LARIMER COUNTY | Community Development
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Residential Swimming Pools and Spas

Please visit ICCsafe.org to view a free copy of the International Swimming Pool and Spa Code (ISPSC).

Prefabricated swimming pools that are less than 24 inches (610 mm) deep do not require building permits.

Plan Submittal Requirements

- For all residential pools and spas, provide **THREE COPIES** of a plot plan per Larimer County's Plot Plan Requirements handout, showing the location of the proposed pool or spa, pool deck and stairs (if any), associated heating or plumbing equipment, any windows and doors within 5', and the location of any electrical disconnects.
- The following plans and specifications are also required.

Residential In-ground Swimming Pools

- **TWO COPIES** of the design plans for the proposed swimming pool. Design plans should include:
  - Design criteria (wind/snow loads, soil bearing)
  - Profile section of the pool
  - Details of rebar and shotcrete
  - Locations of the lights, drains and other equipment
  - Type of material of the pool deck
- Location of the disposal of the wastewater if being discharged into the building's drainage system.
- **TWO COPIES** of the manufacturer's specifications for the following:
  - Heating equipment per ISPSC Table 316.2(1).
  - Suction entrapment device (APSP 7)
  - Skimmer (NSF 50)
  - Circulation equipment
  - Suction outlet fitting (APSP 16)

Residential Portable Spas and Exercise Spas

- **TWO COPIES** of the manufacturer's specifications for the portable residential spa listed and labeled in accordance with UL 1563 or CSA C22.2 No. 218.1.
- Additional engineering may be required if installing a portable spa on a deck.

Residential Permanent Spas and Exercise Spas

- **TWO COPIES** of the following:
  - Pump and motor listing for use in spas
  - Suction fittings (ASPS 16)
  - Water temperature controls (UL 873 or UL 372)

Residential On Ground Storable Swimming Pools

- **TWO COPIES** of the manufacturer's specifications for the following:
  - Pool
  - Ladders and stairs
  - Circulation equipment

Barrier Requirements (ISPSC Section 305)

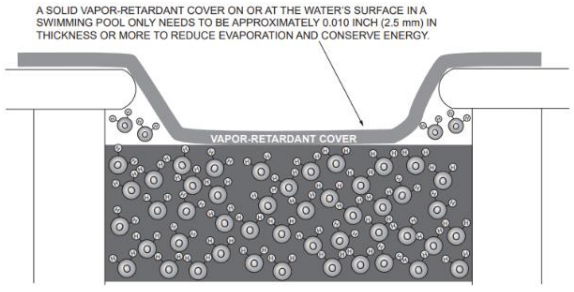
- Provide a method that meets one of the following barrier requirements:
  - Physical barrier design plan including fencing, walls, gates, and alarms – see next page for barrier excerpts.
  - Manufacturer's specifications for a lockable safety cover that complies with ASTM F 1346 for spas and hot tubs.
  - Manufacturer's specifications for a powered safety cover that complies with ASTM F 1346 for swimming pools.

Electrical Requirements per NFPA 70 (National Electrical Code)

- **Article 680.26(B) Bonded Parts.** Conductive pool shells, perimeter surfaces extending 3' from inside walls of the pool, metallic components, underwater lighting, metal fittings, electrical equipment, and fixed metal parts including but not limited to metal-sheathed cables and raceways, metal piping, metal awnings, metal fences, metal doors and window frames, etc. shall be bonded together and grounded per Article 250.8.

Energy Efficiency Requirements (ISPSC Section 303)

- Electric heaters shall be controlled by a readily accessible on-off switch.
- Gas-fired heaters shall not have continuously burning ignition pilots.
- Heaters and pump motors shall have built-in or field-installed automatic timers.
- Outdoor heated pools and permanent spas shall be provided with a vapor-retardant cover.



Commentary Figure 303.1.3(2)
POWERED OR PIN-DOWN TYPE SOLID VAPOR-RESISTANT COVER
{Illustration of Association of Pool and Spa Professionals (APSP)}

Residential Swimming Pool and Spa Barrier Requirements

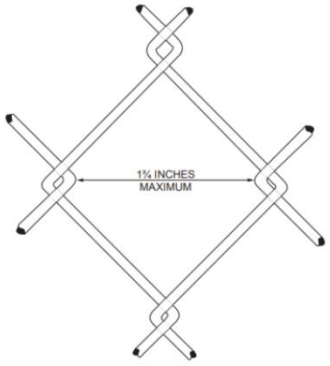
Construction fencing required
Fencing at least 4' high shall be installed surrounding the site from start of excavation until permanent barrier is complete.

Outdoor swimming pools and spas and indoor pools shall be surrounded by a barrier that complies with the following:

- The top of the barrier shall be at least 48 inches above grade, measured on the outside and extending 3' out.
- The bottom of the barrier shall be no more than 2" above non-solid surfaces such as grass and gravel, and 4" maximum above solid surfaces such as concrete or the top of the pool or spa structure.
- Where the pool or spa is above grade, the barrier shall be installed on grade or mounted on top of the pool or spa.
- Openings in the barrier shall not allow passage of a 4-inch-diameter sphere.
- Solid barriers without openings shall not contain indentations or protrusions that form handholds and footholds.
- Pool equipment such as pumps, filters and heaters outside the barrier shall be at least 3' away from the barrier.

Chain link fences

- The maximum opening formed by a chain link fence shall be $1^3/_4$ inches.
- Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be not more than $1^3/_4$ inches. The angle of diagonal members shall be not greater than 45 degrees from vertical.



ELEVATION VIEW

Commentary Figure 305.2.7
MAXIMUM OPENING WIDTH IN BARRIERS BUILT WITH CHAIN LINK FENCING

Mesh fences shall be installed in accordance with the manufacturer's instructions and the following:

- The inside of a mesh fence shall be not closer than 20 inches to the nearest edge of the water of a pool or spa.
- The bottom of the mesh fence shall be not more than 1 inch above the deck or installed surface or grade.
- The fence shall not allow passage of a 4-inch sphere under any panel or be able to be lifted more than 4 inches.
- An attachment device shall attach each barrier section at a height not lower than 45 inches (1143 mm) above grade.
- Vertical post receptacles that are placed inside the patio surface shall be of a nonconductive material.
- Mesh fences shall not be installed on top of on ground *residential* pools.

Doors and Gates

- Pedestrian access doors and gates shall open outward, shall be self-closing and shall have a self-latching device.
- Where a latch release on the outside of the barrier is not self-locking, it shall be at least 54" high.
- Where the mechanism is inside the barrier, openings within 18" of the latch shall be ½" maximum in any dimension.
- Non-pedestrian gates (utility and service doors) shall remain locked when not in use.

Dwelling wall as a barrier

- Where wall doors, gates or windows provide direct pool/spa access, operable windows within 48 inches of indoor finished floor, doors and gates shall have an alarm listed and labeled as a water hazard entrance alarm in accordance with UL 2017 that produces an audible warning.
- In dwellings not required to be Accessible/Type A or B units, the operable parts of the alarm deactivation switches shall be located at least 54 inches above indoor finished floor. Where accessibility is required, the operable alarm parts shall be located not greater than 54 inches and not less than 48 inches above indoor finished floor.

On ground residential pool wall structure or barrier mounted on top may serve as a barrier where the following are true:

- Where only the pool wall serves as the barrier, the bottom of the wall is on grade, the top of the wall is at least 48 inches above grade for the entire perimeter of the pool, and the pool manufacturer allows the wall to serve as a barrier.
- The top of a barrier mounted on top of the pool wall shall be not less than 48 inches above grade for the entire perimeter of the pool, and the wall and the barrier on top of the wall comply with the above barrier requirements.
- Ladders or steps used as means of access to the pool are capable of being secured, locked, or removed to prevent access except where the ladder or steps are surrounded by a barrier that meets the above requirements.
- Openings created by securing, locking or removal of ladders and steps do not allow the passage of a 4-inch diameter sphere.
- Barriers mounted on top of on ground *residential* pool walls shall follow the pool manufacturer's instructions.