

POOLS

Required Information (2 copies)

BROCHURE FOR: POOL
PUMP
FILTER
FENCE
HEATER – FUEL SOURCE
POOL COVER (REQUIRED WITH
INSTALLATION OF A HEATER)

DIAGRAM FOR ELECTRIC

PLANS AND DETAILS FOR FENCING AND GATE

SIGN FORM FOR FENCING REGULATION, CONTRACTOR
AND CONTRACT AND COST

SURVEY – LOCATIONS OF POOL, FENCE, PUMP, FILTER,
HEATER, PATIO AND DECK

SEPTIC – SHOW LOCATION OR GET DIAGRAM FROM
HEALTH DEPARTMENT

IMPERVIOUS COVERAGE CALCULATIONS – SEE ZONING
PERMIT

PLAN REVIEW CHECK LIST FOR SWIMMING POOLS

1. Provide electrical plan and include bonding and grounding details and wire size.
 - A. Location of switches, receptacles, lighting fixtures, etc.
 - B. Detail of pump motor connection.
 - C. Detail of underground circuit includes burial depth and materials.
 - D. Location of GFCI device or devices.
2. Size of pool and type of construction, seal by a professional engineer.
3. Show existing and proposed grades and location of any retaining walls, their height and type of construction.
4. Show location of pump, filter, heater and tank.
5. If pool is heated – type of cover (required by Energy Code).
6. Show distances from property lines, house, septic tank and field or pits.
7. Show location of fence and type of construction. Show gates and direction of swing.
8. Show location and size of patio, pavers or deck to be constructed.
9. Details for diving board.
10. Calculations for impervious coverage.



TOWNSHIP OF SPARTA

65 Main Street
Sparta, New Jersey 07871-1986

memorandum

TO : HEALTH DEPARTMENT STAFF
BUILDING DEPARTMENT STAFF

FROM : Ralph J. D'Aries, Health Officer

DATE : July 15, 1993

SUBJECT : POOL INSTALLATIONS - DISTANCES TO SEPTIC SYSTEM
COMPONENTS

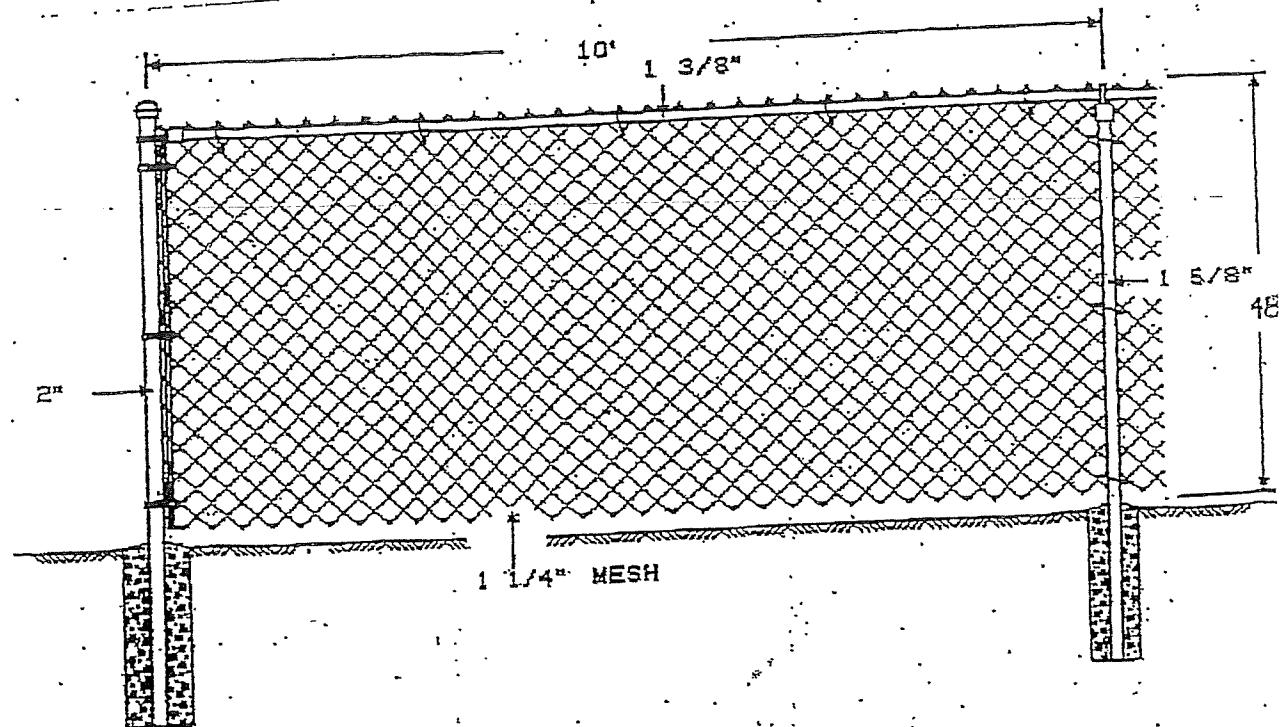
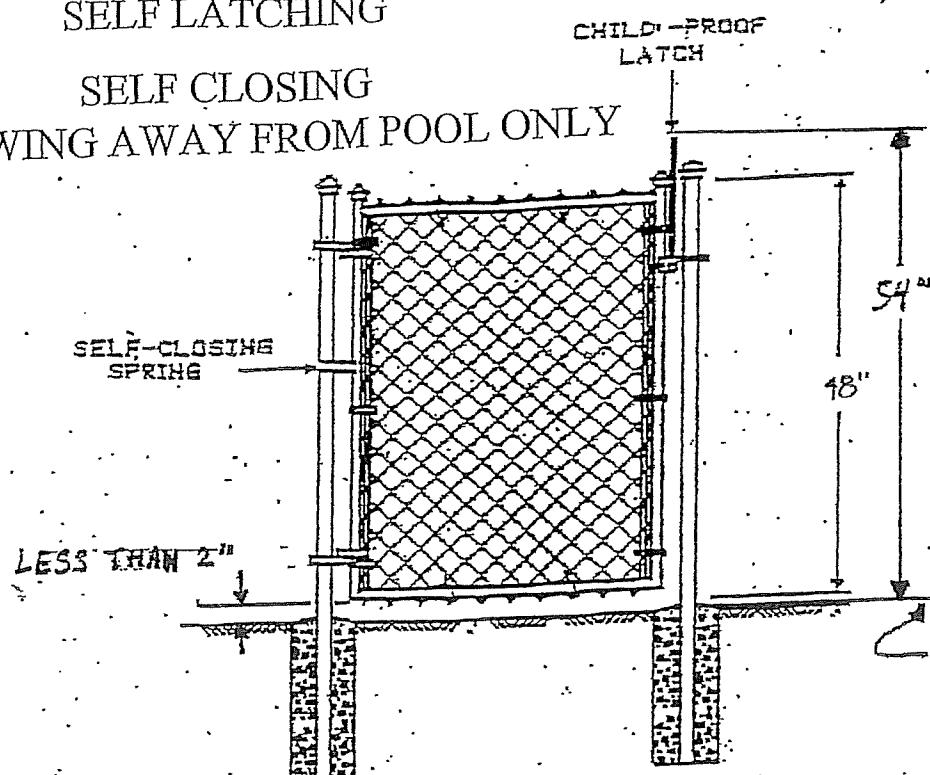
INGROUND POOLS

D Box - tank	- 10'
Disposal field	- 20'
Seepage pit	- 30'

ABOVEGROUND POOLS

D Box - tank	- 10'
Disposal field	- 15'
Seepage pit	- 20'

SELF LATCHING
SELF CLOSING
MUST SWING AWAY FROM POOL ONLY



Your pool is
NOT
to be filled with
water
until the
PERMANENT
fence is installed
AND
INSPECTED

Above Ground Pool-Barrier Alternative

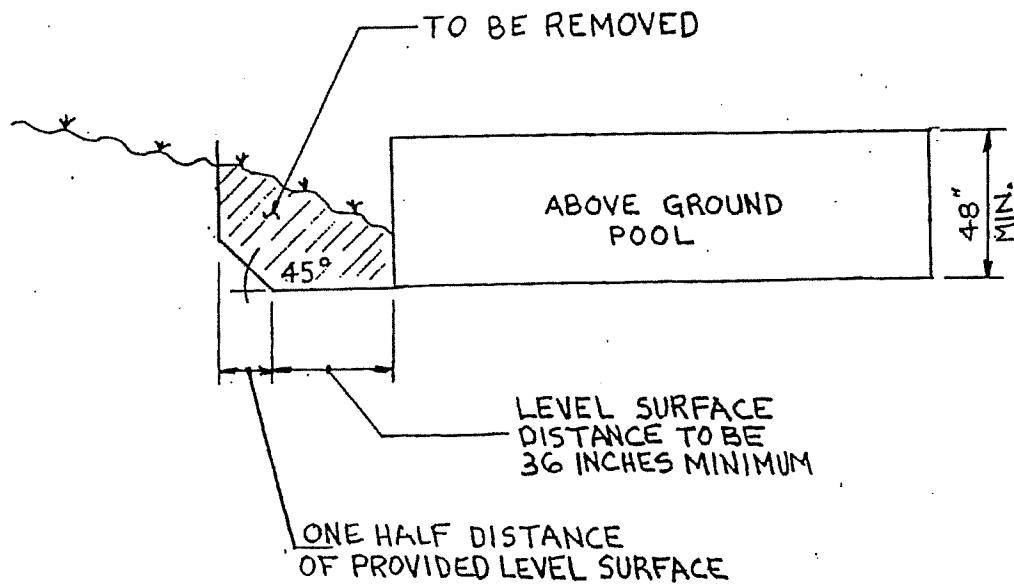
Many times, above ground pools are installed on a sloped site so that the top of the pool wall, which acts as a barrier, is below the 48 inch minimum required by section 421.10 of the 1996 BOCA National Building Code. Usually when this occurs, an additional barrier is mounted on the top of the pool, much to the annoyance of the pool owner.

After years of wrestling with this code section, DCA's Northern Regional Local Code Enforcement Office has come up with a safe option to the additional barrier. (Do not conclude that this is required!)

Where the above-ground pool is to be installed on a sloped site that will render a portion of the top of the pool structure to be less than 48 inches to grade, a minimum of a 3 foot level surface around the portion of the pool structure that is less than 48 inches to grade should be provided. The level surface should be measured away from the pool wall to the excavation edge and should be tapered away from the pool at a minimum 45 degree angle for a distance of one-half the provided level surface.

Because a picture is worth a thousand words, please refer to the sketch below for clarification.

Source: Chuck Herring, Northern Regional Office

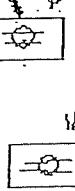
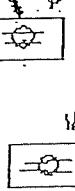


POOL WATER TO BE BONDED W/ #8 SOLID COPPER TO
BOND GRID AS PER 2008 NEC 680.26(C)
CONTACT POOL SUPPLIER FOR APPROVED PRODUCTS

4 POINTS OF ATTACHMENT-COPPER LUGS APPROVED FOR
DIRECT BURIAL AT POOL. STAINLESS STEEL NUT/BOLT AND
SPLIT BOLT CONNECTOR APPROVED FOR DIRECT BURIAL

#8 BARRE COPPER WIRE 18"-24" FROM INSIDE EDGE OF
POOL - 4"-6" BELOW GRADE. *buried completely.*

125 VOLT GFCI RECEPTACLE COVER, NOT ON POOL
CIRCUIT - WIRED WITH ANY APPROVED WIRING METHOD.
6'-20 FEET FROM INSIDE EDGE OF POOL



125V 20A TWIST LOCK RECP - DEAD FRONT GFCI OF GFCI
BREAKER PROTECTED 6'-10 FEET FROM INSIDE EDGE OF POOL
WITH BUBBLE COVER ON DEDICATED CIRCUIT BACK TO PANEL.
12 GAUGE THHN INSTALLED IN RACEWAY TO HOUSE BURIED
MIN 18 INCHES IN DEPTH. INTERIOR WIRING MAY BE ANY
APPROVED WIRING METHOD.

#8 SOLID COPPER FROM POOL TO PUMP -
COPPER LUG AT POOL W/ SS NUT/BOLT

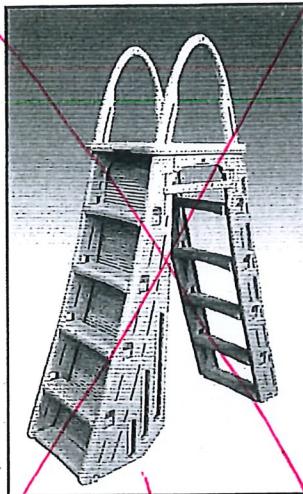
12/3 RUBBER CORD MAX 3 FT IN LENGTH
W/ TWIST LOCK 125V 20A PLUG
CORD MUST BE APPROVED FOR WET LOCATIONS

A-FRAME LADDERS

Model 7200

Rollguard A-Frame Safety Ladder

Convertible
to Inpool Ladder
using
#CK7200 Kit -
sold separately.

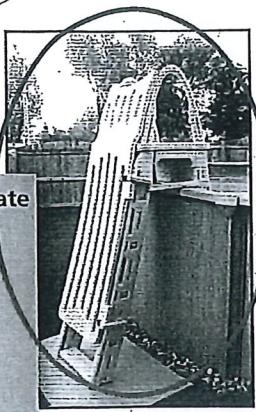


Standard features of the Rollguard Ladder:

- Aesthetically pleasing contemporary design in beautiful warm gray color to complement today's brown or gray tone pools
- Large 5 inch x 18 inch wide Comforttreads
- Curved side rails designed with strength in mind
- Inner side rails include integrated side barriers to prevent entry behind the ladder
- Easy assembly with minimal hardware
- Adjusts to fit pools 48" to 54" tall
- Lockable Rollguard Barrier (lock included)
- Extra-large top platform
- Just fill side rails with water to prevent floating, no sand or bricks needed
- Fits pool top seats up to 14 inches wide
- Weight limit: 300 lbs.
- Five year warranty

Optional G7200 Rollguard Gate

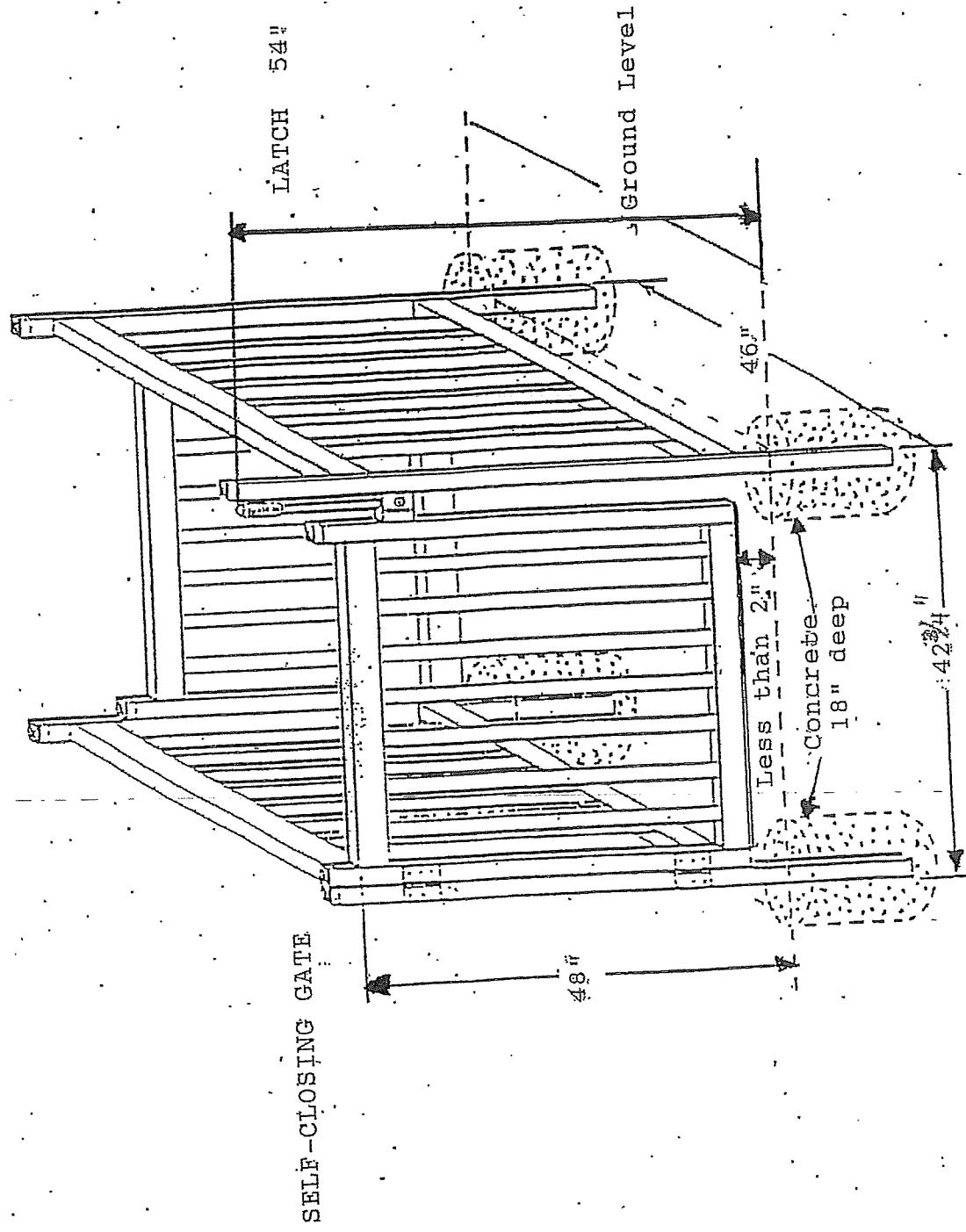
- Attaches easily to our Rollguard Ladder to provide added security
- Self-closing and self-latching
- Satisfies most building inspector requirements
- Latch located well out of reach of small children
- Contoured design "hugs" ladder steps and restricts access
- Padlock included



NOT
allow

Correct
one

ENCLOSURE FOR LADDER FOR ABOVE GROUND POOL



The diagram shows an enclosure for an above-ground pool ladder. The enclosure is built on a concrete base. The height of the concrete base is 48". The height of the top of the enclosure above the ground level is 46". The height of the top of the enclosure above the concrete base is less than 2". The depth of the pool is 18" deep. The width of the enclosure is 42 $\frac{3}{4}$ ". The enclosure has a self-closing gate on the left side. The ladder has a latch at the top. The ground level is indicated by a dashed line.

Most towns require an enclosure such as this around the safety ladder of an above ground pool. The purpose of this enclosure is to prevent a small child from entering the pool accidentally. It has a self-closing gate with a child resistant latch, which will deny entry to small children even if the safety ladder is left in the entry position.

SECTION 305

BARRIER REQUIREMENTS

305.1 General. The provisions of this section shall apply to the design of *barriers* for *aquatic vessels*. These design controls are intended to provide protection against the potential drowning and near drowning by restricting access to such vessels. These requirements provide an integrated level of protection against potential drowning through the use of physical barriers and warning devices.

Exceptions:

1. *Spas* and hot tubs with a lockable safety cover that complies with ASTM F 1346.

305.2 Outdoor swimming pools and spas. All outdoor *aquatic vessels* and indoor swimming pools shall be surrounded by a *barrier* that complies with Sections 305.2.1 through 305.7.

305.2.1 Barrier height and clearances. Barrier heights and clearances shall be in accordance with all of the following:

1. The top of the *barrier* shall be not less than 48 inches (1219 mm) above grade where measured on the side of the *barrier* that faces away from the *aquatic vessel*. Such height shall exist around the entire perimeter of the vessel and for a distance of 3 feet (914 mm) where measured horizontally from the required *barrier*.
2. The vertical clearance between grade and the bottom of the *barrier* shall not exceed 2 inches (51 mm) for grade surfaces that are not solid, such as grass or gravel, where measured on the side of the *barrier* that faces away from the vessel.
3. The vertical clearance between a surface below the *barrier* to a solid surface, such as concrete, and the bottom of the required *barrier* shall not exceed 4 inches (102 mm) where measured on the side of the required *barrier* that faces away from the vessel.
4. Where the top of the vessel structure is above grade, the *barrier* shall be installed on grade or shall be mounted on top of the vessel structure. Where the *barrier* is mounted on the top of the vessel, the vertical clearance between the top of the vessel and the bottom of the *barrier* shall not exceed 4 inches (102 mm).

305.2.2 Openings. Openings in the *barrier* shall not allow passage of a 4 inch (102 mm) diameter sphere.

305.2.3 Solid barrier surfaces. Solid *barriers* that do not have openings shall not contain indentations or protrusions that form handholds and footholds, except for normal construction tolerances and tooled masonry joints.

305.2.4 Mesh restraining barrier/fence. Mesh fences, other than chain link fences in accordance with Section 305.2.7, shall be installed in accordance with the manufacturer's instructions

1. The bottom of the mesh restraining fence shall be not more than 1 inch (25 mm) above the deck or installed surface or grade.
2. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not permit the fence to be lifted more than 4 inches (102 mm) from grade or decking.
3. The fence shall be designed and constructed so that it does not allow passage of a 4-inch (102 mm) sphere under any mesh panel. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not be more than 4 inches (102 mm) from grade or decking.
4. An attachment device shall attach each barrier section at a height not lower than 45 inches (1143 mm) above grade. Common attachment devices include, but are not limited to, devices that provide the security equal to or greater than that of a hook-and-eye-type latch incorporating a spring-actuated retaining lever such as a safety gate hook.
5. Where a hinged gate is used with a mesh *barrier*, the gate shall comply with Section 305.3.
6. Patio deck sleeves such as vertical post receptacles which are placed inside the patio surface shall be of a nonconductive material.
7. Mesh fences shall not be used on top of or ground residential pools.

FENCE CERTIFICATE

1. Please be advised that I am aware of the fact that a fence is required for safety reasons on any swimming pool over 24" deep.
2. I further state that I will install a permanent fence prior to filling the pool.
Inspection required.
3. Failure to comply with the above will result in a \$2,000.00 fine.

OWNER: _____ ADDRESS: _____

305.2.5 Closely spaced horizontal members. 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 *aquatic vessel* side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

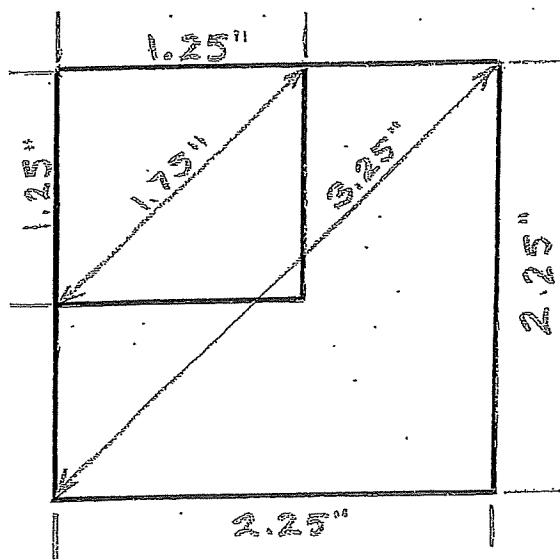
305.2.6 Widely spaced horizontal members. Where the *barrier* is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

305.2.7 Chain link dimensions. The maximum opening formed by a chain link fence shall be not more than 1.75 inches (44 mm). Where the fence is provided with slats fastened at the top and bottom which reduces the openings, such openings shall be not more than 1.75 inches (44 mm).

305.2.8 Diagonal members. Where the *barrier* is composed of diagonal members, the maximum opening formed by the diagonal members shall be not more than 1.75 inches (44 mm). The angle of diagonal members shall not be greater than 45 degrees (0.79 rad) from vertical.

305.2.9 Clear zone. There shall be a clear zone of not less than 36 inches (914 mm) around the exterior of the *barrier* and around any permanent structures or equipment such as pumps, filters and heaters that can be used to climb the barrier.

305.2.10 Poolside barrier setbacks. The *aquatic vessel* side of the required *barrier* shall be not less than 20 inches (508 mm) from the water's edge.



305.3 Gates. Access gates shall comply with the requirements of Sections 305.3.1 through 305.3.3 and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the vessel and shall be self-closing and have a self-latching device.

305.3.1 Utility or service gates. Gates not intended for pedestrian use, such as utility or service gates, shall remain locked when not in use.

305.3.2 Double or multiple gates. Double gates or multiple gates shall have at least one leaf secured in place and the adjacent leaf shall be secured with a self-latching device. The gate and *barrier* shall not have openings larger than $\frac{1}{2}$ inch (12.7 mm) within 18 inches (457 mm) of the latch release mechanism. The self-latching device shall comply with the requirements of Section 305.3.3.

305.3.3 Latches. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from grade, the release mechanism shall be located on the vessel side of the gate at least 3 inches (76 mm) below the top of the gate, and the gate and *barrier* shall not have openings greater than $\frac{1}{2}$ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

305.5 Onground residential pool structure as a barrier. An onground *residential* pool wall structure or a barrier mounted on top of an onground *residential* pool wall structure shall serve as a barrier where all of the following conditions are present:

1. Where only the pool wall serves as the barrier, the bottom of the wall is on grade, the top of the wall is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, the wall complies with the requirements of Section 305.2 and the pool manufacturer allows the wall to serve as a barrier.
2. Where a barrier is mounted on top of the pool wall, the top of the barrier is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, and the wall and the barrier on top of the wall comply with the requirements of Section 305.2.
3. Ladders or steps used as means of access to the pool are surrounded by a barrier that meets the requirements of Section 305.

305.6 Natural barriers. In the case where the pool or spa area abuts the edge of a lake or other natural body of water, public access is not permitted or allowed along the shoreline, and required barriers extend to and beyond the water's edge not less than 18 inches (457 mm), a barrier is not required between the natural body of water shoreline and the pool or spa.

305.7 Natural topography. Natural topography that prevents direct access to the pool or spa area shall include but not be limited to mountains and natural rock formations. A natural barrier approved by the governing body shall be acceptable provided that the degree of protection is not less than the protection afforded by the requirements of Sections 305.2 through 305.5.