

SWIMMING POOL REQUIREMENTS

What do I need to get a pool permit?

1. You will need a zoning permit. Requires a site plan showing the location of the pool and any decks with proximity to property lines, septic system, well etc
2. Wetlands agent review and approval.
3. Northeast District Department of Health approval.(B100a.)
4. Building permit application.
5. Details of the pool ie. In-ground, above-ground, hot tub, spa etc
6. Details of the pool ladder enclosure or fencing for purposes of ensuring barrier compliance.
7. Deck construction details if applicable
8. In-ground pools require engineered drawings
9. Proof of purchase of a pool alarm
10. Hot tubs require covers

Swimming Pools

IRC Appendix G

SWIMMING POOLS, SPAS AND HOT TUBS

The following are highlights of the requirements

For more detail see APPENDIX G sections AG101 – AG105

Swimming Pool – Any structure intended for swimming or recreational bathing that contains water more than **24 inches** deep. This includes in ground, above-ground and on ground pools, hot tubs and spas.

AG105. Barrier Requirements. The top of the barrier shall be at least **48 inches** above grade measured on the side of the barrier that faces away from the pool. The maximum vertical clearance between grade and the bottom of the barrier shall be **2 inches** measured on the side of the barrier that faces away from the pool.

Openings. Openings in the barrier shall not allow the passage of a **4-inch** diameter sphere.

Gates. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device, (**54 inches** from the bottom of the gate), able to accommodate a locking device.

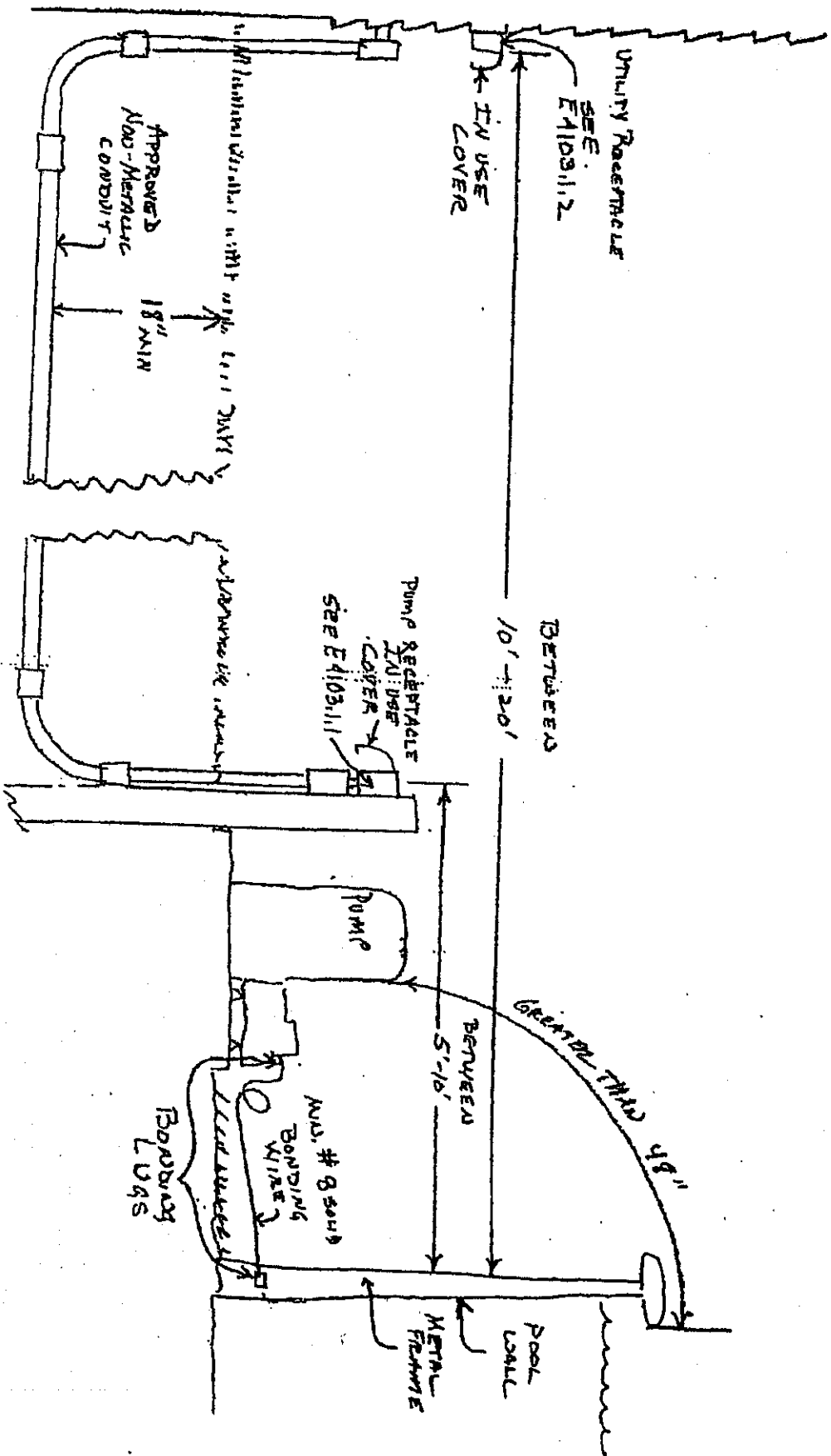
Pool alarm. Pursuant to section 29-265a of the Connecticut General Statutes, no building permit shall be issued for the construction or substantial alteration of a swimming pool at a residence occupied by, or being built for, one or more families unless a pool alarm is installed with the swimming pool. As used in this section, "pool alarm" means a device that emits a sound of at least 50 decibels when a person or object weighing 15 pounds or more enters the water in a swimming pool.

POOL ELECTRICAL REQUIREMENTS

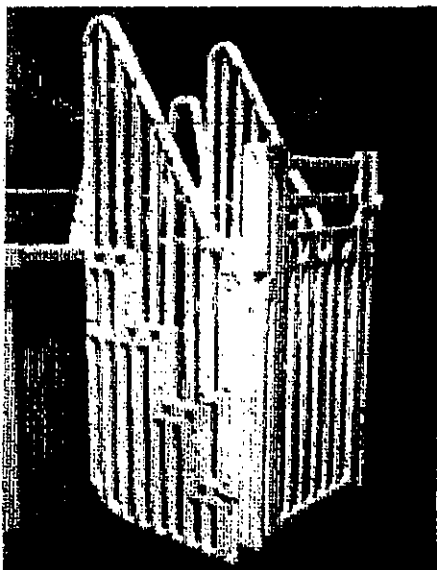
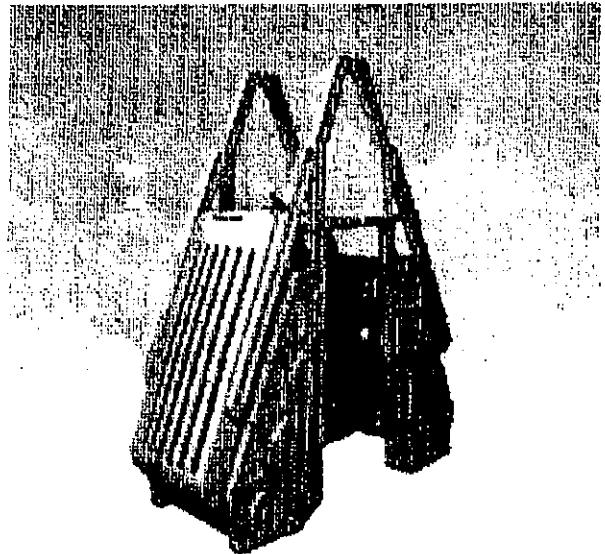
E4103.1.1 Location. Receptacles that provide power for water-pump motors or other loads directly related to the circulation and sanitation system shall be permitted to be located between 5 feet and 10 feet (1524 mm and 3048 mm) from the inside walls of pools and outdoor spas and hot tubs, and, where so located, shall be single and of the locking and grounding type and shall be protected by ground-fault circuit interrupters. Other receptacles on the property shall be located not less than 10 feet (3048 m) from the inside walls of pools and outdoor spas and hot tubs.

E4103.1.2 Where required. At least one 125 volt 15 or 20-ampere receptacle supplied by a general-purpose branch circuit shall be located a minimum of 10 feet (3048 mm) from and not more than 20 feet (6096 mm) from the inside wall of pools and outdoor spas and hot tubs. This receptacle shall be located not more than 6 feet, 6 inches (1981 mm) above the floor, platform or grade level serving the pool spa or hot tub.

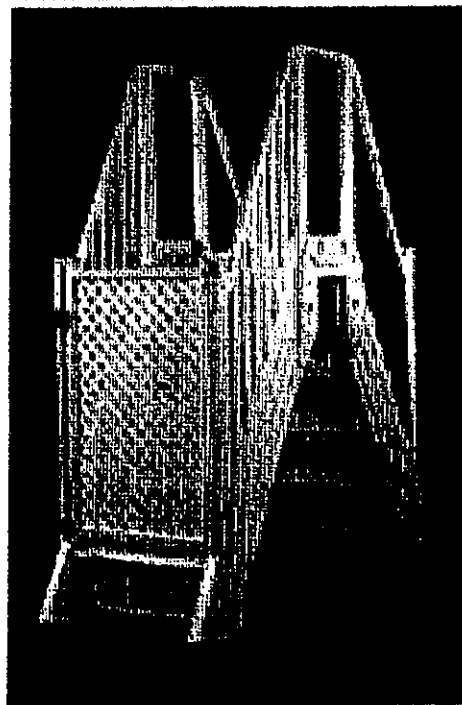
E4103.1.3 GFCI protection. All 125-volt receptacles located within 20 feet (6096 mm) of the inside walls of pools and outdoor spas and hot tubs shall be protected by a ground-fault circuit-interrupter.

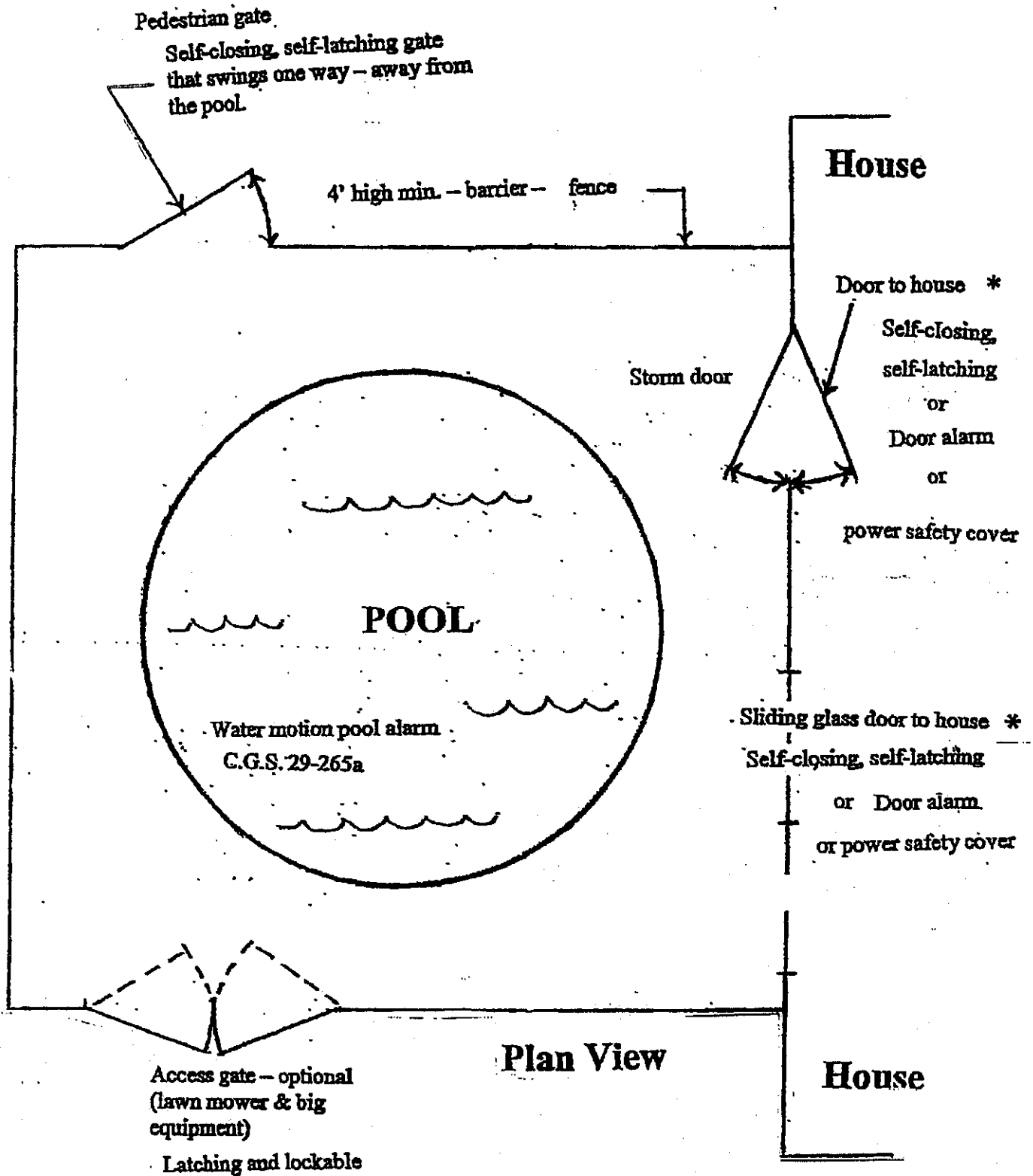


Examples of code compliant self-closing and self-latching gates.

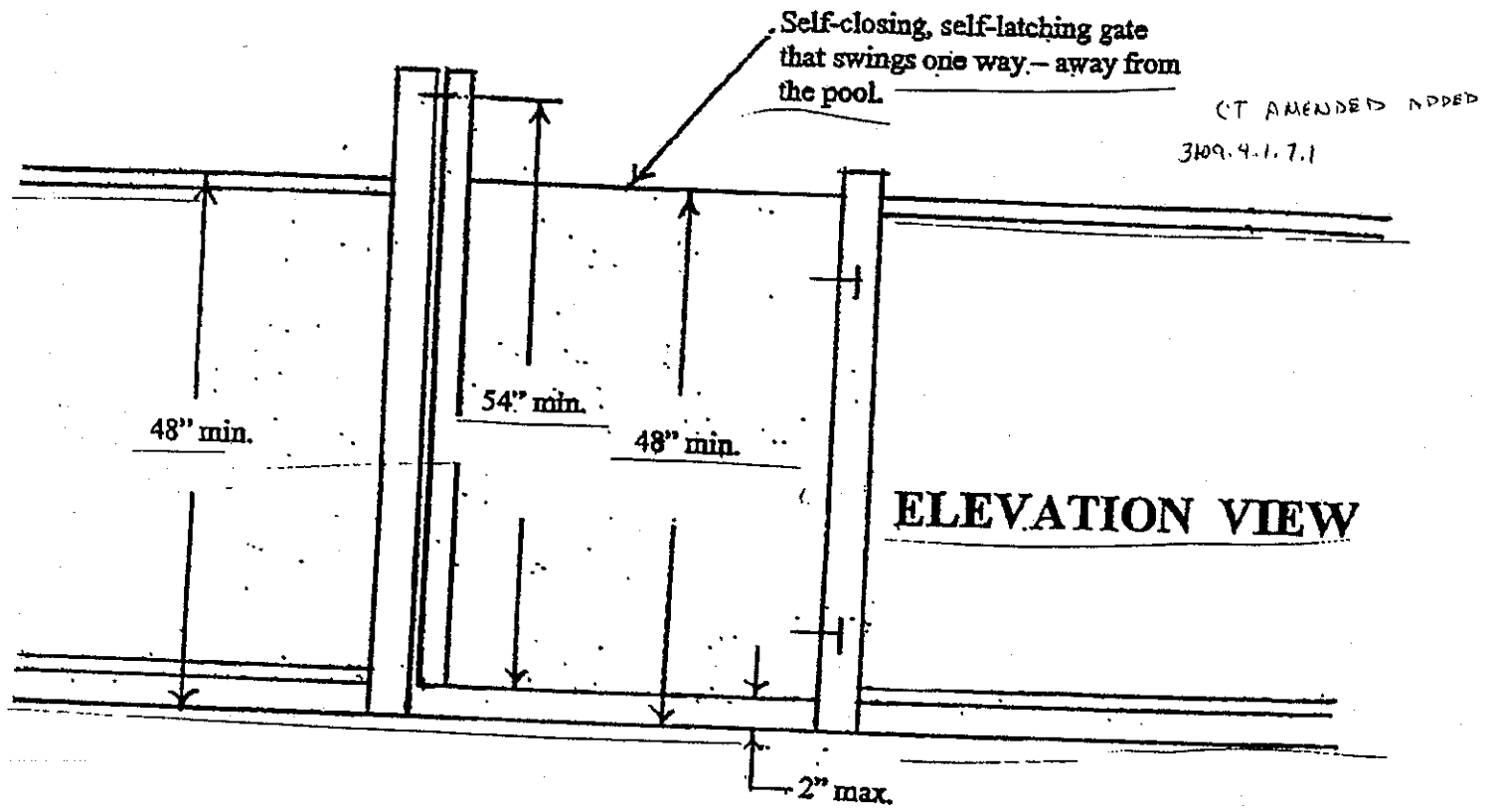
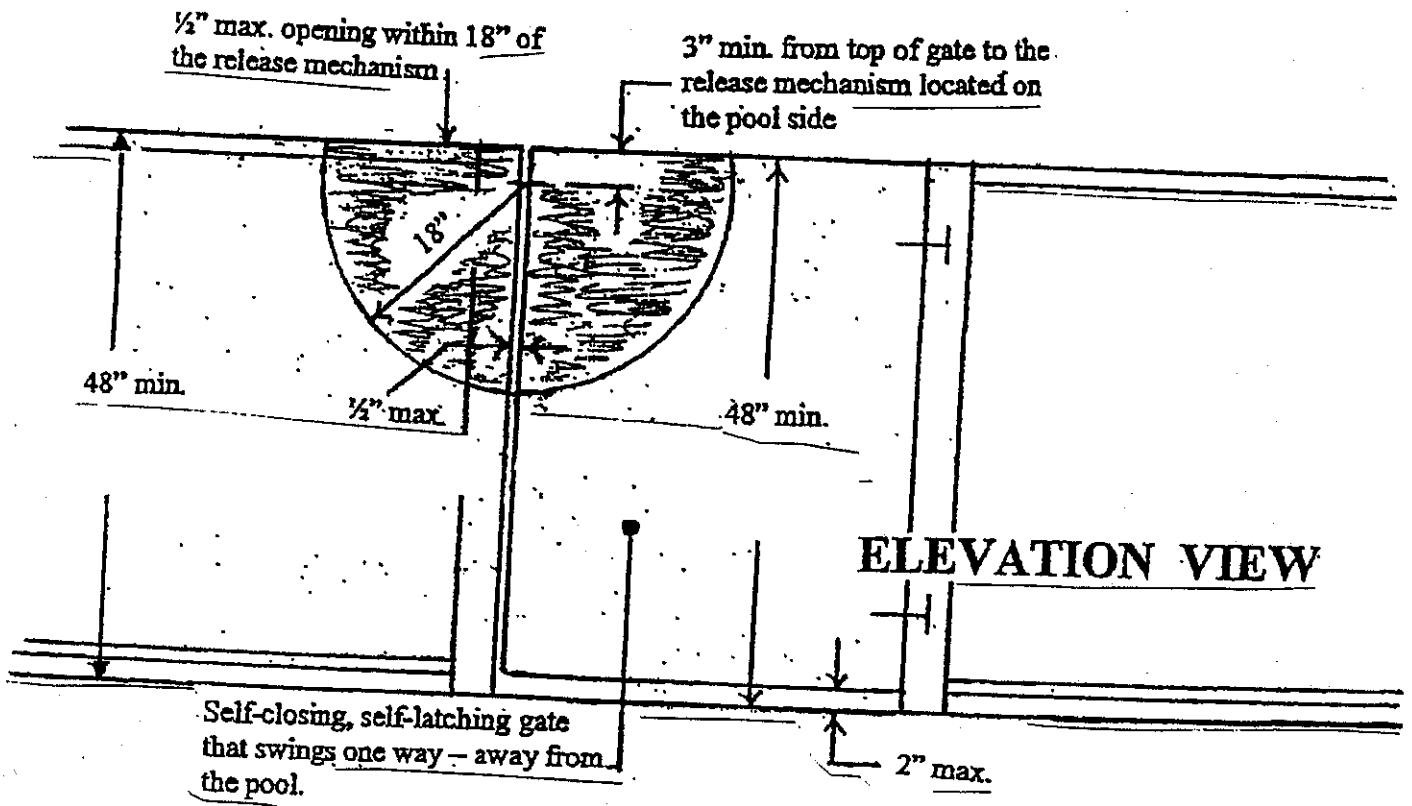


Maximum space between pickets
or lattice is 1 ¼ inches

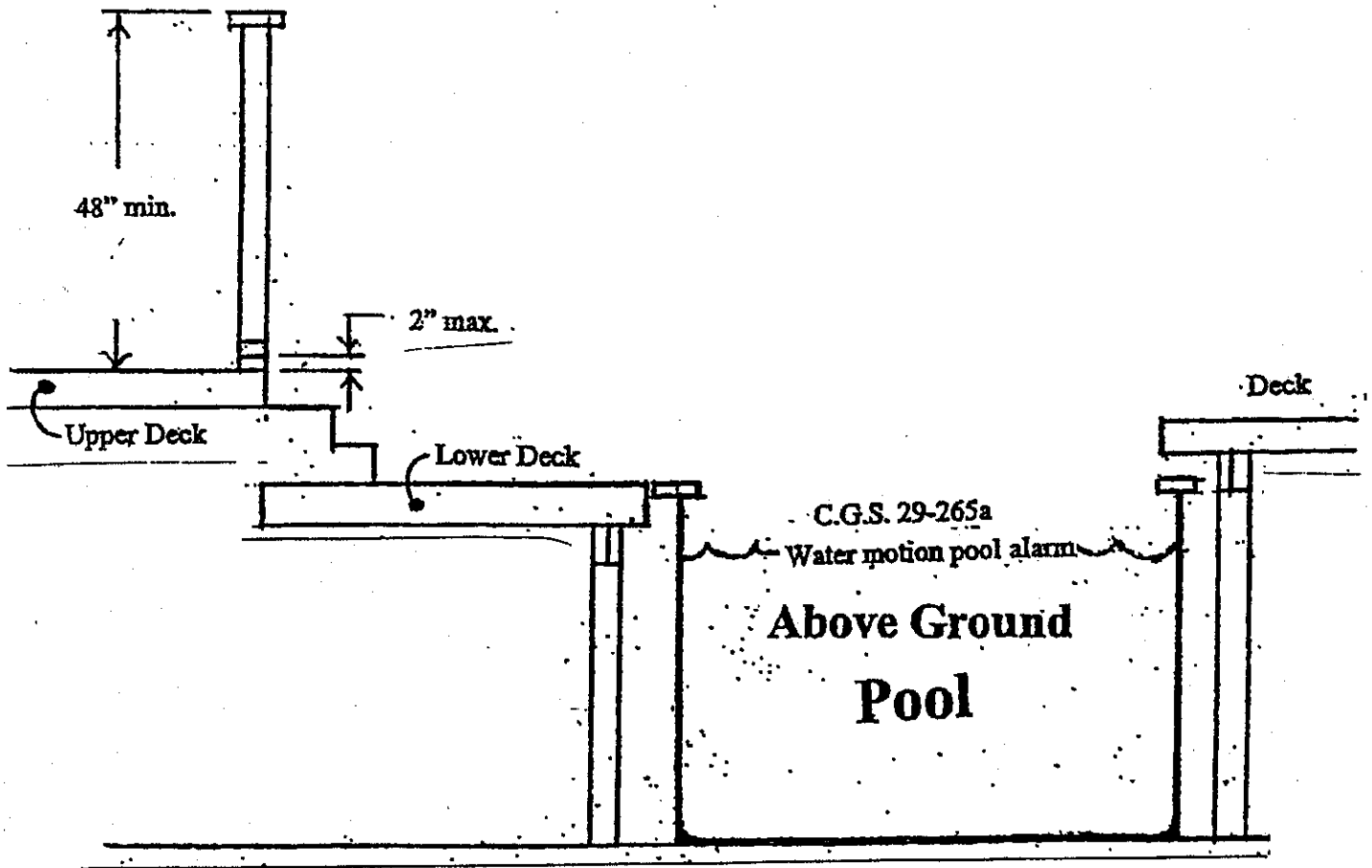




***Note: These requirements also apply to indoor pools**



CROSS-SECTION MULTI-LEVEL DECKS & POOL



APPENDIX G

SWIMMING POOLS, SPAS AND HOT TUBS

SECTION AG101 GENERAL

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.

SECTION AG102 DEFINITIONS

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. See "Swimming pool."

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

HOT TUB. See "Swimming pool."

IN-GROUND POOL. See "Swimming pool."

(Amd⁶⁹) Residential. That which is situated on the premises of a detached one- or two-family dwelling or which is accessory to an individual one-family townhouse for the exclusive use of its residents and invited guests.

SPA, NONPORTABLE. See "Swimming pool."

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 (610 mm) deep. This includes in-ground, above-ground 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.

SECTION AG103 SWIMMING POOLS

AG103.1 In-ground pools. In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section AG108.

AG103.2 Above-ground and on-ground pools. Above-ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section AG108.

SECTION AG104 SPAS AND HOT TUBS

AG104.1 Permanently installed spas and hot tubs. Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section AG108.

AG104.2 Portable spas and hot tubs. Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Section AG108.

SECTION AG105 BARRIER REQUIREMENTS

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 drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

AG105.2 Outdoor swimming pool. An outdoor swimming pool, including in-ground, above-ground or on-ground pools, hot tubs and spas shall be provided with a barrier that shall comply with the following:

1. The top of the barrier shall be at least 48 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches measured on the side of the barrier that 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.
2. Openings in the barrier shall not allow passage of a 4-inch diameter sphere.
3. Solid barriers that do not have openings, such as masonry or stone walls, 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, the horizontal members shall be located on the swimming pool side of the barrier. Spacing between vertical members shall not exceed 1 $\frac{3}{4}$ inches in width. Where there are decorative cutouts within vertical or horizontal members, spacing within the cutouts shall not exceed 1 $\frac{3}{4}$ inches 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 inches or more, spacing between vertical members shall not allow passage of a 4-inch diameter sphere. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1\frac{3}{4}$ inches in width.
6. Maximum mesh size for chain link fences shall be $2\frac{1}{4}$ inches square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than $1\frac{3}{4}$ inches.
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 $1\frac{3}{4}$ inches.
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 from the bottom of the gate, the release mechanism and surrounding openings shall comply with the following: The release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate and the gate and barrier shall have no opening greater than $\frac{1}{2}$ inch within 18 inches of the release mechanism.
9. Where a wall of a dwelling serves as part of the pool barrier, one of the following conditions shall be met:
 - 9.1. The pool shall be equipped with a power safety cover in compliance with ASTM F 1346-91; or
 - 9.2. All doors with direct access to the pool through that wall shall be equipped with an alarm that 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 within 7 seconds after the door and its screen, if present, are opened and be capable of being heard throughout the house during normal activities. The alarm shall automatically reset under all conditions. The alarm shall be equipped with a manual means, such as a touch pad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. The deactivation device(s) shall be located at least 54 inches above the threshold of the door; or
 - 9.3. All doors with direct access to the pool through that wall shall be equipped with a self-closing and self-latching device with the release mechanism located a minimum of 54 inches above the door threshold. Swinging doors shall open away from the pool area.
10. Where an above-ground or on-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, then the ladder or steps shall be surrounded by

a barrier which meets the requirements of section AG105.2, Items 1 through 9.

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

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

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.

AG105.6 Temporary enclosure. A temporary enclosure shall be installed prior to the commencement of the installation of any in-ground swimming pool unless the permanent barrier specified in Section AG105.2 is in place prior to the commencement of the installation. The temporary enclosure shall be a minimum of 4 feet in height, shall have no openings that will allow passage of a 4-inch sphere and shall be equipped with a positive latching device on any openings.

AG105.7 Pool alarm. No building permit shall be issued for the construction or substantial alteration of a swimming pool at a residence occupied by, or being built for, one or more families unless a pool alarm is installed with the swimming pool. As used in this section, "pool alarm" means a device that emits a sound of at least 50 decibels when a person or an object weighing 15 pounds or more enters the water in a swimming pool.

Exception: Hot tubs and portable spas shall be exempt from this requirement.

SECTION AG106 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

AG106.1 General. Suction outlets shall be designed to produce circulation throughout the pool or spa. Single outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.

(Amd) AG106.2 Suction fittings. All pool and spa suction outlets shall be provided with a cover that conforms with ASME/ANSI A112.19.8M-2007 or an approved channel drain system.

Exception: Surface skimmers.

(Add) AG106.2.1 Fitting maintenance. Any pool, spa or hot tub with a broken, loose or missing suction outlet cover shall be immediately placed out of service until repairs are completed and approved.

(Amd) AG106.3 Atmospheric vacuum relief system required. All pool and spa single or multiple outlet circulation systems other than pools equipped only with surface skimmers shall be equipped with atmospheric vacuum relief. Such vacuum relief systems shall include at least one approved or engineered method of the type specified herein, as follows:

1. Safety vacuum release system conforming to ASME A112.19.17, or
2. An approved gravity drainage system operating through a surge tank.