



JAN 2018

Swimming Pool Construction Guidelines

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BUILDING INSPECTIONS
100 Main Street, Colleyville, TX 76034
OFFICE 817-503-1030 __ FAX 817-503-1039
Inspection Request Line 817-350-6321

PERMIT APPLICATION PACKETS may be left for review and permits picked up between 8:00 a.m. and 5:00 p.m. daily.

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

- A. **Permit Application Form** (Any plans not picked up within 45 days after notification will be considered abandoned and plan review fee assessed.)
- B. **Site Plan** – one copy with the proposed pool overlaid on a survey with setbacks shown from the side and rear property lines as well as the primary dwelling. The site plan shall specify construction access from one of the following: 1) the existing driveway 2) the public street/across the yard 3) an adjacent lot
- C. **Pool Plan** - One (1) copy detailing setbacks from the house and any other structures and showing the pool equipment location. This plan must be approval-stamped by the appropriate Electrical Utility Company.
- D. **Tree Preservation Plan** – One (1) copy of a site plan showing all protected trees and any trees that are proposed to be removed due to the pool construction. The plan shall detail the size, species, and canopy overlaid on the proposed pool plan. Pools submitted for permit or under permit that are to be constructed concurrently with a new home shall trigger the approval of a Tree Removal permit before any trees can be removed.
- E. Plan submittals shall not be larger than 11 x 17.

SEPTIC SYSTEMS

Dwellings 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.

TREE PROTECTION

Trees must be shown on the site plan if the plans require removal of any protected trees. Protected Trees shall not be removed unless the contractor is in possession of a pool permit. Do not place fill, store materials, or park vehicles under any protected trees.

LOCATION ON LOT

The exterior walls of outdoor swimming pools, spas, and hot tubs shall be not be located less than 5 feet from any property line, cannot be within the required front yard, and cannot extend beyond the forward-most portion of the primary dwelling on the lot. Pool decks and equipment shall not encroach into drainage or utility easements. 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. Portable spas or hot tubs are not regulated as to location by zoning other than they may not be in the front yard or forward of the principal building.

LOT DRAINAGE

Any decking, equipment, stonework, or other improvements that are less than 5 feet from a side or rear property line shall require a drainage plan to be submitted which demonstrates how the lot drainage will function. The Building Official can require a drainage study conducted by a professional engineer as evidence of compliance.

SETBACKS FROM BUILDING FOUNDATIONS

Pools must be located a minimum of three (3) feet from any building foundation, footing, or piers. The belly of the pool must not penetrate an imaginary line that extends laterally at least one (1) foot for every one (1) foot of depth, measured to any point of excavation. For example, if a portion of a pool is five (5) feet deep, that portion of the pool must be located at least five (5) feet from the building foundation, footing, or piers. An engineered letter of compliance shall be submitted as required.

FOOTINGS/FOUNDATIONS FOR FUTURE STRUCTURES – Installations within the pool deck for future patio covers or fireplaces are permitted provided they are detailed on the pool plans.

BACKWASH LINES

Swimming pool backwash lines shall discharge to a P-Trap that is connected to sanitary sewer. 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 discharge 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 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 2012 IRC R308.4 Hazardous Locations.

FIRE PITS - Wood burning fire pits are approved provide they are constructed of masonry materials on site and approved for the specific. Wood burning fire pits shall require a minimum 25 foot separation from any buildings or combustible materials. Gas-fired fire pits shall require a minimum 5 feet separation from buildings, combustible materials, and property lines. Fire pits shall not be located within any easement and cannot negatively impact lot drainage.

DEED RESTRICTIONS/HOMEOWNER ASSOCIATION

Deed restrictions and Homeowner Association regulations are considered a private agreement between property owners. The City of Colleyville 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.

CODE COMPLIANCE

For a complete list of building construction requirements, refer to the following code books and the adopting ordinance No. O-14-1936. They may be viewed at http://www.colleyville.com/departments/building_inspection

- **2012 International Residential Code**
- **2014 National Electrical Code**
- **2015 International Energy Conservation Code**

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

PLANS EXAMINER is 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 are generally available to receive phone calls from 7:00 a.m. to 8:00 a.m. daily. At other times, voice mail messages may be left and calls will be returned as soon as time is available.

INSPECTION REQUESTS: Inspection Requests are accepted 24 hours daily at [817-350-6321](tel:817-350-6321).

- It is the Pool Contractor's responsibility to call for all inspections.
- The City-stamped plans/packet **MUST** be on the jobsite for ALL inspections.
- Inspection must be called in **prior to 7:00a.m.** for same day inspection
- No concrete or plumbing inspections will be made if it is too wet
- No concrete inspections will be made unless the temperature is 38 degrees or above and rising. Do not lay brick when it will be below 40 degrees before mortar sets.
- All inspections held back because of cold weather or rain **must** be re-scheduled by calling the inspection line.

RE-INSPECTION FEE

A \$75.00 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 \$125.00 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.

CONSTRUCTION ACCESS

Unpaved access to pool construction requires a rock construction entrance in the right-of-way portion. Aggregate 3"-5" is recommended. The use of an adjacent lot for pool construction access is prohibited unless erosion control is in place which includes construction entrance with aggregate. Permanent vegetation shall be established on the lot at the time of pool final.

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.
- 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.

PLANS ON SITE

The pool permit packet must contain a copy of the permit, city stamped plans and any and all inspection tags. 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 at a location listed above **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, submit to Building Inspections copies of all plans to be stamped. A fee of \$50.00 per hour may be charged for additional plan review time.

CONSTRUCTION HOURS

The Land Development Code regulates noise construction that is considered a nuisance. By ordinance, construction is allowed from 7:00 AM to 6:00 PM, Monday through Saturday. There cannot be any work performed on Sundays.

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.

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 Colleyville franchise agreement requires Progressive Waste Solutions must be contracted for that service. Contact 817-222-2221. www.progressivewaste.com

INSPECTIONS REQUIRED Each of the following inspections should typically be done in the proper order. City approved plans/packet 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 and a re-inspection fee assessed 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. Where applicable, diving board jig shall be in place and bonded.
- **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.
- **P-Trap** – Swimming pool backwash lines shall discharge to a p-trap that is connected to sanitary sewer.
- **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. *Because the pool contractor is the permit holder, the pool contractor is responsible for the permanent fence.*
- ****NOTE: Alarm letter must be on file 24 hours before requesting pre-plaster 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. No pool shall be occupied, utilized, or accessed unless a final inspection has been performed and approved by the City.
- **Final Grading Site** -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.
- NOTE: Pool Final and Final Grading site inspections are performed simultaneously.
- **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 PERMITTING POLICY

Certain accessory components to be constructed in conjunction with a swimming pool installation may be covered under a Pool Permit. This includes spas, grills, fire pits, 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. A legally existing covered patio may have a grill or outdoor kitchen installed under a pool permit. All components are subject to compliance with applicable building codes and zoning ordinances. All components shall be clearly shown on the pool plan and site plan and shall include all pertinent construction details.

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.

The intent of this section is to allow for electrical and/or plumbing installations to be installed concurrent with the pool and other components provided the same licensed contractor performs the work. Items that require a *Building Permit* per section R105 of the IRC cannot be grouped under the Pool Permit and must have a separate permit.



SWIMMING POOL BARRIER REQUIREMENTS (page 1 of 2)

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 13/4 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 13/4 inches.

SWIMMING POOL BARRIER REQUIREMENTS (page 2 of 2)

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(s) 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.

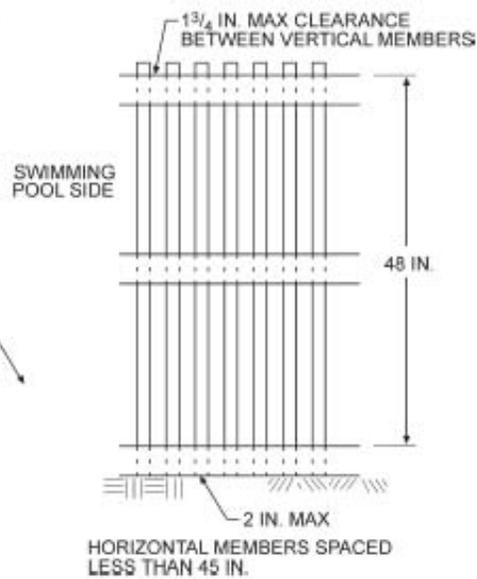
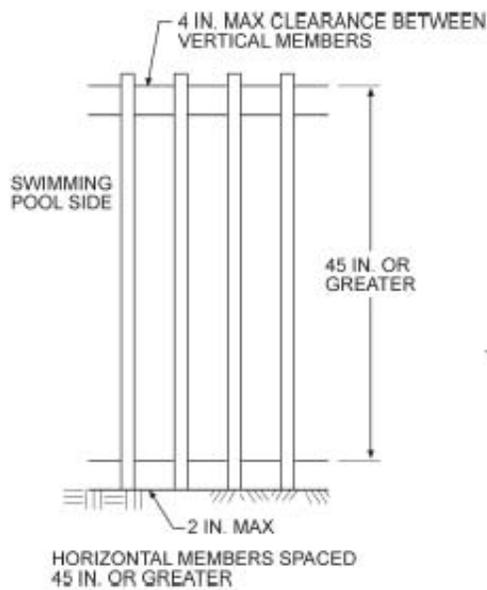
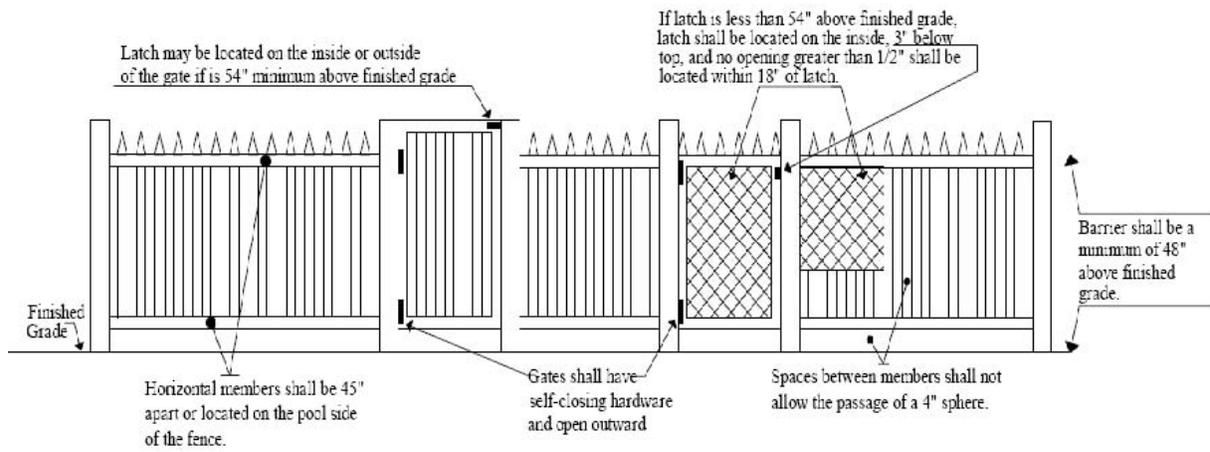
AG105.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Item 9 Section AG105.2,

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, it is recommended that the gate shall open and close within one (1) minute of opening with a single activation of the switch in order to prevent a gap in the barrier once a vehicle has passed through.



For SI: 1 inch = 25.4 mm.

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



POOL BARRIER CERTIFICATION

SITE ADDRESS _____

POOL CONTRACTOR _____

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

I certify that **one** of the following protection devices has been installed at all doors with direct access to the pool:

[] 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 opened. 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 _____

COUNTY OF _____

On this ____ day of ____, in the year _____, before me _____, Notary Public, personally appeared _____.

Personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is (are) subscribed to this instrument, and acknowledged that he (she/they) executed it.

WITNESS my hand and official seal.

Notary's Signature

Notary's Name (print)

My commission expires: _____

EMAIL THIS FORM TO buildinginspections@colleyville.com
DELIVERY AT BUILDING INSPECTIONS DEPT. - 100 Main Street – Colleyville, Texas 76034