



# Pool Barriers

Presented by:

The Office of Building Code Compliance

# Senate Bill 86

- ◆ This bill also known as the “Preston de Ibern/McKenzie Merriam Residential Swimming Pool Safety Act” Created Chapter 515 of the Florida Statutes.
- ◆ This is how it all started.
- ◆ It became effective October 1, 2000.

# Florida Statutes 515

- ◆ **515.23 Legislative findings and intent.**--The Legislature finds that drowning is the leading cause of death of young children in this state and is also a significant cause of death for medically frail elderly persons in this state, that constant adult supervision is the key to accomplishing the objective of reducing the number of submersion incidents, and that when lapses in supervision occur a pool safety feature designed to deny, delay, or detect unsupervised entry to the swimming pool, spa, or hot tub will reduce drowning and near-drowning incidents.

# Florida Statutes 515

- ◆ It is also the intent of the Legislature that the Department of Health be responsible for producing its own or adopting a nationally recognized publication that provides the public with information on drowning prevention and the responsibilities of pool ownership and also for developing its own or adopting a nationally recognized drowning prevention education program for the public and for persons violating the pool safety requirements of this chapter.

# Florida Statutes 515

- ◆ Therefore, it is the intent of the Legislature that all new residential swimming pools, spas, and hot tubs be equipped with at least one pool safety feature as specified in this chapter.

# Florida Statutes 515

## ◆ 515.27 Residential swimming pool safety feature options; penalties.--

- ◆ (1) In order to pass final inspection and receive a certificate of completion, a residential swimming pool must meet at least one of the following requirements relating to pool safety features:
  - ◆ (a) The pool must be isolated from access to a home by an enclosure that meets the pool barrier requirements of s. 515.29;

# Florida Statutes 515

- ◆ (b) The pool must be equipped with an approved safety pool cover;
- ◆ (c) All doors and windows providing direct access from the home to the pool must be equipped with an exit alarm that has a minimum sound pressure rating of 85 dB A at 10 feet; or

# Florida Statutes 515

- ◆ (d) All doors providing direct access from the home to the pool must be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.

# Florida Statutes 515

- ◆ A person who fails to equip a new residential swimming pool with a least one safety feature as required in subsection (1) commits a misdemeanor of the second degree.

# Florida Statutes 515

- ◆ In addition to the incalculable human cost of these submersion incidents, the health care costs, loss of lifetime productivity, and legal and administrative expenses associated with drownings of young children and medically frail elderly persons in this state each year and the lifetime costs for the care and treatment of young children who have suffered brain disability due to near-drowning incidents each year are enormous.

# Senate Bill 52 C

- ◆ Section 13. The Florida Building Commission is authorized to provide for uniform implementation of sections 515.25, 515.27, and 515.29, Florida Statutes, by including standards and criteria in the Florida Building Code for residential swimming pool barriers, pool covers, latching devices, door and window exit alarms, and other equipment required in those sections which are consistent with the with the intent of section 515.23, Florida Statutes. Thus, the residential swimming pool safety requirements of the Florida Building Code, section 424.2, relating to private swimming pools, of Rule 9B-3.047, Florida Administrative Code, as adopted November 28, 2000, shall take effect January 1, 2002.

# Senate Bill 52 C

- ◆ **515.25 Definitions**
- ◆ **515.27 Residential swimming pool safety feature options; penalties.**
- ◆ **515.29 Residential swimming pool barrier requirements**

# Senate Bill 52 C

◆ Thus, the residential swimming pool safety requirements of the Florida Building Code, section 424.2, relating to private swimming pools, of Rule 9B-3.047, Florida Administrative Code, as adopted November 28, 2000, shall take effect January 1, 2002.



◆ This is were we were on February 12, 2002 before a DEC statement by the Florida Building Code Commission.

## Section 424 FBC. Swimming Pools and Bathing Places

- ◆ **MEDICALLY FRAIL ELDERLY PERSON.** Means any person who is at least 65 years of age and has a medical problem that affects balance, vision, or judgment, including, but not limited to, a heart condition, diabetes, or Alzheimer's disease or any related disorder.
- ◆ **YOUNG CHILD.** Means any person under the age of 6 years.

## Section 424 FBC. Swimming Pools and Bathing Places

- ◆ **424.2.17.1 Outdoor Swimming Pools.**  
Outdoor swimming pools shall be provided with a barrier complying with 424.2.17.1.1 through 424.2.17.1.14.

# Section 424 FBC. Swimming Pools and Bathing Places

- ◆ **424.2.17.1.1** The top of the barrier shall be at least 48 inches 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 inches measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade the barrier may be at ground level 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.

## Section 424 FBC. Swimming Pools and Bathing Places

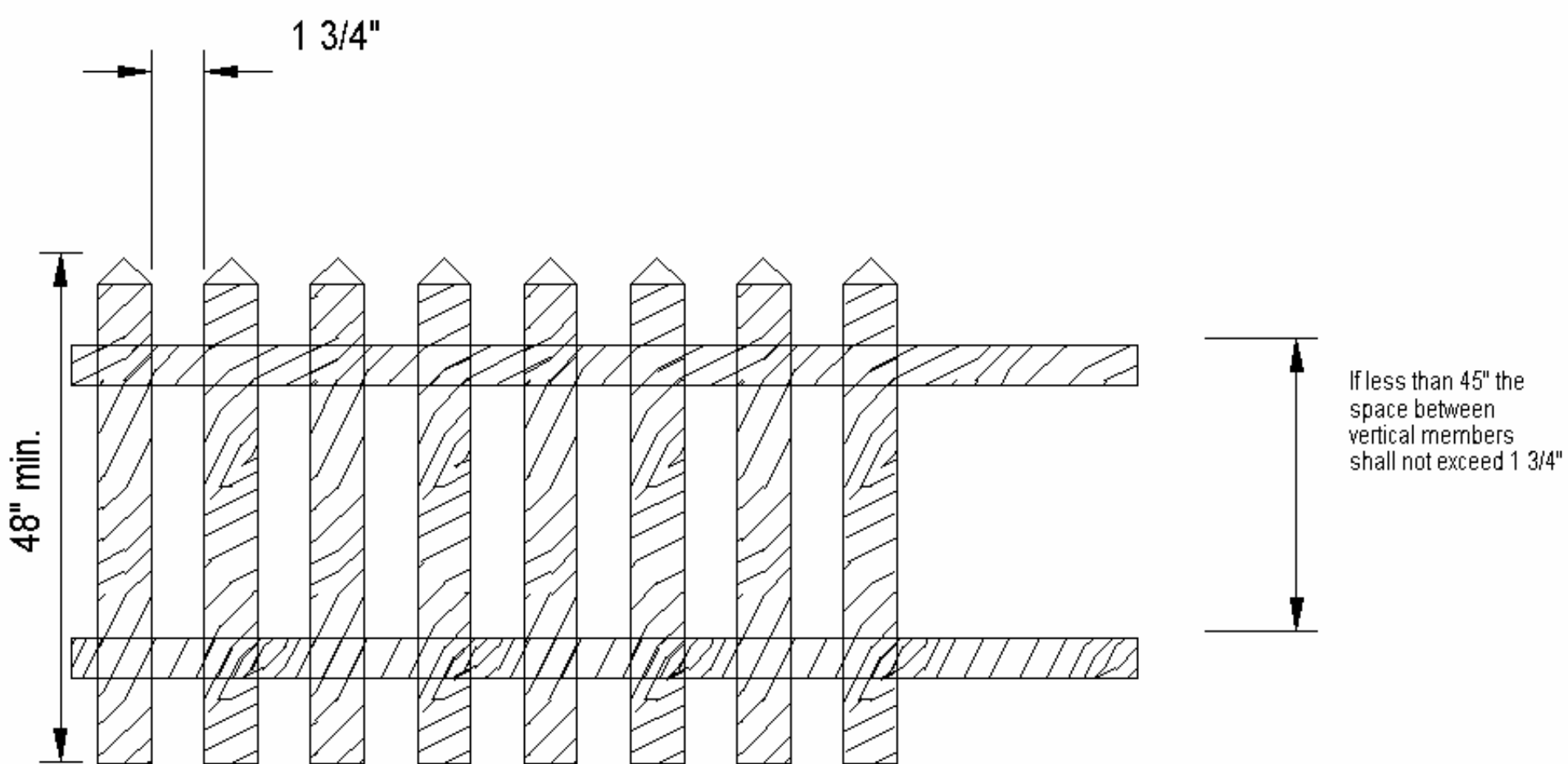
◆ 424.2.17.1.2 The barrier may not have any gaps, openings, indentations, protrusions, or structural components that could allow a young child to crawl under, squeeze through, or climb over the barrier as herein described below. One end of the barrier shall not be removable without the aid of tools. Openings in the barrier shall not allow passage of a 4-inch diameter sphere.

## Section 424 FBC. Swimming Pools and Bathing Places

◆ **424.2.17.1.3** Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

## Section 424 FBC. Swimming Pools and Bathing Places

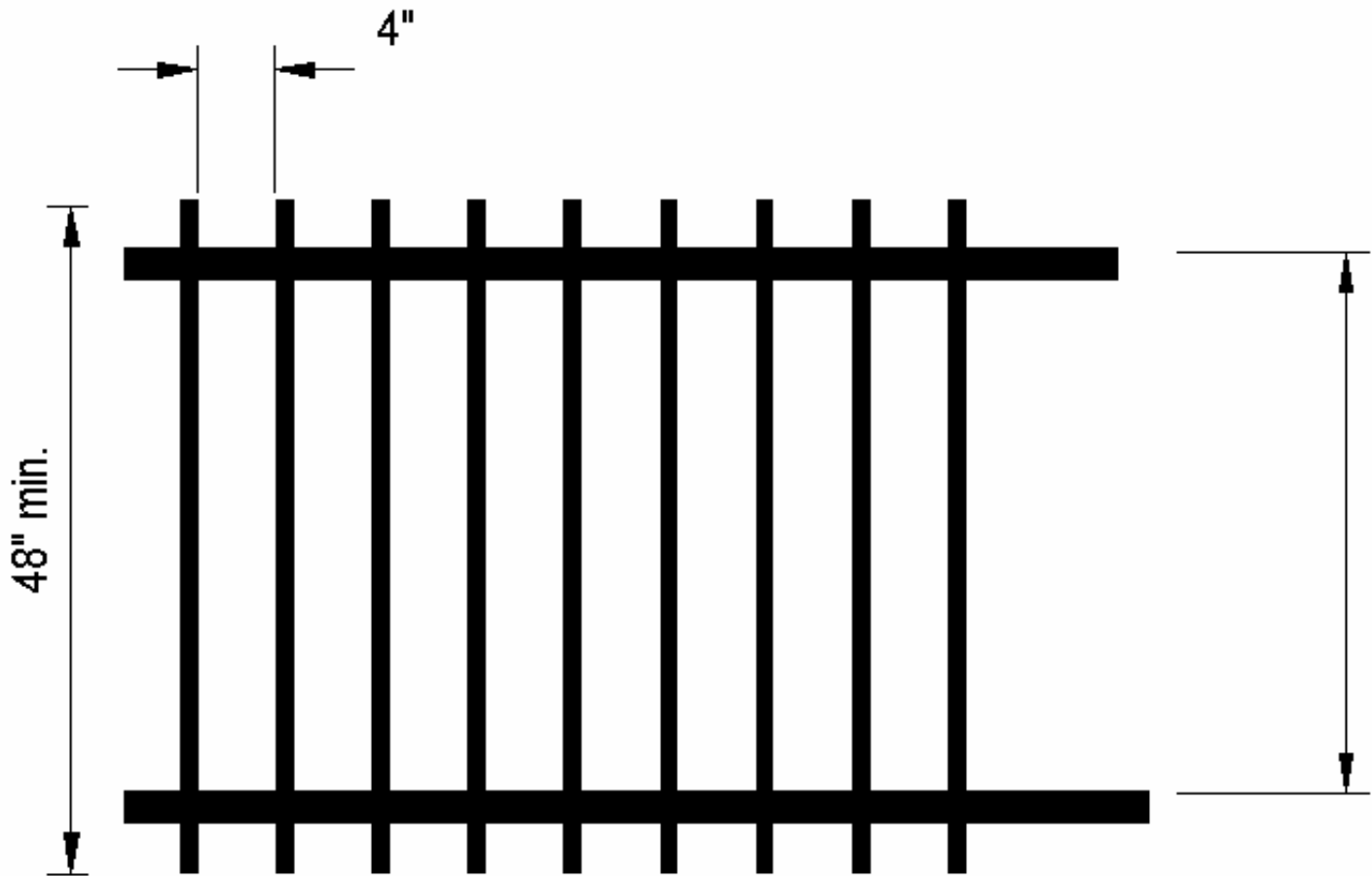
- ◆ **424.2.17.1.4** Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed  $1\frac{3}{4}$  inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed  $1\frac{3}{4}$  inches in width.



Drawing not to scale

## Section 424 FBC. Swimming Pools and Bathing Places

- ◆ **424.2.17.1.5** 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 exceed 4 inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed  $1 \frac{3}{4}$  inches in width.

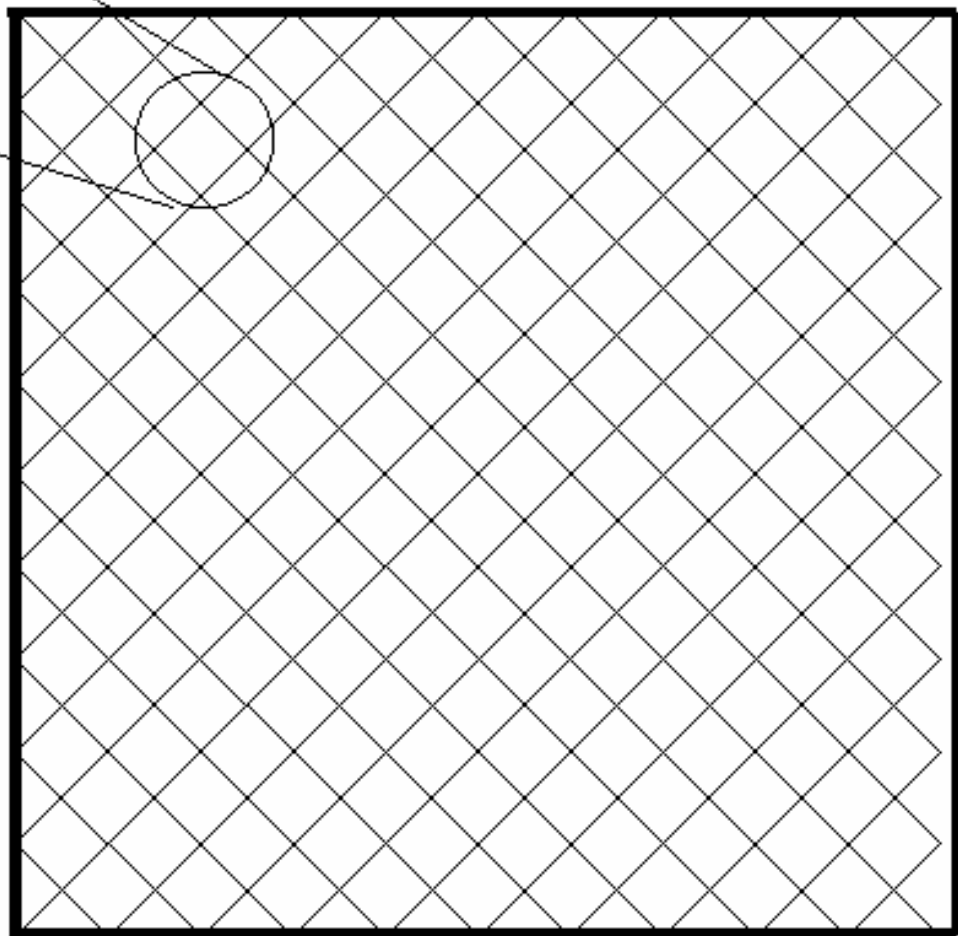


If more than 45" then the distance between vertical members may be a maximum of 4"

Drawing not to scale

## Section 424 FBC. Swimming Pools and Bathing Places

◆ **424.2.17.1.6** Maximum mesh size for chain link fences shall be a 2 ¼ inch square unless the fence is provided with slats fastened at the top or bottom which reduce the openings to no more than 1 ¾ inches.



## Section 424 FBC. Swimming Pools and Bathing Places

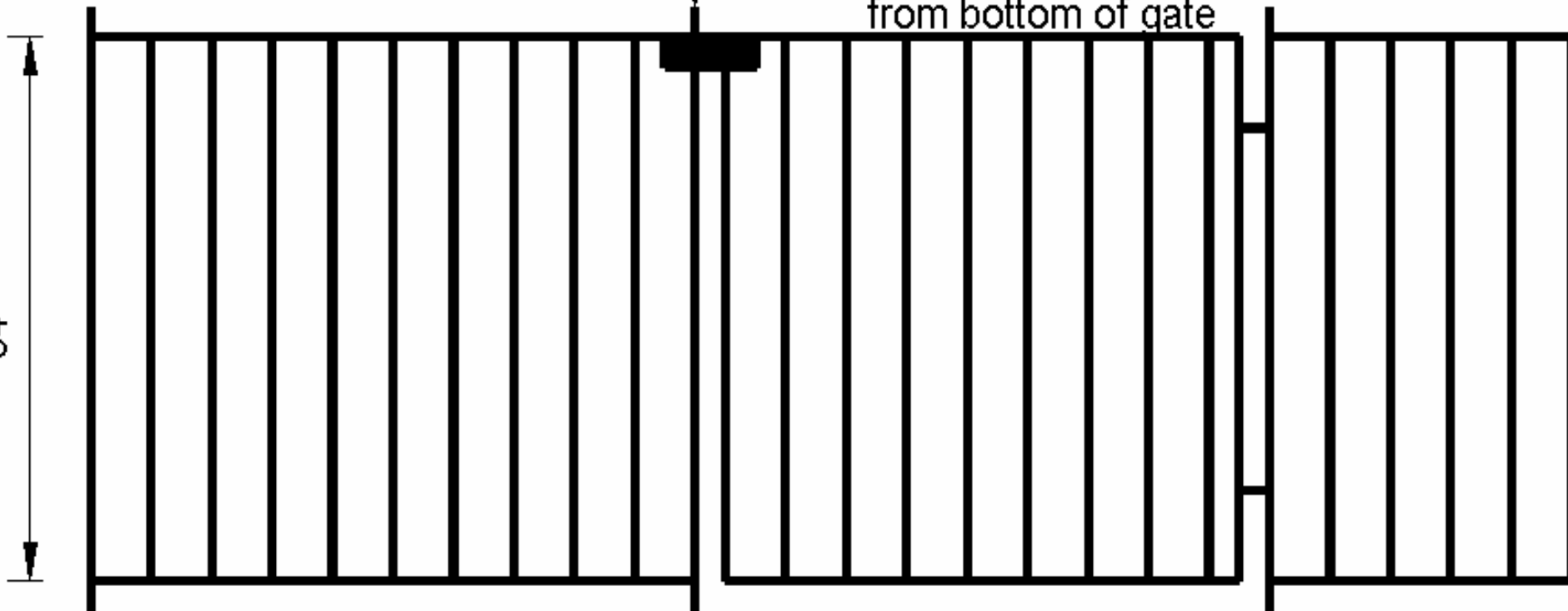
◆ **424.2.17.1.7** Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be no more than  $1 \frac{3}{4}$  inches.

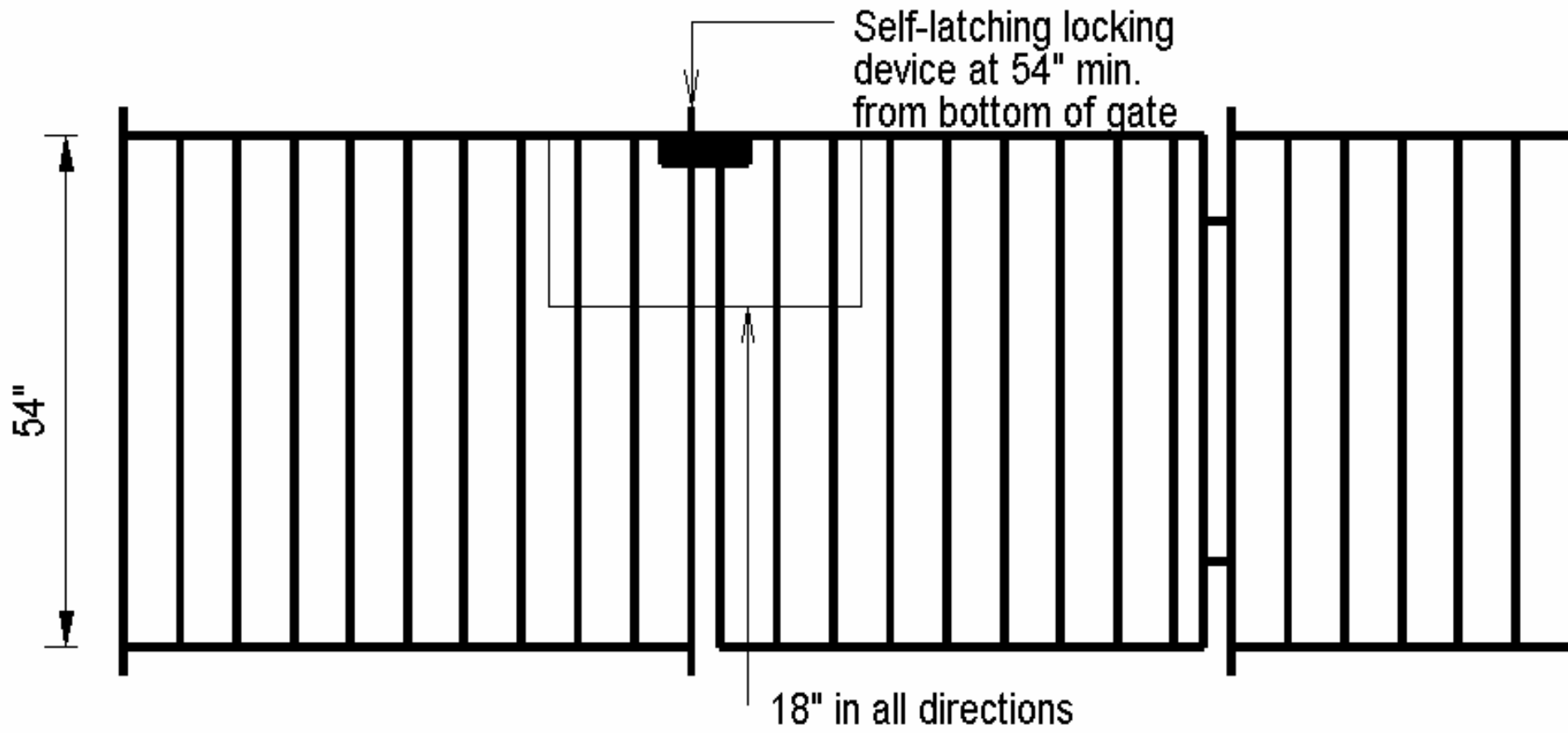
# Section 424 FBC. Swimming Pools and Bathing Places

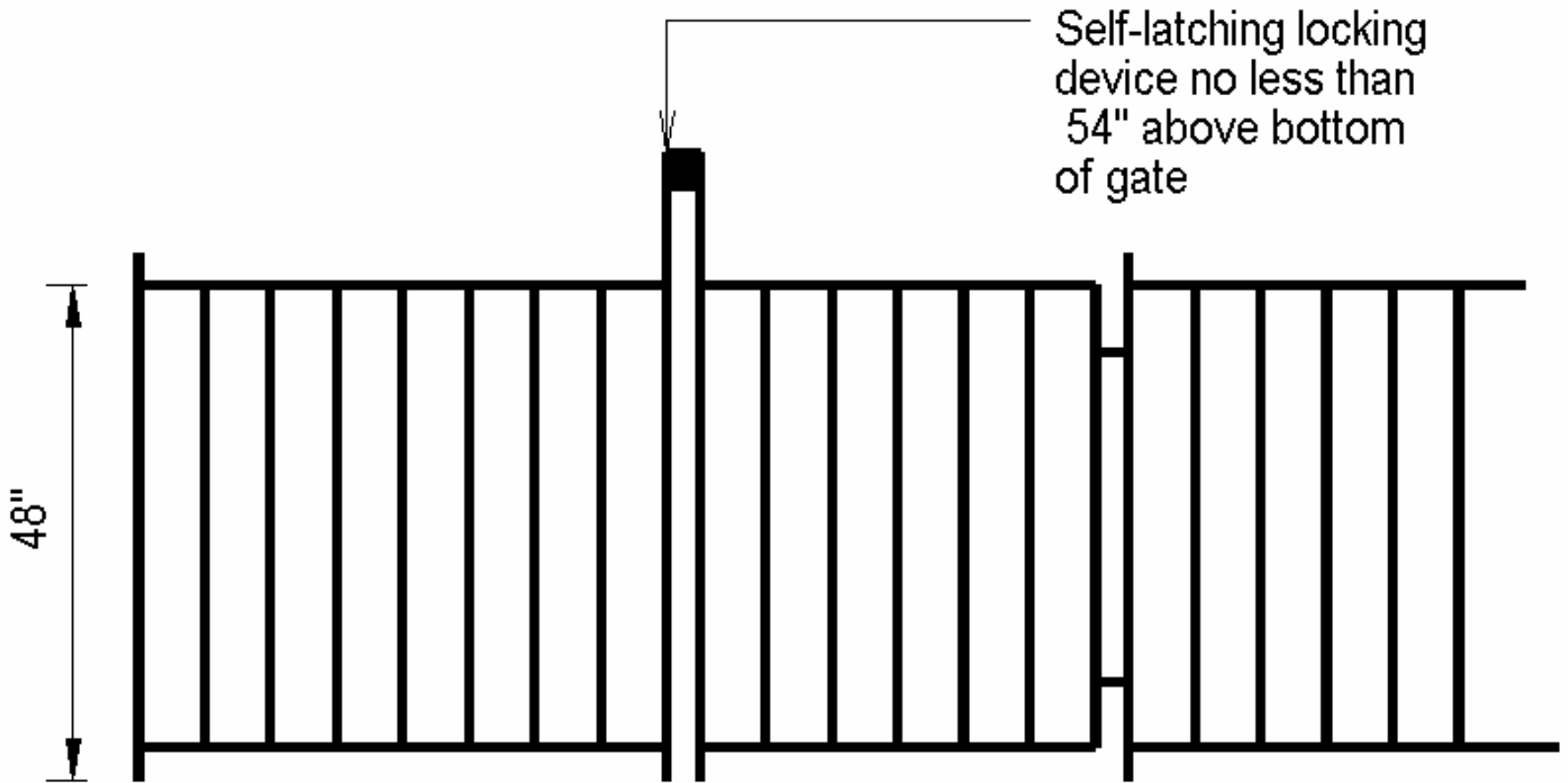
- ◆ **424.2.17.1.8** Access gates, when provided, shall comply with the requirements of 424.2.17.1.1 through 424.2.17.1.7 and shall be equipped with a self-latching locking device located no less than 54 inches from the bottom of the gate. The device release mechanism shall be located on the pool side of the gate and so placed that it cannot be reached by a young child over the top or through any opening or gap. Gates that provide access to the swimming pool must open outward away from the pool. The gates and barrier shall have no opening greater than 1/2 inch within 18 inches of the release mechanism.

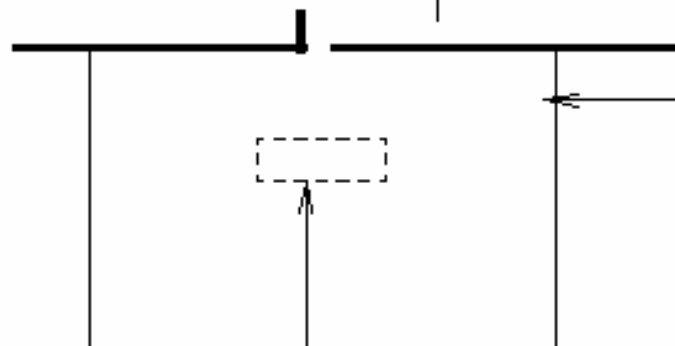
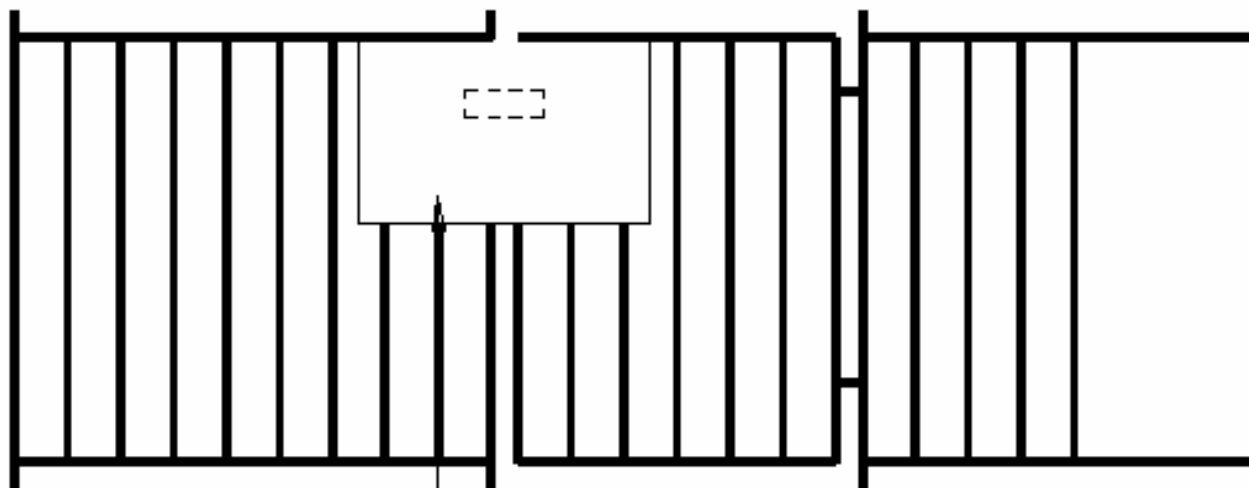
54"

Self-latching locking  
device at 54" min.  
from bottom of gate









The gates and barriers shall have no opening greater than 1/2" within 18 inches of the release mechanism.

ANSI/NSPI 5 used to allow for the mechanism to be 3" below the top of the gate and to provide an access shield 18" in all directions, but that part of the Code has been stricken

Release mechanism

## Section 424 FBC. Swimming Pools and Bathing Places

- ◆ **424.2.17.1.9** Where a wall of a dwelling serves as part of the barrier, one of the following shall apply:
  - ◆ 1. All doors and windows providing direct access from the home to the pool shall be equipped with an exit alarm complying with UL 2017 that has a minimum sound pressure rating of 85 dB A at 10 feet and is either hard-wired or of the plug-in type. The exit alarm shall produce a continuous audible warning when the door and its screen are opened.

## Section 424 FBC. Swimming Pools and Bathing Places

- ◆ The alarm shall sound immediately after the door is opened and be capable of being heard throughout the house during normal household activities. The alarm shall be equipped with a manual means to temporarily deactivate the alarm for a single opening. Such deactivation shall last no more than 15 seconds. The deactivation switch shall be located at least 54 inches above the threshold of the door.

# Senate Bill 442

- ◆ Section 32 of S.B. 442 States that when Chapter 515 F.S. was created it was the intent of the legislature that any alarm that met UL 2017 be a permissive alternative to comply with the pool safety provisions of 515. Further more section 32 orders the Florida Building Commission to amend the Florida Building Code to reflect this intent.

# Continuation Senate Bill 442

- ◆ The commission must complete rulemaking before November 1, 2005. Upon publication of the applicable Notice of Rule Development in the Florida Administrative weekly , any alarm that complies with U.L. 2017 shall be allowed.

# Section 424 FBC. Swimming Pools and Bathing Places

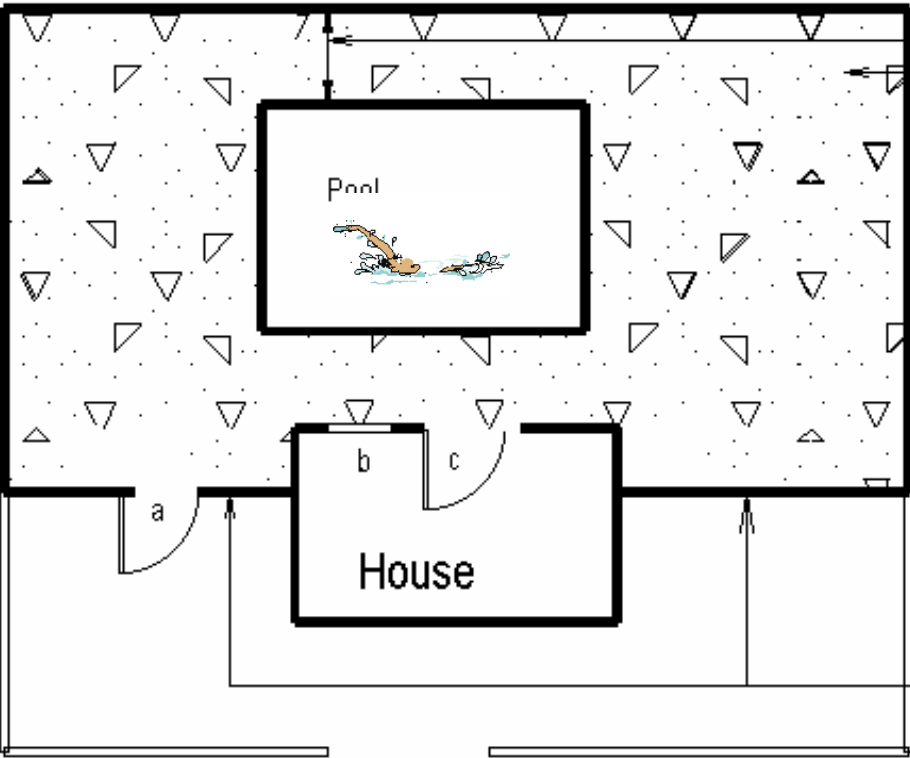
## ◆ Exceptions:

- ◆ a. Screened or protected windows having a bottom sill height of 48 inches or more measured from the interior finished floor at the pool access level.
- ◆ b. Windows facing the pool on floor above the first story.
- ◆ c. Screened or protected pass-through kitchen windows 42 inches or higher with a counter beneath.

## Section 424 FBC. Swimming Pools and Bathing Places

- ◆ 2. All doors providing direct access from the home to the pool must be equipped with a self-closing, self-latching devices with positive mechanical latching/locking devices installed a minimum of 54 inches above the threshold, which is approved by the authority having jurisdiction.

Example # 1



20 inches min. as per 424.2.17.1.13

Pool Deck

Example # 1

- a. Gates must have a self closing/latching device no less than 54" above bottom of gate and must comply with 424.2.17.1 through 424.2.17.1.7 and with 424.2.17.1.8.
- b. Windows must either have a self locking/latching device that complies with 424.2.17.1.9 or have an exit alarm that complies with 424.2.17.1.9.
- c. Same as windows.

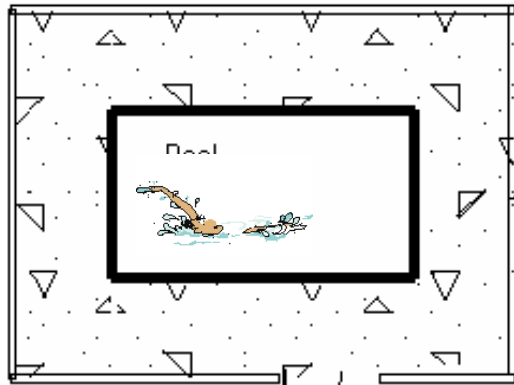
This part of barrier around property needs to comply with 424.2.17.1 through 424.2.17.7.

This part of fence does not need to comply

This part of barrier also needs to comply with 424.2.17.1 through 424.2.17.1.8

Note: in all cases the barrier must be placed around the perimeter of the pool as per 424.2.17.1.12 and as per definition of: "Pool Perimeter" A pool perimeter is defined by the limits of the pool deck and any dwelling or non-dwelling wall or any combination thereof which completely surrounds the pool.

Example 2



Example # 2

- a. If a barrier which meets the requirements of 424.2.17 is provided then:
- b. does not need to comply and
- c. does not need to comply

Pool Deck

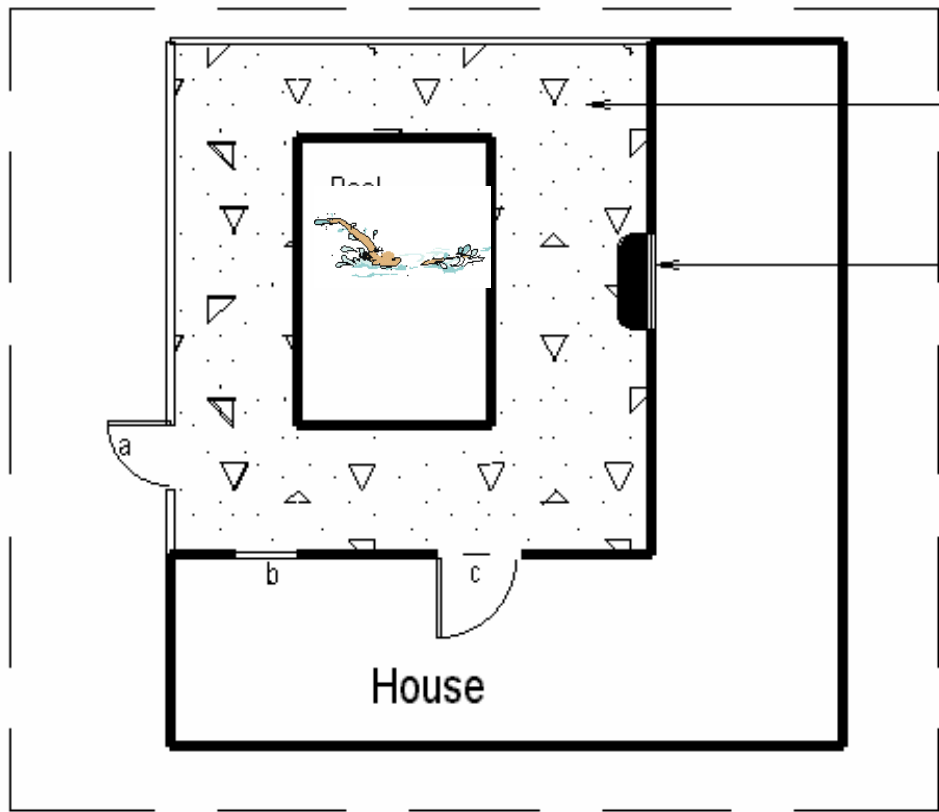
If a Screen enclosure it must comply with 424.2.17.1.11

If a barrier such as a kiddie fence it must comply with 424.2.17.1 through 424.2.17.7.

Property line

Note: in all cases the barrier must be placed around the perimeter of the pool as per 424.2.17.1.12 and as per definition of: “Pool Perimeter” A pool perimeter is defined by the limits of the pool deck and any dwelling or non-dwelling wall or any combination thereof which completely surrounds the pool.

### Example 3



Pool Deck

Property line

424.2.117.1.9 Exceptions  
c. Screened or protected  
pass-through kitchen  
windows 42 inches or higher  
with a counter beneath.

#### Example # 3

- a. Gates must have a self closing/latching device no less than 54" above bottom of gate and must comply with 424.2.17.1 through 424.2.17.1.7 and with 424.2.17.1.8.
- b. Windows must either have a self locking/latching device that complies with 424.2.17.1.9 or have an exit alarm that complies with 424.2.17.1.9.
- c. Same as windows.

#### NOTE:

In all cases barrier must be placed around perimeter of pool as per 424.2.17.1.12 and as per definition of "Pool Perimeter"

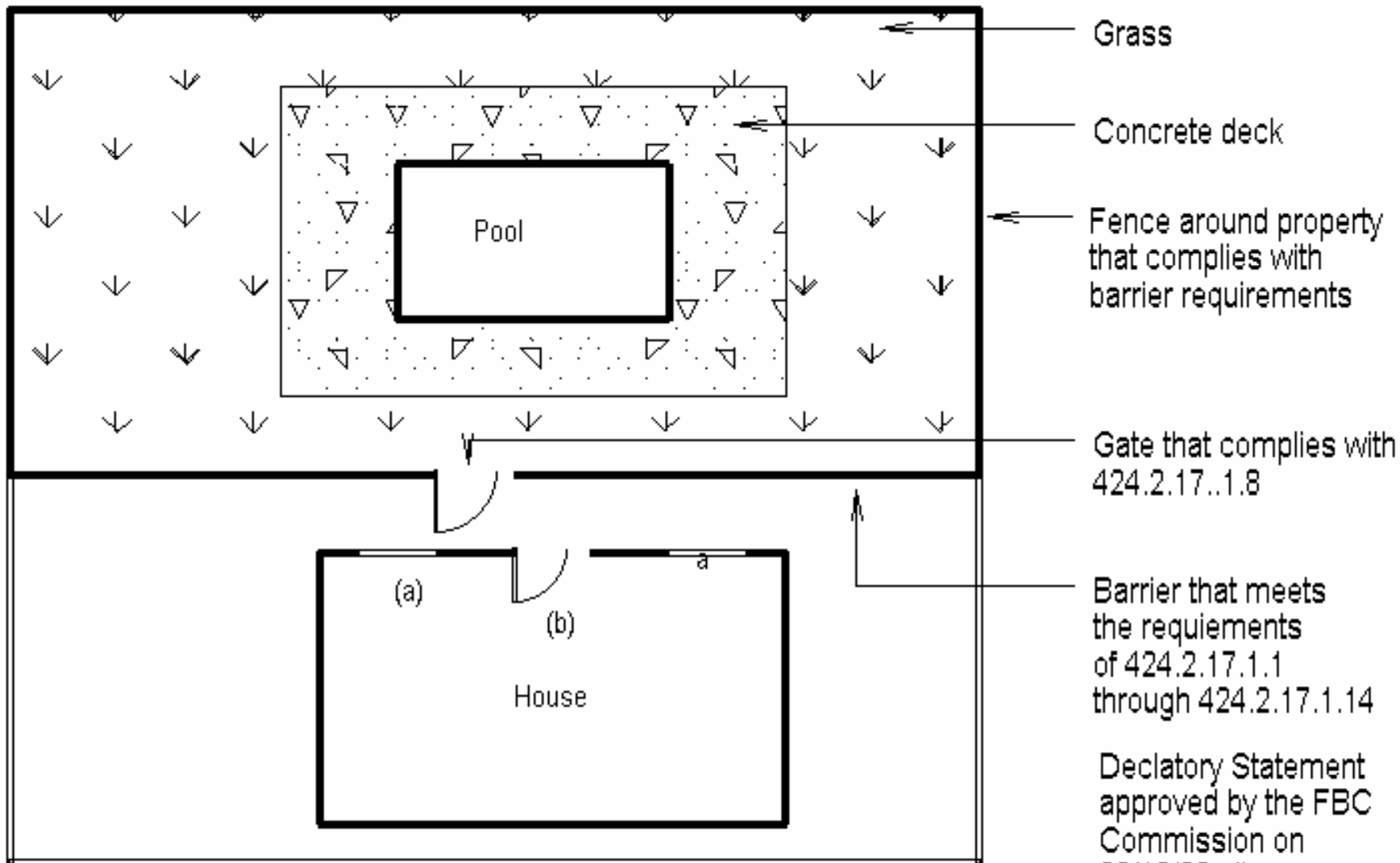
## Section 424 FBC. Swimming Pools and Bathing Places

- ◆ On February 12, 2002 the Building Code Commission approved a DEC statement DCA02-DEC-023 which is not out yet. In said statement the Commission accepted staff recommendation by saying that the site plan that was submitted met the intentions of 424.2.17. In essence it allows for the grass around a swimming pool to be considered as a pool deck as long as it is level and stable.

# DEC Statement

- ◆ It seems that in a round about way it classifies a fence around the property as a non-dwelling wall.
- ◆ And if it meets the requirements for barriers it can be used as such.

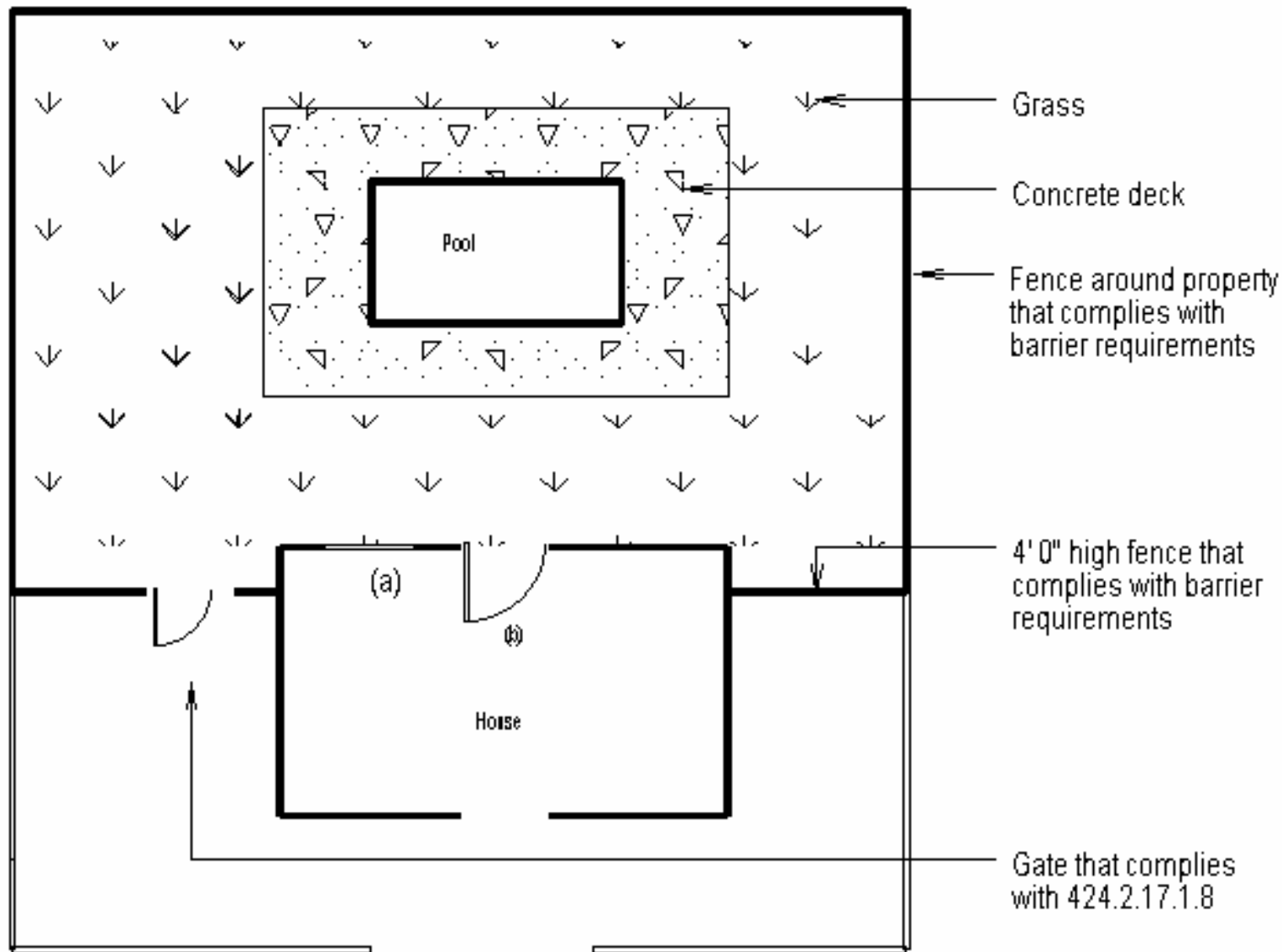
### Example 4



Declaratory Statement approved by the FBC Commission on 02/12/02 allows grass to be considered as "deck"

Windows (a) and door (b) do not have to comply

### Example 5



Window (a) and door (b) must comply with 424.2.17.1.9

Declaratory statement will allow for grass to be considered a "deck"

# Public Swimming Pool, Spa and Hot Tub Barriers

- ◆ Sec 8C- 4 Code of Miami-Dade County
- ◆ All new construction of public swimming pools, spas and hot tubs shall be provided with a permanent barrier complying 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.

# Continuation

- The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches measured on the side of the barrier which faces away from the swimming pool. Where the 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”.

# Continuation

- ◆ And it goes on with the same requirements for non climbable as the Florida Building Code and ANSI/NSPI 5. Except for item number 9 which reads as follows:
- ◆ (9) Where the release mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, the release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate and barrier shall have no opening greater than  $\frac{1}{2}$ " within 18' of the release mechanism.

**THE END**

