



TOWN OF KILLINGLY

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SWIMMING POOL PERMITS

This packet details requirements for obtaining a pool permit under the current State of Connecticut Building Code.

A swimming pool by definition is any structure intended for swimming or recreational bathing that contains water over 24 inches deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

Note: A pool which is capable of containing more than 24 inches of water is a "swimming pool" even if the pool is filled to a depth of less than 24 inches.

The basic elements of the permit application process are:

1. Zoning permit application – requires site plan of property showing location of pool and any decks - proximity to property lines, septic systems, wells etc
2. Wetlands Agent review and approval
3. Northeast District Department of Health approval (B 100) if dwelling is serviced by a septic system.
4. Building permit application
5. Details of pool – in-ground, above-ground, temporary hot tub/spa, etc
6. Details of pool ladder enclosure or fencing for purposes of ensuring barrier compliance
7. Deck construction details if applicable
8. In ground pools will require engineered drawings typically provided by pool manufacturer.
9. Proof of purchase of pool alarm
10. Hot tubs require covers

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.

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 bather 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 13/4 inches in width. Where there are decorative cutouts within vertical or horizontal members, spacing within the cutouts shall not exceed 1 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 3/4 inches in width
6. Maximum mesh size for chain link fences shall be 2 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 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 3/4 inches
8. Access gates shall comply with the requirements of 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 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 Items I 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 AG 107, 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.

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.

AG106.2 Suction fittings. All pool and spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a 12" x 12" drain grate or larger, or an approved channel drain system.

Exception: Surface skimmers

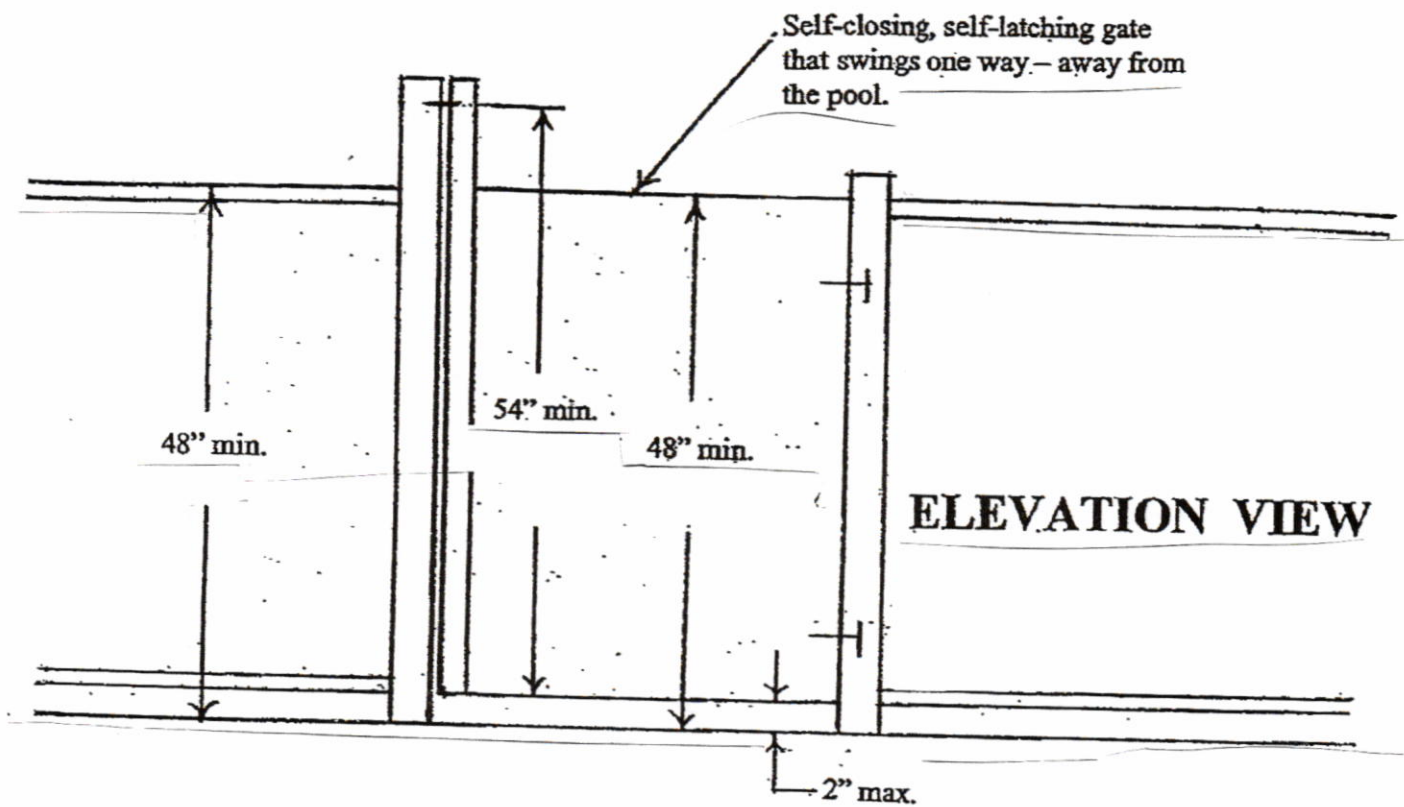
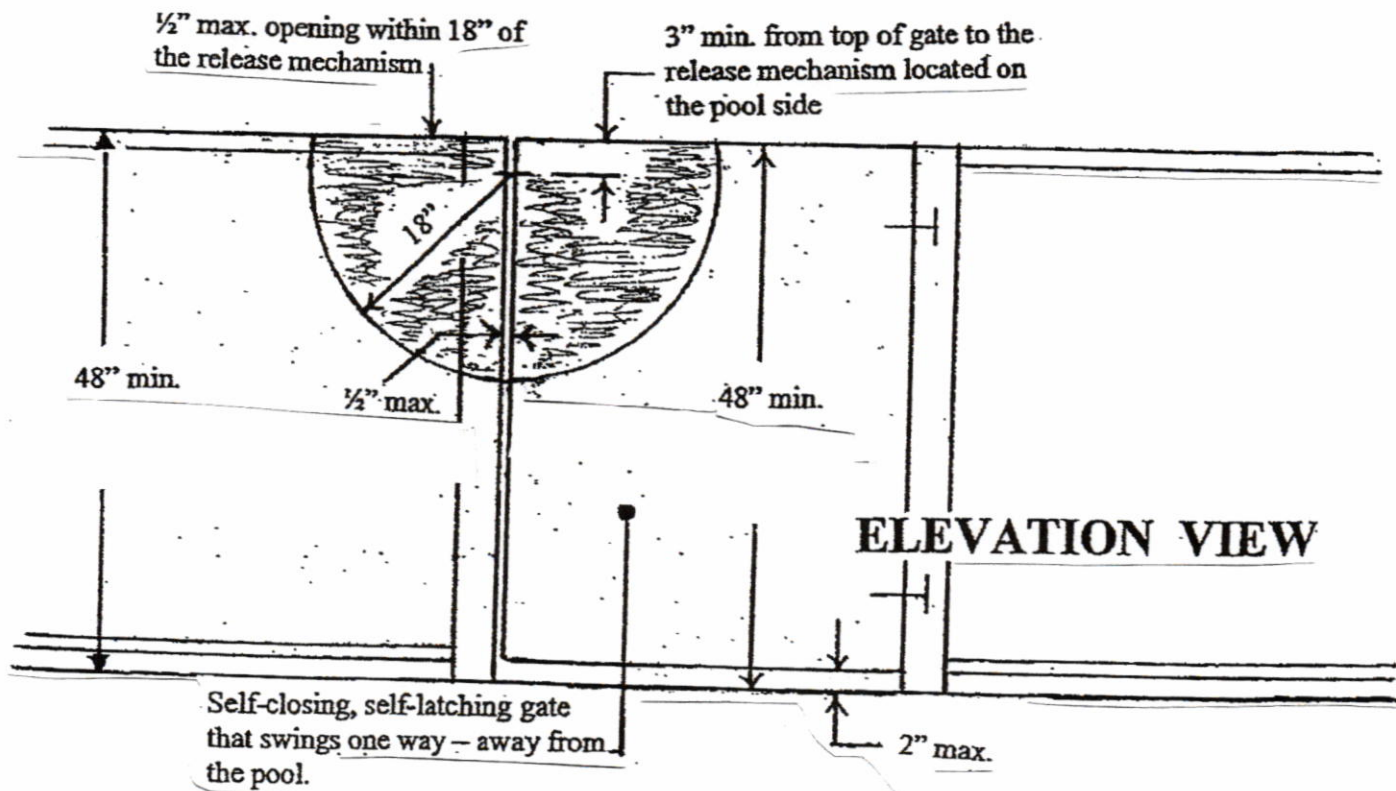
AG106.3 Atmospheric vacuum relief system required. All pool and spa single or multiple outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems shall include at least one approved or engineered 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

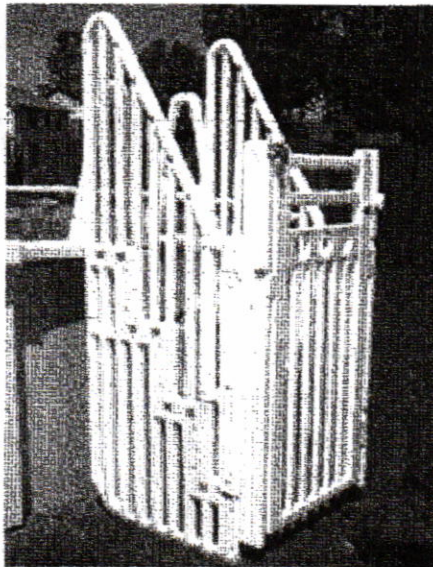
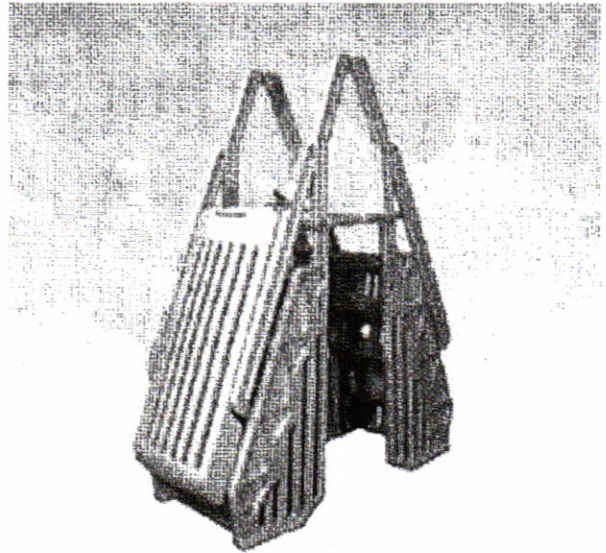
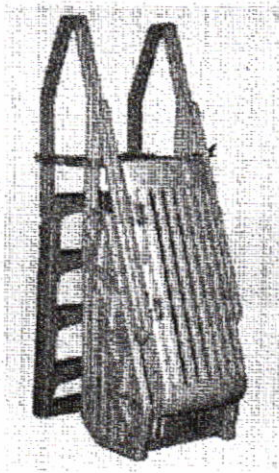
AG106.4 Dual drain separation. Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three (3) feet shall separate such outlets.

These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum relief-protected line to the pump or pumps.

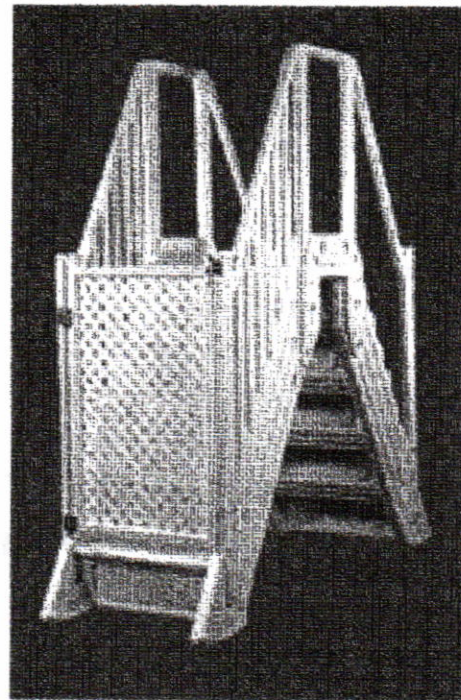
AG106.5 Pool cleaner fittings. Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least (6) inches and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).



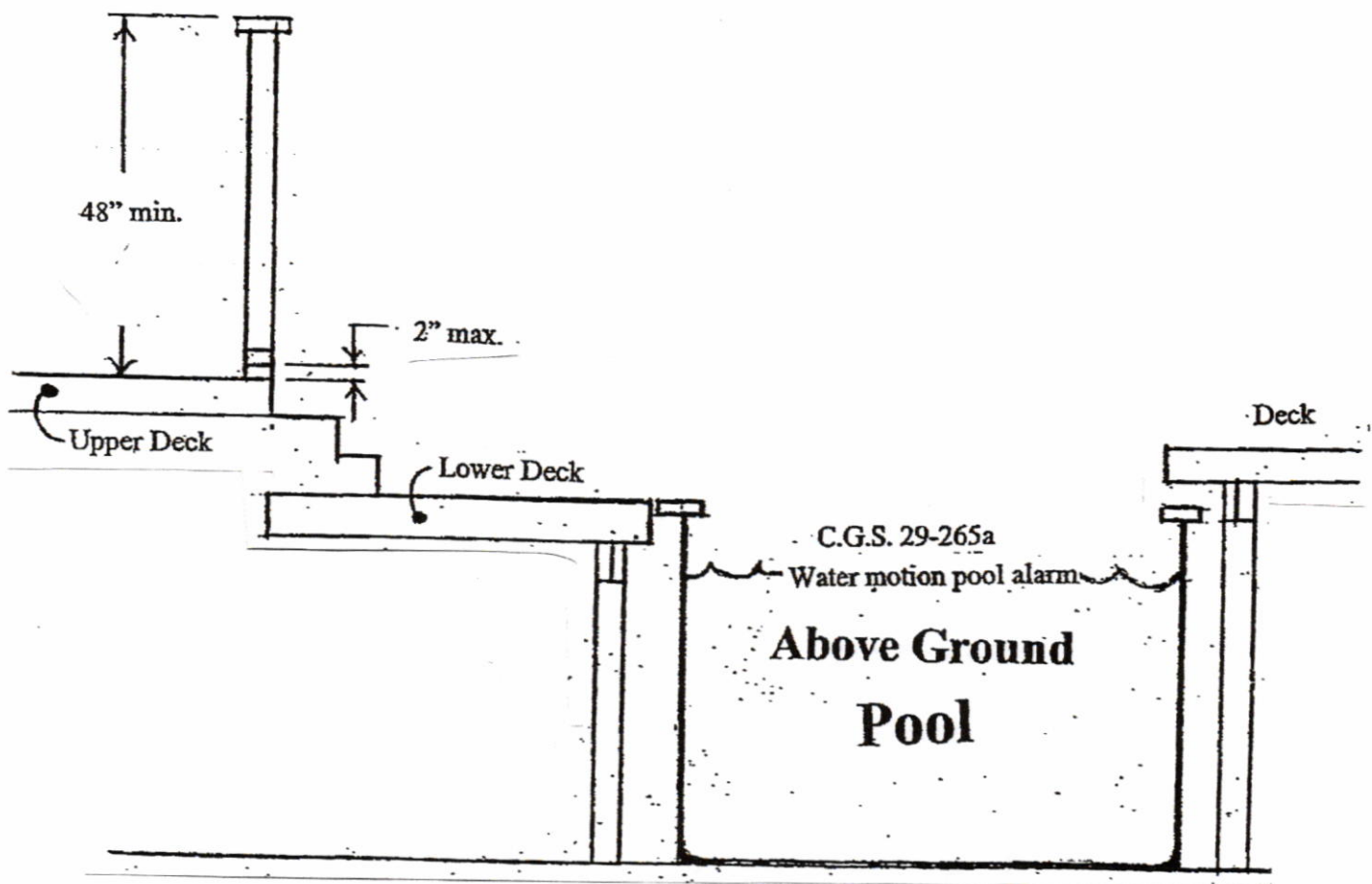
Examples of code compliant self-closing and self-latching gates.

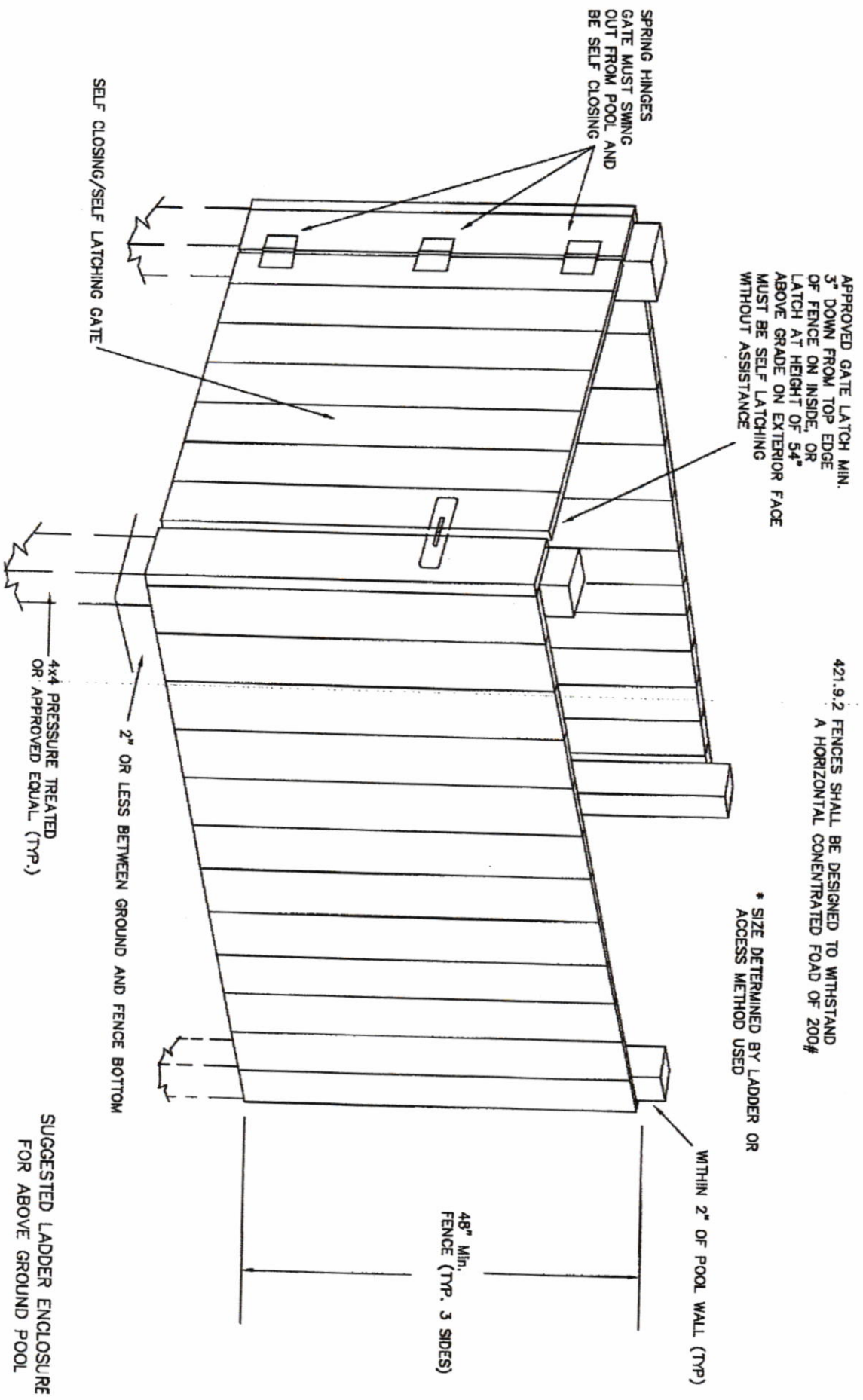


Maximum space between pickets
or lattice is 1 $\frac{3}{4}$ inches



CROSS-SECTION
MULTI-LEVEL DECKS & POOL





APPROVED GATE LATCH MIN.
3" DOWN FROM TOP EDGE
OF FENCE ON INSIDE, OR
LATCH AT HEIGHT OF 54"
ABOVE GRADE ON EXTERIOR FACE
MUST BE SELF LATCHING
WITHOUT ASSISTANCE

421.9.2 FENCES SHALL BE DESIGNED TO WITHSTAND
A HORIZONTAL CONCENTRATED LOAD OF 200#

* SIZE DETERMINED BY LADDER OR
ACCESS METHOD USED

WITHIN 2" OF POOL WALL (TYP)

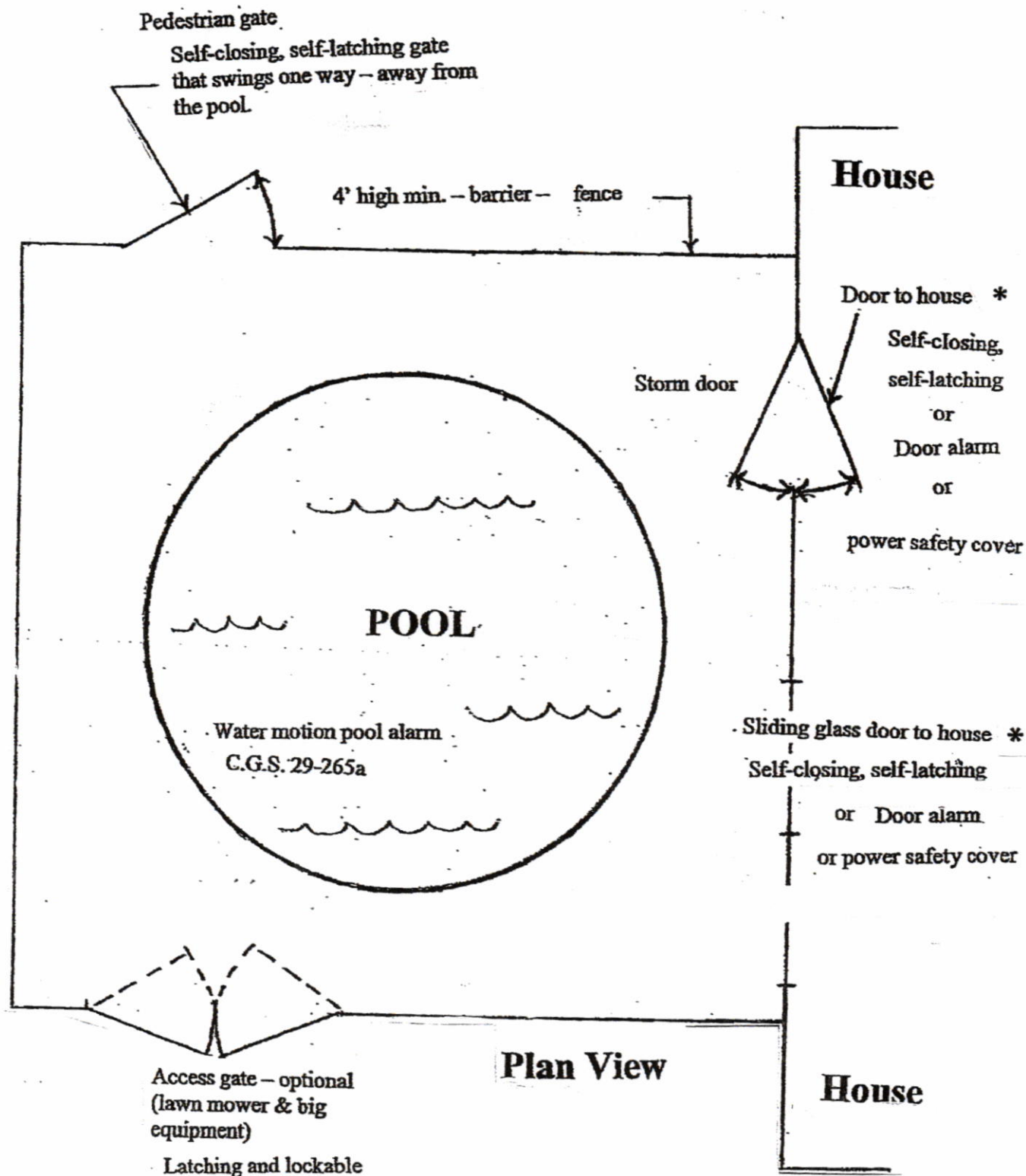
48" Min.
FENCE (TYP. 3 SIDES)

SELF CLOSING/SELF LATCHING GATE

2" OR LESS BETWEEN GROUND AND FENCE BOTTOM

4x4 PRESSURE TREATED
OR APPROVED EQUAL (TYP.)

SUGGESTED LADDER ENCLOSURE
FOR ABOVE GROUND POOL



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

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.

