

ALAMO TOWNSHIP

Alamo Township
Attention: Building Department
7901 North 6th Street
Kalamazoo, MI 49009

SWIMMING POOL FENCE/BARRIER PLAN REVIEW

Contractor: _____ Permit# _____

Address: _____ Owner: _____

All references herein are to the Michigan Residential Building Code (2003). The plan review that follows is not intended to identify all construction details that may have been omitted from the drawings. It may show items that Building Official wants to draw special attention to. All sections apply even if not mentioned in this review.

SWIMMING POOLS, SPAS AND HOT TUBS

Ag101.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one and two family dwelling.

AG102.1 General. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL, HOT TUB, IN-GROUND POOL, SPA, NON PORTABLE
See "Swimming Pool."

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds that swimming pool and obstructs access to the swimming pool.

RESIDENTIAL. That which is situated on the premises of a detached one or two family dwelling or a one family townhouse not more that three stories tall.

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water over 24 inches deep. This includes in-ground, aboveground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by walls of said structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

BARRIER REQUIREMENTS

Ag105.1 Applications. 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, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48" 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" 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 aboveground 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".
2. Openings in the barrier shall not allow passage of a 4" diameter 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", the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75" in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75" in width.
5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45" or more, spacing between vertical members shall not exceed 4". Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75" in width.
6. Maximum mesh size for chain link fences shall be a 1.25" square unless the fence is provided with slats fastened at the top or the bottom, which reduce the openings to not more than 1.75".
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 1.75".
8. Access gates shall comply with the requirements of 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" from the bottom of the gate, the release mechanism and openings shall comply with the following:
 - The release mechanism shall be located on the pool side of the gate at least 3" below the top of the gate and
 - The gate and barrier shall have not opening greater than 0.5" within 18" 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 All 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 its screen, if present, are opened
 - The Alarm shall sound continuously for a minimum of 30 seconds immediately after the door is Opened and be capable of being heard throughout the house during normal household activities.
 - The alarm shall automatically reset under all conditions.
 - The alarm system shall be equipped with a manual means, such as touchpad or switch, to Temporarily deactivated the alarm for a single opening.
 - Such deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be Located at least 54 inches 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 aboveground 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, then:
 - 10.1 The ladder or steps shall be capable of being secured, locked or removed to prevent access, or

- 10.2 The ladder of steps shall be surrounded by a barrier which meets the requirements of AG105.2, Items 1 through 9. When the ladder of steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch diameter sphere.

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

AG105.4 Prohibited locations. Barriers shall be located so as to prohibit permanent structures, equipment of similar objects from being used to climb the barriers.

COMENTARY – SWIMMING POOL ENCLOSURES

(Section 3109.4 of the International Building Code Handbook – Fire and Life Safety Provisions)

Residential swimming pools. Drowning is the second leading cause of accidental death in the home for children under 5 years of age. The use of effective residential swimming pool barriers is the best way to reduce these tragic losses. Unless a swimming pool is provided with a power safety cover or a spa with a safety cover complying with the provisions of ASTM F 1346, a residential swimming pool, spa or hot tub must be enclosed in accordance with this section. The code addresses a number of different barrier designs, each intended to limit access to the pool area. Where a wall of a dwelling serves as a portion of the barrier, additional requirements are also in place to regulate unsupervised access to the pool or spa.

Insurance and Licensing Requirements

State law requires that all electrical and mechanical/gas piping work be performed by contractor licensed for that specific trade, unless the work is performed by the homeowner. It is your right to request that the contractor provide you with copies of their license and proof of insurances as required by State Law.

See the following table for a list of the required inspections and their corresponding codes. The codes are provided for your reference only and are not intended to be used as a substitute for the applicable code.

1. **Building Rough In** – verify excavation compliance and zoning requirements.
2. **Electrical Rough In** - Bonding of all metal components (**prior to backfill**)
3. **Mechanical Underground** – Gas Piping (**prior to backfill**)
4. **Building – Fence Inspection (Prior to filling pool with water)**
5. **Electrical Final** – at completion of all interior and exterior work
6. **Mechanical Final** – at the completion of all above ground piping and completion of any venting requirements.
7. **Building Final** – at the completion of all pool and fence components.
8. **Plumbing** – all pools using make-up water systems must comply with the standards and codes set forth with the **State Plumbing Code**.