



Pool Construction Guidelines

These guidelines are for information purposes only.
The contractor is obligated to comply with all adopted codes and ordinances.

BUILDING INSPECTIONS

1400 Main St., Ste. 250 – Southlake, Texas 76092
(817) 748-8237 or 8236

Inspection Requests must be scheduled online

POOL PERMITTING POLICY

Certain accessory components to be constructed in conjunction with a swimming pool installation may be covered under a Pool Permit. This includes pools, spas, grills, fire pits (gas only-no solid fuel), fireplaces, outdoor showers, and outdoor kitchens combining a grill and/or bar sink as well as all detached structures not exceeding 120 square feet in area. An existing covered patio may have a grill or outdoor kitchen installed under a pool permit. All components are subject to all applicable building codes and ordinances. All components shall be clearly shown on the pool plan and site plan and shall include all pertinent construction details.

The intent of the above paragraph is that the plumbing and/or electrical done under the Pool Permit is done by the trade listed on the permit and is ready for inspection at the same time as the regular pool inspections. Items that require a Building Permit per section R105 of the IRC cannot be grouped under the Pool Permit and must have their own permit.

Detached structures exceeding 120 square feet in area including but not limited to cabanas, gazebos, and arbors, as well as attached patio covers require a *separate* building permit.

SWIMMING POOL REQUIREMENTS

PERMIT APPLICATION PACKETS may be submitted online for review. Our goal is to complete plan reviews within five (5) working days, excluding day of submittal. When plans are approved, print one paper set of city stamped plans for a field set.

The following items must be included with the online submittal. Plan reviews will not begin until all application requirements are met. **Incomplete plans and/or applications will not be accepted.**

- A. Online submittal. All information including subcontractor details must be complete prior to submittal.
- B. Site Plan showing the pool, spa and any other structures (fire pits, fire features, fire places, water features, ponds, arbors/cabanas under 120 sqft., grill/outdoor kitchen, outdoor shower). The site plan shall specify construction access and a drainage plan to include grading, deck drains, area drains and roof gutters/ downspouts to match the subdivision or lot drainage plan. If there is not a subdivision plan or an engineered drainage plan on file in Public Works Engineering, applicant will be required to provide one. This must be stamped by the appropriate Electrical Utility Company.
- C. Pool plans detailing setbacks from the house and any other structures from water edge and “back of beam”. Plan must show the depth of the pool and a pool profile. Include any other new construction on pool plan including water features, gas lines, and other structures. Label if required a separate permit.

- D. Cabana/arbor plan including engineered foundation/piers . (Applicable if under 120 sf)
- E. Outdoor kitchen plan showing plumbing, gas and electric plans. (if applicable)
- F. Fireplace plan with engineered foundation plan and gas/electric plan. (if applicable)
- G. Any additional gas plan (fire pit, fire bowls, etc.)
- H. Resubmittal – all plans must be resubmitted online at one time or review will not be completed until full re-submittal is complete.

Deed Restrictions/ Homeowner Association

Deed restrictions and Homeowner Association regulations are considered a private agreement between property owners. The City of Southlake is not a party to such agreements and does not have any standing in the enforcement. It is each property owner's responsibility to be aware of and comply with such agreements.

Projects located in the **Carillon** will need an **approval stamp** from Carillon HOA prior to building permit submittal.

Septic Systems

Houses on Septic Systems must show location of lateral lines or aerobic system on the site plan and must show setbacks from the pool as required by the Tarrant County Health Department.

Wells

Houses with an alternative water source (well water) have the potential for a cross connection of the municipal water supply. Any alternative water supply not regulated by the TCEQ is considered a high health hazard. The water department is obligated to protect the municipal water system and the customer from any health hazards due to cross connections. Thus, the water department shall require any water customer with an alternative water source to create two physical separations from the alternative water sources, where appropriate. The two acceptable physical separations are either a reduced pressure principal assembly (RPZ) or an air gap. When adding a RPZ, a closed loop plumbing system is created. At that time, an expansion tank will be required to be added to all water heaters on site. This is not required for tank-less water heaters. A permit will be required for adding a RPZ and for any expansion tanks.

Protected Trees

Trees must be shown on the site plan if the plans require removal of any protected trees. No Protected Trees may be removed without permission from the City. Your pool permit grants permission to remove any tree that is under pavement on your approved plans. Do not place fill, store materials, or park vehicles under any protected trees. See TREE PRESERVATION ORDINANCE SUMMARY for definition of protected trees. Call the Landscape Administrator at 817-748-8229 for more information.

Tree protection fencing

Orange fencing with tree protection signs, where applicable, must be erected prior to any aspect of construction on site.

Location on lot.

Outdoor swimming pools shall be located in a side or rear yard, not forward of the house and at least five feet from any property line measured from the water's edge of the pool structure. A decorative fountain or pond not over 24 inches deep may be in a front yard provided it is at least ten feet from any property line.

Setbacks from Existing Building Foundations

Pools or spas that are less than a one-to-one depth to distance ratio from back of pool beam to existing building foundations require an engineer's letter to avoid undermining of building foundations.

Glazing and Wet Surfaces

Glazing less than sixty (60) inches above pool grade and less than sixty (60) inches horizontal distance to water's edge is required to be safety glazing. Glazing more than sixty (60) inches above pool grade does not have a safety glass requirement.

Backwash Lines

Swimming pool backwash lines shall discharge to a P-Trap that is connected to sanitary sewer. Any lot of at least one acre or more that is NOT connected to sanitary sewer may discharge directly onto the lot provided it does not run off onto a neighboring property. An approved separation tank may be used when connected as a reclamation system, or a cartridge filter system that does not require backwashing. Chlorinated water and salt water shall not be dumped into a storm sewer, creek, bar-ditch, or on another property.

Entrapment

To prevent hair entrapment, drain covers must be installed that are in compliance with ASME/ANSI A112.19.8M and ANSI/NSF standard 50-2000.

Vacuum or Pressure Cleaner

All vacuum or pressure cleaner fitting(s) shall be located at least six (6) inches and not than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).

Deck Drains

Deck drains, area drains, and roof gutters/ downspouts which are designed principally to collect rainwater may drain to a storm sewer, creek, or bar-ditch.

Safety Glazing

Safety glazing is required in walls and fences enclosing indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60 inches above a walking surface and within 60 inches horizontally of the water's edge. This shall apply to single glazing and all panes in multiple glazing. Reference 2018 IRC R308.4 Hazardous Locations.

Contractor Registration

The General (Pool) contractor must be currently registered with the City of Southlake prior to submittal of the building permit. Registration: \$105.00 annual fee. State of Texas license holders are required to register and must have a current active license on file with the state but there is no fee for registration.

Fence or Retaining Wall

A pool barrier/fence may be included in the pool permit if it is noted on the application and shown on the plans. Otherwise, a separate permit is required.

Fences and retaining walls meeting the criteria listed below require a separate fence permit:

- A masonry fence or retaining wall 48 inches or greater from the bottom of the footing to the top of the wall. (Requires engineering)
- A non-masonry fence greater than 7 feet high. Fences over 96 inches from grade require a variance to the zoning ordinance.

CODES

For a complete list of building construction requirements, refer to the following code books and the adopting ordinances: They may be viewed at <http://www.cityofsouthlake.com/planning/building.asp>

- 2018 International Swimming Pool and Spa Code – Ordinance 1216
- 2018 International Residential Code – Ordinance 1210
- 2020 National Electrical Code – State of Texas requirements
- 2018 International Energy Conservation Code – Ordinance 1208

STAFF

Office Hours: Office hours are 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding holidays.

Plans Examiners are generally available during 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding holidays. Appointments are encouraged to meet with a specific person.

Inspectors To contact an inspector either leave a message on voice mail and calls will be returned as soon as time is available or send an email. To contact inspectors please call 817-748-8226 or 817-748-8969.

INSPECTION REQUESTS: All Inspection Requests are required to be requested **online** through the city online permit software. *Inspection requests for am/pm are reserved for water heater or HVAC change outs in an occupied residence only. **This is strictly reserved as a courtesy to homeowners.***

- It is the General Contractor's responsibility to request all inspections online.
- The City stamped set of plans MUST be on the jobsite for ALL inspections.
- Inspection must be requested prior to 7:00 a.m. for same day inspection.
- **All inspections held back because of cold weather or rain MUST be re-scheduled by requesting an inspection online.**
- No concrete or plumbing rough inspections will be made if it is too wet. No concrete inspections will be made unless the temperature is 38 degrees and rising. Do not lay brick when it will be below 40 degrees before mortar setting.
- All dogs must be locked up prior to inspection.
- To cancel an inspection call 817-748-8236 or 8237 ***before 8:30 am.***

Re-Inspection Fee

A \$100.00 RE-INSPECTION FEE may be charged when:

- Work called for inspection is incomplete;
- Building address and/or permit card is not clearly posted;
- City approved plans are not on the job site available to the inspector;
- The building is locked or work otherwise not available for inspection when called;
- Items noted for correction on initial inspection and not corrected upon re-inspection.
- The original red tag has been removed from the job site and/or,
- Violations exist on the property including failure to maintain erosion control, trash control or tree protection.

A \$200.00 RE-INSPECTION FEE may be assessed for second and subsequent violations of the above.

Unauthorized Cover Up Fee

Any work concealed without first obtaining the required inspection in violation of Section 109 shall be assessed a fee of \$350.00 as established by the city fee resolution.

Job Site Requirements

All permit cards shall be posted on a FREE STANDING SIGN located at the front property line of a location that is obvious and visible to a public street, R.O.W., or private access drive. The sign is to remain in place until final building inspection is approved. Sign is to be minimum 6 square feet and maximum 32 square feet constructed of material similar to a real estate sign.

Plans on Site

The building permit packet must contain a copy of the permit and city stamped plans. This packet must be left on site at one of the following two locations for all swimming pool inspections requested:

- The back of the house where it is obvious and visible to the inspector **OR**
- At the pool equipment - Failure to provide the packet for requested inspections or if documents are missing from the packet shall result in the assessment of a re-inspection fee.

If the packet is lost or stolen, stamped plans can be downloaded from the permit. For plan changes a fee of \$50.00 per hour will be charged for additional plan review time.

Construction Hours

The Southlake code regulates noise construction that is considered a nuisance. By ordinance, construction is allowed from 7:00 AM to 9:00 PM, Monday through Saturday. On Sundays only work that does not create noise audible at the property line is permitted. Variances to this ordinance are handled by the Police Department at 817-748-8114.

Temporary Fencing

Pool excavation shall be secured by an approved temporary fence at all times until the permanent fence is installed. The top of the temporary fence shall be at least four feet (4') above grade, measured on the side of the fence that faces away from the swimming pool construction. Any opening in the fence shall be no larger than a size to prevent a sphere four inches (4") in diameter from passing through the fence. The wall of a dwelling may serve as part of the fence. Temporary fencing shall be supported using minimum 5-ft. tall, 14 gauge steel t-posts or steel tubing spaced a maximum of ten (10) feet on center. No rebar, wood stakes, or other methods shall be accepted unless approved in advance by the Building Official.

Construction Access

The use of an adjacent lot for pool construction access is prohibited unless an Earth Disturbance permit has been obtained with written authorization from the property owner and erosion control is in place.

Erosion Control

- All activity on a site shall comply with City, State, and Federal statutes for storm water pollution control.
- Erosion control must be maintained at all times throughout the project.
- All inspections may be canceled and re-inspection fees assessed at any time erosion control conditions are inadequate.
- Unpaved access to pool construction requires effective erosion control in the right-of-way portion. Aggregate 3"-5" is recommended.
- Pool builder is responsible for maintaining erosion control methods on site where applicable. (EPA and TCEQ requirements)
- EPA and TCEQ requirements prohibit wash-out onto any public or private property of any materials used during construction including gunite, plaster, washed aggregate concrete, or any other hazardous material.

Litter

- Provide a litter container of sufficient size on the job site at all times.
- Require all sub-contractors to place trash in this container each day before leaving the job site.
- See that all paper and boxes from building materials and lunch wrappers are not allowed to blow about the

job site and area.

- All inspections may be canceled and re-inspection fees assessed if trash is blowing or loose on the job site. No inspections will be made until all trash has been contained.
- If a commercial container (dumpster) is used, the City of Southlake franchise agreement requires Republic Waste Services must be contracted for that service. Contact 817-317-2424. www.republicservices.com
- There may be other commercial waste vendors available through licensing agreements. Please contact Building Inspections office for more information.

INSPECTIONS REQUIRED Each of the following inspections must requested online in the proper order. If an inspection is requested out of order, no inspection will be made. City approved plans must be on the job site at the time of the inspection. Other inspections may be required based on approved plans. ***All inspections will be cancelled if the TEMPORARY FENCE is not installed correctly on the job site.**

- Belly Steel Ground - Ground clamps used on pool steel must be clamps listed for direct burial.
- Deck Steel Ground - Ground clamps used on pool steel must be clamps listed for direct burial.
- For any detached accessory structure less than 120 square feet built with this permit – the setbacks on the structure must 10’ from the property line. Attached structures or ones 120 square feet or larger require a separate permit. See the Residential Accessory Building Guidelines.
- Gas Line(s) – If there are additional gas lines on the pool plan that were included with the pool permit and installed by the same plumber they will be inspected at this time.
- Underground Electric – any underground electric for the pool, spa or any item covered under the permit must be inspected.
- P-Trap – Swimming pool backwash lines shall discharge to a p-trap that is connected to sanitary sewer. Any lot at least one acre or more that is not connected to sanitary sewer may discharge directly on the lot.
- Pre-Plaster - Pool plastering shall not proceed until the permanent barrier is inspected and approved. Before the pool is filled with water, a permanent fence shall be erected surrounding the pool, which shall conform to Appendix G of the International Residential Code. The pool contractor is responsible for the permanent fence. ****NOTE: Alarm letter must be uploaded and an alarm letter inspection requested 48 hours before requesting pre-plaster inspection.****
- Final Grading Site Survey -Finish grade shall not alter the drainage of the lot from the approved drainage plan submitted by the developer. Sod or hydro mulch must be completed where required. Lot drainage survey or sealed engineer letter stating that the drainage matches the subdivision or lot engineered drainage plan is to be uploaded to the permit and approved at least 24 hours prior to final inspection.
- Pool Final -A final inspection must be requested *within 180 days* from permit date. *Your contractor registration can be revoked for allowing permits to expire.* If the pool is not ready for a final inspection, an extension may be requested prior to the expiration of the permit without penalty.

Lot drainage survey or sealed engineer letter stating that the drainage matches the subdivision engineered drainage plan is required to be submitted online and an inspection for drainage approved at least 24 hours prior to requesting final inspection.

No pool shall be occupied, utilized, or accessed unless a final inspection has been performed and approved by the City.

- Energy Code requirements. The International Energy Conservation Code has additional requirements for swimming pools:

403.9 Pools (Mandatory). Pools shall be provided with energy-conserving measures in accordance with Sections 403.9.1 through 403.9.3.

403.9.1 Pool heaters. All pool heaters shall be equipped with a readily *accessible* on-off switch to allow shutting off the heater without adjusting the thermostat setting. Pool heaters fired by natural gas or LPG shall not have continuously burning pilot lights.

403.9.2 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.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Where pumps are required to operate solar-and-waste-heat-recovery pool heating systems.

403.9.3 Pool covers. Heated pools shall be equipped with a vapor-retardant pool cover on or at the water surface. Pools heated to more than 90°F (32°C) shall have a pool cover with a minimum insulation value of R-12.

EXCEPTION: Pools deriving over 60 percent of the energy for heating from site-recovered energy or solar energy source.

POOL FENCE/BARRIER REQUIREMENTS

2018 International Residential Code as adopted by Ordinance 1210.

AG105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

AG105.1 Application. The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drowning and near drowning by restricting access to swimming pools, spas and hot tubs.

AG105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

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 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 (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 a masonry or stone wall, 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 13/4 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 13/4 inches (44 mm) in width. **EXCEPTION:** Barriers that are at least 6 feet in height may have horizontal members on either side of the fence.
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 13/4 inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a 2 1/4-inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1 3/4 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 3/4 inches (44 mm).
8. Access gates shall comply with the requirements of Section AG105.2, 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 larger than 1/2 inch (13 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 F 1346; or
 - 9.2. 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 in accordance with UL 2017. 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 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:
- 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 Section **AG105.2**, 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.

AG105.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Item 9 Section AG105.2,

AG105.4 Prohibited locations. Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.

AG105.5 Barrier exceptions. Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107, shall be exempt from the provisions of this appendix.

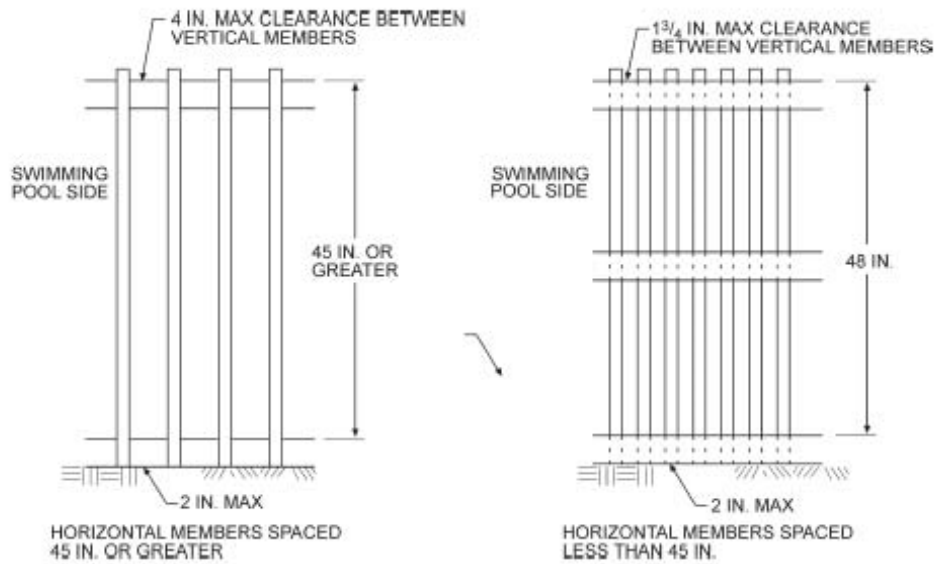
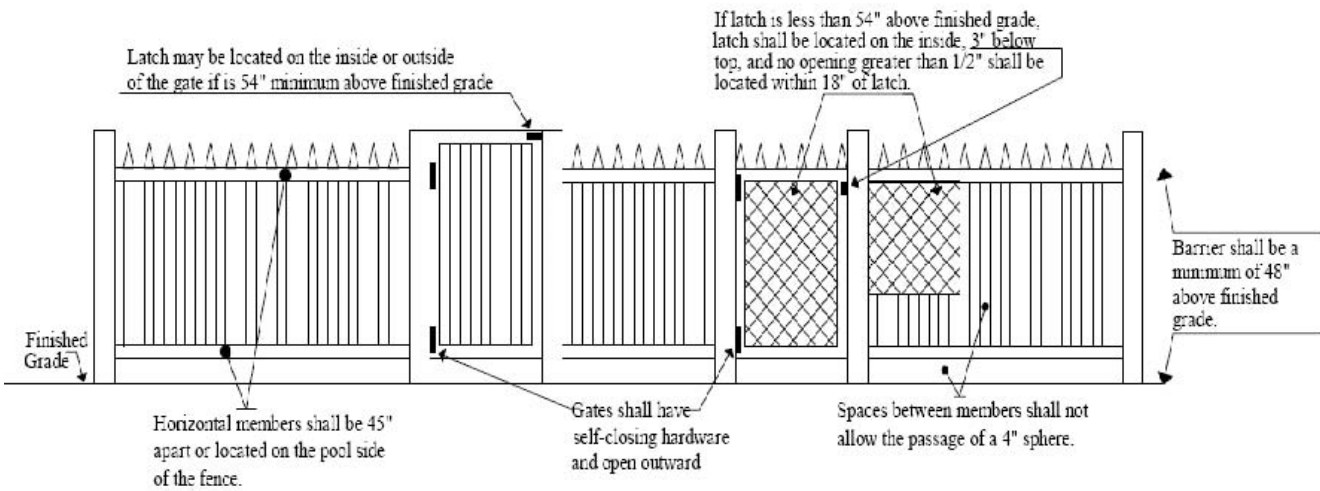
Automatic Vehicle Entry Gate as Pool Barrier Component:

Where an automatic vehicle entry gate is incorporated as a component of a pool barrier, the gate shall open and close within two minutes of opening with a single activation of the switch in order to prevent a gap in the barrier once a vehicle has passed through the entry.

SECTION AG106

Entrapment Protection for Swimming Pool and Spa Suction Outlets

AG106.1 General. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7



For SI: 1 inch = 25.4 mm.

Figure AG105.2(2)
PRIVATE SWIMMING POOL BARRIER CONSTRUCTION



POOL BARRIER CERTIFICATION

ALARM LETTER

SITE ADDRESS _____

POOL CONTRACTOR _____

This document requires that the homeowner certify that one (1) of the following protection methods has been installed. For dwellings without a certificate of occupancy, the general contractor listed on the NRES permit shall sign the form.

I certify that one (1) of the following protection devices has been installed at all doors with direct access to the pool (select one).

[] Doors 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 removed. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch(s) shall be located at least 54 inches above the threshold of the door.

[] Doors with direct access to the pool area shall be equipped with self-closing doors and self-latching devices. The latch must be at least 54 inches above the threshold of the door.

PRINT NAME: _____

SIGNATURE: _____

STATE OF TEXAS

COUNTY OF TARRANT

Before me, _____, on this day personally appeared, _____, known to me or
(Notary) (Name of Signer)
proved to me through satisfactory evidence of Identification which was _____ to be the person whose
(Identification)
name is subscribed to the foregoing instrument and acknowledged to me that he (she) executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this ____ day of _____, 20__.

Notary's Signature

Notary's Name (print)

My commission expires: _____

