

PRIVATE IN-GROUND SWIMMING POOLS
PERMIT REQUIREMENTS

This guideline is intended to provide the homeowner/contractor with the basic information needed to apply for a building permit to construct most private in-ground swimming pools. A permit is required for all swimming and bathing pools which equal or exceed 24" in depth or 250 square feet in area or which are equipped with a water-recirculating system.

1. Fill out and sign application for a building permit. Indicate on the application if electrical, plumbing, and/or mechanical work is included in the project. Refer to page 4 for additional signatures needed before permit issuance.
2. Submit four (4) separate copies of your plot (site) plan showing existing structures with new in-ground pool and its perpendicular distances to the lot lines and from other structures on the lot, if any.
3. Obtain zoning approval from the St. Louis County Department of Public Works (if unincorporated) or from municipality. In municipalities site plans must be marked "Approved" and the Municipal Zoning Approval Form submitted prior to permit issuance.
4. One of the following must be filed with your application request:

Provide Master Plan Number for Pool. Many local pool contractors/suppliers have had their pool plans and specifications reviewed and pre-approved so that the homeowner/contractor can obtain their permits easier. Pre-approved pools have been assigned a Master Plan Number by the County. Consult your pool contractor/supplier for this number, or

Provide four (4) complete sets of detailed pool plans and specifications, prepared, sealed and signed by a Missouri Licensed Architect or Professional Engineer. The plans must be drawn to scale, properly dimensioned, and contain the following:

- a) Foundation/Structural Wall Plan.
 - b) Cross sections through the pool indicating slope of sidewalls and floor and water depth throughout.
 - c) Sections and/or details of the ladders, steps, drains, diving boards, filters, structural supports and reinforcing, skimmers or gutters.
 - d) Water supply system, drainage and water disposal system, and filtering/recirculating system diagrams.
 - e) Specification notes.
5. Indicate type, location, and height of pool enclosure barrier on your site plan. When fences/gates are provided to meet the pool enclosure barrier requirements submit four (4) separate copies of an elevation drawing (showing both gate and fence) and a sectional drawing (fence) of the fence/gate enclosure with your application request.

The pool must be protected on all sides by an enclosure barrier to prevent small children from entering the pool area unsupervised, as well as make it more difficult for unauthorized use by others. The barrier, which may be one or any combination of the following, must be at least 48" in height above finished ground level measured on the side of the barrier which faces away from the swimming pool. A 2" maximum clearance from ground level to bottom of the barrier shall be maintained. Openings in barriers shall prohibit the passage of a 4" diameter sphere, and designed to prevent the barrier from being readily climbed by children.

For fences having horizontal and vertical members where the distance between the tops of the horizontal members is 45" or more the spacing between the vertical members shall not exceed 4 inches. When the distance between the tops of any horizontal members of the fence is less than 45", the horizontal members shall be on the pool side of the fence and the spacing between the vertical members shall not exceed 1 3/4". Maximum mesh size for chain link fences shall be 1 1/4" square.

Gates in fences shall open outward away from the pool, be self-closing and self-latching. Where the release mechanism of the self-latching device is located less than 54" from the bottom of the gate: (a) the release mechanism shall be located on the pool side of the gate at least 3" below the top of the gate; and (b) the gate and barrier shall not have an opening greater than 1/2" within 18" of the release mechanism.

Where a wall of the house serves as part of the enclosure barrier, either all doors with direct access to the pool shall be equipped with an approved automatically resetting audible alarm, or doors shall be self-closing and self-latching with the release mechanism for the latch installed 54" minimum above the threshold, doors shall open away from pool area or the pool shall be equipped with an approved power safety cover.

Refer to attached drawings for typical information and requirements that need to be shown on your site plan and fence/gate elevation and section drawings.

Some of the more common code requirements related to private in-ground pools which are usually not reflected on the plans but will be verified through the pool construction/installation and inspection process are as follows:

Grades

Surrounding grades shall be such as to prevent surface water from entering the pool. No alteration of the existing stormwater drainage pattern of the area is permitted without the prior approval of the Department of Highways and Traffic.

Steps and Ladders

At least one means of egress must be provided. Step treads must have a minimum horizontal depth of 10 inches and a minimum unobstructed surface area of 240 square inches. Risers can have a maximum height of 12 inches. Treads of steps and ladders shall have slip-resistant surfaces and handrails on both sides, except that handrails are not required where there are not more than four steps or where the steps extend the full width of the side or end of the pool.

Discharge Water

Pool shall be constructed and equipped to allow the pool to be completely emptied of water. All discharged water must be to an approved location so as not to create a nuisance to adjoining property. Connection to the sanitary sewer system is not permitted. Backwash water from the filters must be connected to the sanitary sewer.

Water Supply

A back flow prevention device must be installed on the hose bibb used to fill the pool or in the water supply piping if the pipe discharge is below the maximum pool water level. Installation of the device on the supply piping must be done by a Licensed Master Plumber.

Electrical

The installation must comply with Article 680 of the 1996 National Electrical Code. All electrical work must be done by a licensed Electrical Contractor in accordance with St. Louis County Ordinances.

- \$ All overhead wires must be a minimum of 10' horizontally away from the edge of the pool or 18' vertically above the water level. Certain Union Electric lines have greater clearances, check with Union Electric.
- \$ Underground wiring is not permitted under the pool or within 5' of the pool wall. If space limitations prevent wiring from being re-routed beyond 5', wiring may be permitted if installed by a method listed in Article 680.
- \$ No lighting shall be located closer than 5' from the edge of the pool. All lighting within 10' of the edge of the pool must be ground fault circuit interrupter protected.
- \$ A ground fault circuit interrupter must be installed in the electrical system for underwater lighting fixtures or cord connected pumps.
- \$ No receptacles within 10' from the edge of the pool, except one single receptacle may be located between 5 and 10' from the edge of the pool for connecting the pump by a flexible cord provided with the pump. No extension cords are permitted. This receptacle must be the single, locking and grounding type and be protected by a G.F.C.I.
- \$ At least one receptacle that is ground fault protected must be located a minimum of 10' from the edge of the pool but not more than 20'. All receptacles located within 20' of the edge of the pool must be G.F.C.I. protected.
- \$ All metal parts of the pool must be properly grounded and bonded as specified in Article 680.

Mechanical

Pool heating systems and gas line installations must comply with the manufacturer's installation instructions and Section 921 of the 1998 International Mechanical Code. All mechanical work must be done by a registered financial responsible (bonded and insured) or licensed contractor authorized to do mechanical work.

The preceding requirements apply to most private in-ground pool installations; however, the plan reviewer may

determine that unusual circumstances dictate the need for additional information on any particular project.

All electrical, plumbing, and mechanical work must be performed by licensed and bonded electrical contractors, master plumbers, and registered financial responsible (bonded and insured) or licensed contractors authorized to do mechanical work, or a certified homeowner in accordance with St. Louis County Ordinances, each of whom must also sign the bottom of the application form in the appropriate location. All signatures must be furnished to Public Works before the permit can be issued.