipment, such as lights, blowers, and water-sanitizing equipment. There are two types of Residential Spas: Permanent or Portable. Portable may be non-self contained or self contained - regarding controls, filters, pumps, lights blowers, heaters and equipment. Self contained may be either permanently wired or cord connected to power.

## II. Commercial Swimming Pools/Spas

Where a public or semi-public swimming pool is to be installed, the applicant is to submit an electronic commercial building permit application by logging into the [BuildSA Customer Portal](#). The application is located under the Building module tab. Choose “Create an Application”, and then chose the “Commercial Project Application”. During the application, in the Commercial Permit Type window, and under Minor Building Structures choose the Swimming Pool at the bottom of the screen. Do not check any of the other boxes on this screen since each box checked will create a permit unless the goal is to obtain several permits with one application. Any related sitework is included in the swimming pool application and permit, so it is sufficient to only choose Minor Structure as the type of commercial application.

If the intent is to build an occupiable building with the pool/spa, then check No to the question, “Is this project going to be phased?” Then check both Complete New Building and Minor Structure/Swimming Pool in the list of permits. Both permits will be issued after plan review and allow a COO for the Building after completion of the permit inspections as well as an LOC (Letter of Completion) for the swimming pool or spa.

After the on-line submittal, electronic construction plans, and documents are required to be uploaded in pdf format (one or more files) to the Plan Room within the BuildSA portal.

Commercial swimming pools are defined as follows:

- *Public swimming pool:* A pool, other than a residential pool, that is intended to be

used for swimming or bathing and is operated by an owner, lessee, operator, licensee or concessionaire, regardless of whether a fee is charged for use. Public pools shall be further classified and defined by the Class of Swimming Pool: Class A through Class F (see the 2021 ISPSC).

- *Public Spa*: A spa other than a permanent residential spa or portable residential spa which is intended to be used for bathing and is operated by an owner, licensee or concessionaire, regardless of whether a fee is charged for use.

Public swimming pools or spas located outdoors and on ground level are processed and reviewed through the Minor Plans Team and are generally assigned a three (3) calendar day turnaround for initial reviews. Public swimming pools or spas 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 or spa for compliance with the applicable City codes (Pool and Spa, Building Code, Health Code, Storm Water/Flood Plain regulations, Fire Code, etc.). Once the permit is approved, paid for, and issued, the applicant may begin construction of the swimming pool/spa 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

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](#)
  - 2021 *International Swimming Pool and Spa Code*
  - 2021 *International Building Code*
  - 2021 *International Residential Code*
  - 2021 *International Plumbing Code*
  - 2021 *International Fuel Gas Code*
  - 2021 *International Mechanical Code*
  - 2021 *International Energy Conservation Code*
  - 2020 *National Electrical Code*
  - 2021 *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 the pool filler backflow preventer and waste discharge location.
- Proposed pool/spa barrier does not meet applicable requirement of 2021 International Swimming Pool and Spa Code 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 of the 2021 International Swimming Pool and Spa Code as amended by the City of San Antonio.
- 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 2020 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 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 with quantities 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](mailto: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/SPAS**

The City of San Antonio (COSA) requires that private residential swimming pools or spas installed on the lot of a one- or two-family dwelling comply with the 2021 *International Swimming Pool and Spa Code (ISPSC)* and the 2021 *International Energy Conservation Code (IECC)*, each as currently adopted and amended by COSA. As part of these minimum safety requirements, the 2021 ISPSC requires that residential swimming pools and spas be surrounded by barriers (with exception) meeting minimum design criteria which are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools/spas. Also, as part of the minimum energy conservation requirements, the 2021 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/spa barrier requirements. **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.
- **Residential Swimming Pool.** A pool intended for use that is accessory to a residential setting and available to the household and its guests.
- **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.
- **SPA.** A product intended for the immersion of persons in temperature-controlled water circulated in a closed system and not intended to be drained and filled with each use.

**Barrier Requirements (2021 ISPSC Section 305):**

For a Residential application, barriers are NOT required where spas or hot tubs are equipped with a lockable safety cover that complies with ASTM F1346, or swimming pools are equipped with a powered safety cover that meets ASTM F1346.

A **safety cover** is defined as: A structure, fabric or assembly, along with attendant appurtenances and anchoring mechanisms, that is temporarily placed or installed over an entire pool, spa or hot tub and secured in place after all bathers are absent from the water.

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 per Sections 305.2.1 through 305.7 if no ASTM F1346 safety cover is installed. The following summarizes some details of barrier requirements but does not include all detailed requirements or options of the International Swimming Pool and Spa Code: For details, refer to the 2021 ISPSC Section 305.

- **Top of barrier:** The top of the barrier shall be not less than 48 inches (1219 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier.
- **Bottom of barrier:** The vertical clearance between grade and the bottom of the barrier shall

not exceed 2 inches (51 mm) for grade surfaces that are not solid, such as grass or gravel. The vertical clearance between a surface below the barrier to a solid surface, such as concrete, and the bottom of the required barrier shall not exceed 4 inches (102 mm).

- 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:**
  - **Mesh Fence:** The bottom of the mesh fence shall be not more than 1 inch (25 mm) above the deck or installed surface or grade. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not permit the fence to be lifted more than 4 inches (102 mm) from grade or decking. The fence shall be designed and constructed so that it does not allow passage of a 4-inch (102 mm) sphere under any mesh panel. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not be more than 4 inches (102 mm) from grade or decking.
  - **Chain link:** Maximum opening for chain link fences shall be a 1<sup>3</sup>/<sub>4</sub>-inch square. If the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1<sup>3</sup>/<sub>4</sub> inches. Diagonal members: (e.g., lattice fence) Maximum opening formed by the diagonal members shall not be more than 1<sup>3</sup>/<sub>4</sub> 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 (for Residential):** 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 1/2 inch within 18 inches of the release mechanism.
  - **Building Structure walls with doors used as barrier:** Where a wall of a residential building serves as part of the barrier, doors through that wall with direct access to the pool 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 48 inches and not greater than 54 inches above the threshold of the finished floor); or 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 the above.
  - **Operable Windows:** Where a wall of a residential building serves as part of the barrier, any first floor operable window with sill height of less than 48-inches above finished floor shall have an alarm that produces an audible warning when the window is opened. The alarm shall be listed and labeled as a water hazard entrance alarm in accordance with UL 2017.

**Above-ground pool structure used as barrier:** Where an above-ground pool structure is used as a barrier complying with the height requirements 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 ISPSC Section 305.5.

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

**Energy Conservation Requirements for Heated Pools (2021 ISPSC Section 303 or IECC– Section C404.9 Commercial and R403.10 Residential)**

- **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 that operate solar- and waste-heat-recovery pool heating systems.
- **Pool covers:** Unless more than 75 percent of the energy for heating is from site- recovered energy or solar energy source heated pools, computed over a period of 3 calendar months, the pool 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.		