

TOWN OF PONCE INLET
BUILDING DEPARTMENT
PHONE 386-236-2182 / FAX 386-236-2190

RESIDENTIAL POOL & SCREEN ENCLOSURE CHECK LIST

JOB ADDRESS:

CONTRACTOR:

DATE:

- POOL ENCLOSURE

PROVIDE ITEMS BELOW THAT APPLY TO THIS PERMIT

NOTE: Permits requiring approval from state or federal agencies will be issued conditioned on those permits being obtained **prior to commencement** of any work.

- SITE PLAN:** Requires Planning & Zoning Approval **Setbacks:** **1.** Pools are generally not allowed in the front yard, Planning & Zoning can answer any questions with regard to this issue. **2.** Pool minimum setback is 10.0' feet from the closest portion of the structure to the property line. **3.** Enclosure setback is 10.0' feet from the rear and side property line. **4.** Pool construction is not allowed in easements. Pool decks are not allowed in vegetation buffers.

- CURRENT/ACURATE SURVEY TREE REMOVAL PERMIT
- PLANS AND SPECIFICATIONS POOL ENGINEERING: **Current signed & sealed engineering required.**
- POOL DATA SHEET POOL SAFETY ACT FORM
- POOL barrier: Alarms ___ Fence ___ Screen Enclosure ___ Child Safety Fence ___ Cover ___
 - SUB-CONTRACTORS LISTED on the backside of the permit application
 - GAS PERMIT requires a diagram showing location, length, and size of all components to scale
- ENCLOSURE ENGINEERING - ENCLOSURE CALCULATION DATA: Plans submitted must indicate proposed construction is designed for 140 MPH wind speed Exposure "D" in accordance with Section 1609 of the FBC
- FILL/DREDGING/SOIL RELOCATION PLAN: including quantity of fill and where to be relocated (Per Section 18-242 of the Code of Ordinances)
- NOTICE OF COMMENCEMENT OTHER see below

Information only all may not apply

All electrical shall comply with the NEC 2008 Article 680 Swimming Pools, Fountains, and Similar Installations.

NEC 680.26 Equipotential Bonding Grid. (B) (5) All metal within 5.0' of the inside of the pool wall must be bonded

NEC 680.26 C. Equipotential Bonding Grid (b.)

R308.4 Hazardous Locations.

The following shall be considered specific hazardous locations for the purposes of glazing:

9. Glazing in walls and fences enclosing indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60 inches (1524 mm) above a walking surface and within 60 inches (1524 mm) horizontally of the water's edge. This shall apply to single glazing and all panes in multiple glazing.

FBC 3109 All construction seaward of the coastal construction line must be supported by piles or must be of breakaway construction. This applies to pool decks also.

TOWN OF PONCE INLET
BUILDING DEPARTMENT
PHONE 386-236-2182 / FAX 386-236-2190

NOTICE TO CONTRACTOR
CONDITIONAL RELEASE OF PERMIT

The permit has been released with the following restrictions and conditions. The contractor is expected to abide by such conditions and restrictions as stated. Failure to comply may be just cause to revoke the permit or issuance of a stop work order.

PROJECT ADDRESS: _____ **PERMIT NO.** _____

TYPE OF WORK: _____

CONTRACTOR: _____

DATE : _____

THE POOL SAFETY FENCE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND UNTIL SUCH TIME AS THE PERMANENT POOL ENCLOSURE IS IN PLACE.

ALL TRASH MUST BE CONTAINED.

FAILURE TO FOLLOW THE ABOVE WILL BE CAUSE FOR A STOPWORK ORDER. A \$35.00 FEE MUST BE PAID AND A RE-INSPECTION OF THE SITE WILL BE REQUIRED BEFORE WORK MAY RESUME.

A FINAL LOCATION SURVEY WILL BE REQUIRED PRIOR TO A FINAL INSPECTION FOR ALL WORK PERFORMED UNDER THIS PERMIT.

ANY DAMAGE TO THE PUBLIC RIGHT-OF-WAY, ROAD, OR SIDEWALKS DURING CONSTRUCTION MUST BE REPAIRED PRIOR TO A FINAL INSPECTION

COMPLIANCE OF THE WRITTEN APPROVAL FROM BUILDING OFFICIAL OF SOIL/DREDGING/FILL RELOCATION PLAN (PER SEC 18-242 OF THE CODE OF ORDINANCES)

As the contractor of record, I have read and understand the conditions / restrictions noted above, and agree to abide to such conditions and or restrictions.

(Print Name)

(Date)

(Signature)

SECTION 7: COMPLIANCE WITH FLORIDA BUILDING CODE – BUILDING DIVISION

Check all that apply for this permit

Commercial Residential New Addition Alteration Repair Demolition

Building Electrical Gas Mechanical Plumbing Roofing Dock Pavers

Boathouse Boat Slip Pier Mooring Poles Driveway Shed Other

SECTION 7: ELECTRICAL	SECTION 8: PLUMBING
Company:	Company:
License Number	License Number:
Phone:	Phone:
Existing service AMP size:	Number of fixtures replaced?
New service AMP size:	Number of new fixtures?
Remodel: Number of circuits added	Check one: City Sewer <input type="checkbox"/> Septic System <input type="checkbox"/>
Remodel: Number of fixtures added	
Total Cost for this work: \$	Total Cost for this work: \$
SECTION 9: MECHANICAL	SECTION 10: ROOFING
Company:	Company:
License Number	License Number
Phone:	Phone:
Check one: New <input type="checkbox"/> Replacement <input type="checkbox"/>	Type of material:
Total cost for this work: \$	Total cost of this work: \$
SECTION 11: GAS	SECTION 12: ADDITIONAL TRADE
Company:	Company:
License Number	License Number
Phone:	Phone:
Check one: New <input type="checkbox"/> Replacement <input type="checkbox"/>	Type of Work?

Application is hereby made to obtain a Development/Construction Permit from the Planning & Development Department of the Town of Ponce Inlet, Florida to perform the type of work indicated herein. I certify that no work or installation has commenced **PRIOR** to the issuance of the requested Permit and, if so, then I will pay **additional fees per the Town regulations**. I further certify that all work will be performed to meet all applicable laws, rules and codes regulating construction and development in this jurisdiction. I understand that a separate Permit must be secured before any work for building, electrical, mechanical, plumbing, excavation & grading, sign installation, soil erosion control, tree removal, wells, pools, accessory buildings, seawalls & docks, or any other land disturbance activities. **Owner's Affidavit: I certify that all the foregoing information is accurate and all work will be done in compliance with all of the applicable laws, rules and codes regulating zoning and construction in Ponce Inlet, Florida.**

WARNING TO OWNER: Your failure to record a Notice of Commencement (NOC) may result in your being required to pay **DOUBLE** fees for improvements to your property. If you intend to obtain financing, please consult your lender or attorney before recording your NOC.

STATE OF FLORIDA

COUNTY OF VOLUSIA

TOWN OF PONCE INLET

Signature of Owner (as contractor)

Signature of Contractor

Subscribed and sworn to (or affirmed) before me on _____, 20__
by _____. He / She is personally known to me or
has presented _____ as identification.

SEAL / STAMP

Notary Signature:

Application Approved By: _____, Building Official Date: ___/___/___

Approved by: _____, Fire Marshal Date: ___/___/___

Additional Conditions Attached



Town of Ponce Inlet/Building Department

NOTICE OF COMMENCEMENT AFFIDAVIT

A Notice of Commencement is required for any permit project exceeding \$2,500 (\$5,000 for mechanical permits)

Work to be performed at the following address:

_____ PONCE INLET, FL

PARCEL ID NUMBER: _____

I CERTIFY THAT A NOTICE OF COMMENCEMENT FOR THIS PROJECT HAS BEEN FILED FOR RECORDING WITH THE CLERK OF THE CIRCUIT COURT @ THE VOLUSIA COUNTY COURTHOUSE.

APPLICANT'S PRINTED NAME

APPLICANT'S SIGNATURE

STATE OF FLORIDA

COUNTY OF VOLUSIA

SWORN TO (OR AFFIRMED) AND SUBSCRIBED BEFORE ME THIS _____

DAY OF _____, BY _____

(Printed name of applicant)

WHO IS:

PERSONALLY KNOWN TO ME OR HAS PRODUCED ID

(TYPE OF ID): _____

Signature of Notary Public, State of FL

Print, Type of Stamp Name of Notary

NOTICE OF COMMENCEMENT

State of Florida
County of Volusia

Permit No

Tax Parcel Number

The UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement

1. Description of Property: (Legal description of the property, and street address if available.)

2. General description of improvement:

3. Owner information:

- a. Name and address
- b. Interest in property
- c. Name and address of fee simple titleholder (if other than owner)

FOR CLERK'S OFFICE USE ONLY

4. Contractor:
Name and address

- a. Phone number
- Fax number

5. Surety: Name and address

- a. Phone number () _____
Fax number () _____
- b. Amount of bond \$ _____ .00

6. Lender: Name and address

- a. Phone number () _____
Fax number () _____

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:

- a. Name and address
- b. Phone number () _____
Fax number () _____

8. In addition to himself, Owner designates _____ of _____ to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes

- a. Phone number () _____
- b. Fax number () _____

9. Expiration date of Notice of Commencement (the expiration date is 1 year from the date of recording unless a different date is specified) _____

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

Signature of Owner

Print Name of Owner

State of Florida County of _____

Affirmed and subscribed before me this _____ day of _____ 20____ by _____ who is personally known to me or who has produced _____ (type of ID) as identification.

Signature of Notary Public State of Florida

Print, Type or Stamp Name of Notary

Notarial Seal



Town of Ponce Inlet
 4300 S. Atlantic Avenue
 Ponce Inlet, FL 32127
 386-236-2182 (voice)
 386-236-2190 (fax)

**TREE REMOVAL/RELOCATION
 APPLICATION**
 With Development Review
 Pursuant to Article 4 of the
 Land Use and Development Code

Date Submitted: _____

Permit #: _____

Fee Paid: _____

Pursuant to Article 4, Section 4.10 of the Land Use and Development Code, authority to approve removal of specimen trees measuring between 6” and 12” DBH and specimen palms measuring between 12” and 18” DBH is given to the Director of Planning and Development; authority to review removal of specimen trees larger than 6” DBH is given to the Parks, Recreation and Tree Advisory Board; and the Town Council is given the authority to approve the removal of all other specimen trees.

Please note: Failure to *fully complete* all the applicable items will result in the application being deemed incomplete and no further action will be taken.

SECTION 1: PROPERTY INFORMATION

Property Address	
Tax Parcel Number(s)	
Legal Description	

SECTION 2: PROPERTY OWNER INFORMATION

Name		E-Mail	
Phone		Cell	
Address		Fax	
City			

SECTION 3: APPLICANT/AGENT INFORMATION (if not property owner)

Name		E-Mail	
Phone		Cell	
Address		Fax	
City			

SECTION 4: SUBMITTAL REQUIREMENTS

Pursuant to Section 4.10.5.B.1.C of the Land Use and Development Code, “At the time of application for building permits for single-family or two-family residential home construction, the applicant must submit a tree survey, prepared by a FL licensed land surveyor, identifying all boundary information and the exact locations for all trees lying within proposed buildings, driveways, and/or accessory structures, or areas proposed to be cleared or graded, and within 25 feet of all such areas. Said surveys shall identify all trees by location, common name and caliper. The applicant shall provide finished floor elevations of structures, and driveways, and limits of fill and beginning of natural grade occurring prior to construction activity.

A tree replacement and/or relocation plan consistent with the standards set forth in subsection _____, shall also be submitted. The Planning & Zoning Director (or his/her designee) shall ensure that the above plans are in compliance with the designated protection zones and the tree relocation/replacement requirements”.

Pursuant to section 4.10 of the LUDC, “Historic or specimen trees shall only be removed upon approval of a tree removal permit as provided herein, and all other applicable provisions of this section.

(2) Tree replacement plans. All tree replacement plans shall be consistent with the standards set forth in subsection 4.10.4.D and prepared by a certified arborist or licensed landscape architect. The plan legend shall denote whether the trees are: (a) existing trees to be removed and/or retained; and (b) replacement stock required pursuant to subsection 4.10.4.D to be planted. The plan must, at a minimum, include the following:

- (a) Existing trees to be removed and trees to be retained requiring protection shall be clearly designated on the tree

- replacement and/or relocation plan. The designation method shall be clearly indicated on the plan submitted for review;
- (b) The extent and location of understory located within and a radius of 25 feet from proposed roadways, utility easements, stormwater retention/detention areas, public improvements, or areas proposed to be cleared or graded;
- (c) Existing and proposed utility easements; and
- (d) Existing and proposed improvements to the site

If the applicant anticipates the cutting down, destruction or removal of vegetation and/or trees not in connection with subsections 4.10.5.B.1.a or b above, then they shall submit the following information on the application:

- (1) A tree survey, prepared by a Florida licensed land surveyor identifying all boundary information and the exact locations for all trees proposing to be removed or areas proposed to be cleared or graded, and within 25 feet of all such areas. Said surveys shall identify all trees by location, common name and DBH. The director may allow documentation of these areas on an existing property survey without a separate tree survey. All plans shall show the limits of fill, if any, and the natural grade occurring prior to construction activity;
- (2) Name, signature, address, and telephone number of property owner;
- (3) Legal description of the property;
- (4) North arrow, scale, and identification of streets;
- (5) Reason for removal of vegetation and/or trees; and
- (6) A tree replacement plan consistent with the standards set forth in subsection 4.10.4.D.”

SECTION 5: RELOCATION, REPLACEMENT AND TREE SURVIVAL

On single family or two-family lots, tree replacement mitigation shall be determined based on the following table:

Tree Size in DBH	#of Replacement Trees
4 inches--6 inches	2
>6 inches--8 inches	3
>8 inches--12 inches	4
>12 inches--18 inches	6
>18"+	8

Please refer to Section 4.10.4.d for additional replacement requirements, including required size of replacement stock, incentives and use of palms as replacement for hardwood trees.

Please indicate in the following table the number of proposed trees to be removed, the size of the proposed trees to be removed and the calculation of the replacement trees needed based on the table provided above.

Number of Proposed Trees to be Removed	Size of Proposed Trees to be Removed	Replacement Trees Needed

SECTION 6: TREE BANK

Pursuant to Section 4.10.5.b.4, “The town may reduce on-site tree replacement if adequate tree cover can be provided with less than the required number of replacement trees or if on-site conditions make conformance impractical. This determination shall be subject to the review and approval of the town council if the replacement requirements are associated with a development plan that also requires their approval. For tree replacement plans associated with developments which are approvable by the director, the on-site replacement plan reduction determination shall be made by the parks, recreation and tree advisory board. All requests for these reductions shall

be based on a complete tree survey and preservation plan, and shall comply with the following provisions:

1. Where tree replacement requirements are reduced or waived, the applicant shall install the balance of the required replacement trees on publicly owned sites, which may include rights-of-way, to be selected by the town.
2. Where, in the sole opinion of the town, there are no presently available suitable sites for such plantings, the applicant shall pay an amount equal to 20 percent of the cross sectional area of the tree(s) removed multiplied by the currently adopted replacement tree fee schedule as adopted by town council. In the case of a tree removed in violation of the provisions of this section, replacement calculations shall be based on 100 percent of the cross sectional area.
3. The contributions under this section shall be earmarked for tree or native vegetation planting purposes.
4. Contributions allowed to be made pursuant to this section shall not count toward the individual lot landscaping requirements of Section 4.10.3”

SECTION 7: EXPIRATION OF PERMIT

Pursuant to Section 4.10.5.B.3, “All vegetation/tree removal permits shall expire one year from the date of issue unless the director grants a time extension. Application for extensions of time shall be made in writing to the director at least 30 days prior to the expiration of the permit. No more than two extensions, of 90 days each, may be granted for good cause shown.”

I certify that I am familiar with the information contained in this application, and that to the best of my knowledge such information is true, complete and accurate.

I understand that pursuant to Appendix A, Part XVI of the Land Use and Development Code, I am responsible for payment of any additional costs incurred for review of this application by consultants and/or specialists (including but not limited to engineers, attorneys, architects, biologists).

I understand that specimen trees measuring 12” DBH or larger are required to be reviewed by the Parks, Recreation & Tree Advisory Board. Specimen trees measuring 18” DBH or larger are required to be approved for removal by the Town Council. If these reviews are required, additional fees will be charged.

Complete applications must be submitted thirty (30) days prior to the meeting date of the Parks, Recreation & Tree Advisory Board. The Board meets on the fourth Monday of each month. If approval by Town Council is also required, the application will be placed on the agenda of the first regularly scheduled Town Council meeting held after the Park Board has reviewed the application.

I understand that any changes, additions or deletions made to the approved plans will require additional review before final approval and may be subject to additional fees.

Signature of Applicant or Agent

Date

STATE OF FLORIDA
COUNTY OF VOLUSIA

Affirmed and subscribed before me this _____ day of _____, 201__ by _____
_____ who is personally known to me or who has produced _____
_____ (type of ID) as identification.

Notary Public

My commission expires:



Town Of Ponce Inlet

Residential Swimming Pool, Spa and Hot Tub Safety Act

Notice of Requirements

I (We) acknowledge that a new swimming pool, spa or hot tub will be constructed or installed at _____, and hereby affirm that one or more of the
(Please Print Street Address)
following methods will be used to meet the requirements of Chapter 515, Florida Statutes.

(please initial the method(s) to be used for your pool)

_____ The pool will be isolated from access to the home by an enclosure that meets the pool barrier requirements of Florida Statute 515.29; and Florida Building Code Residential Chapter 41

_____ The pool will be equipped with an approved safety pool cover that complies with ASTM F1346 (Standard Performance Specifications for Safety Covers for Swimming Pools, Spas and Hot Tubs);

_____ All doors and windows providing direct access from the home to the pool will be equipped with an exit alarm complying with UL 2017 that has a minimum sound pressure rating of 85 decibels at 10 feet;

_____ All doors and or gates providing direct access from the home or yard to the pool area will be equipped with self-closing, self-latching devices with release mechanisms placed no lower than 54" above the floor or deck;

I understand that not having one of the above installed at the time of final inspection, or when the pool is completed for contract purposes, will constitute a violation of Chapter 515, F.S. and will be considered as committing a misdemeanor of the second degree, punishable by fines up to \$500 and/or up to 60 days in jail as established in Chapter 775, F.S.

CONTRACTOR'S SIGNATURE & DATE

OWNER'S SIGNATURE & DATE

CONTRACTOR'S NAME (PLEASE PRINT)

OWNER'S NAME (PLEASE PRINT)

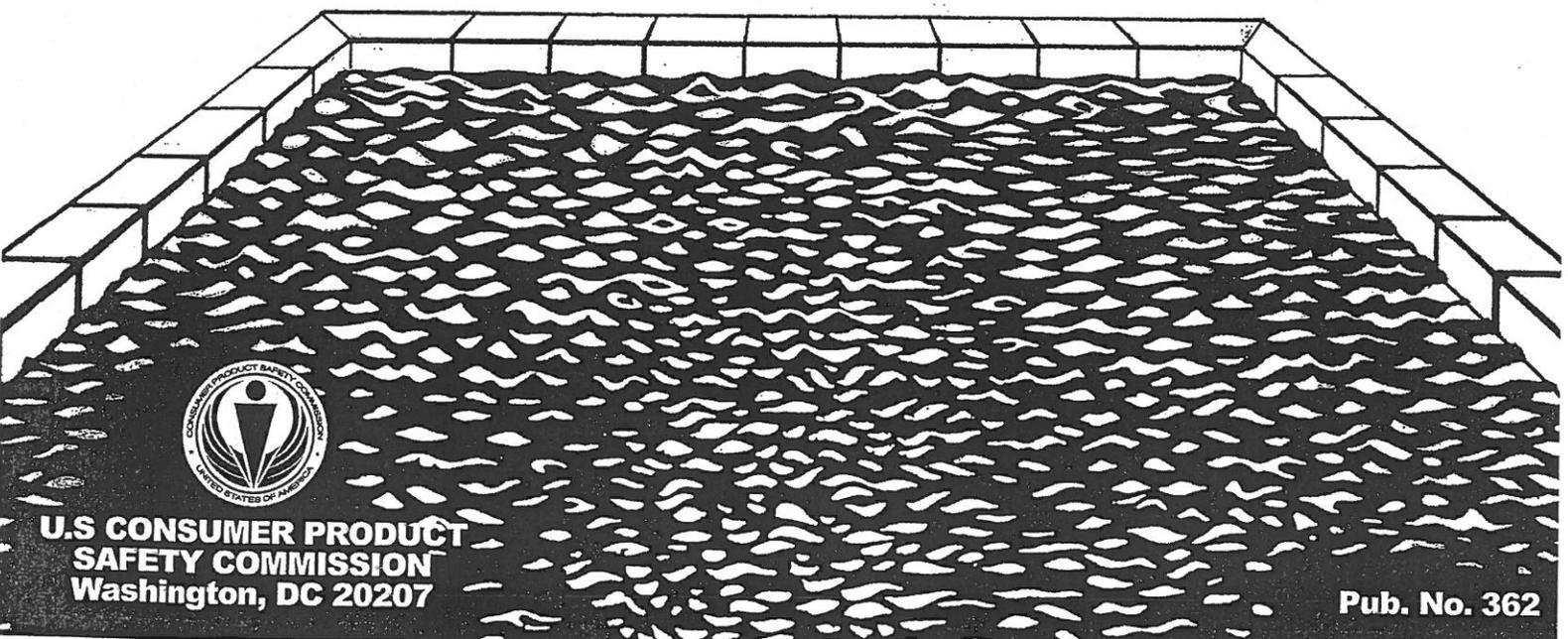
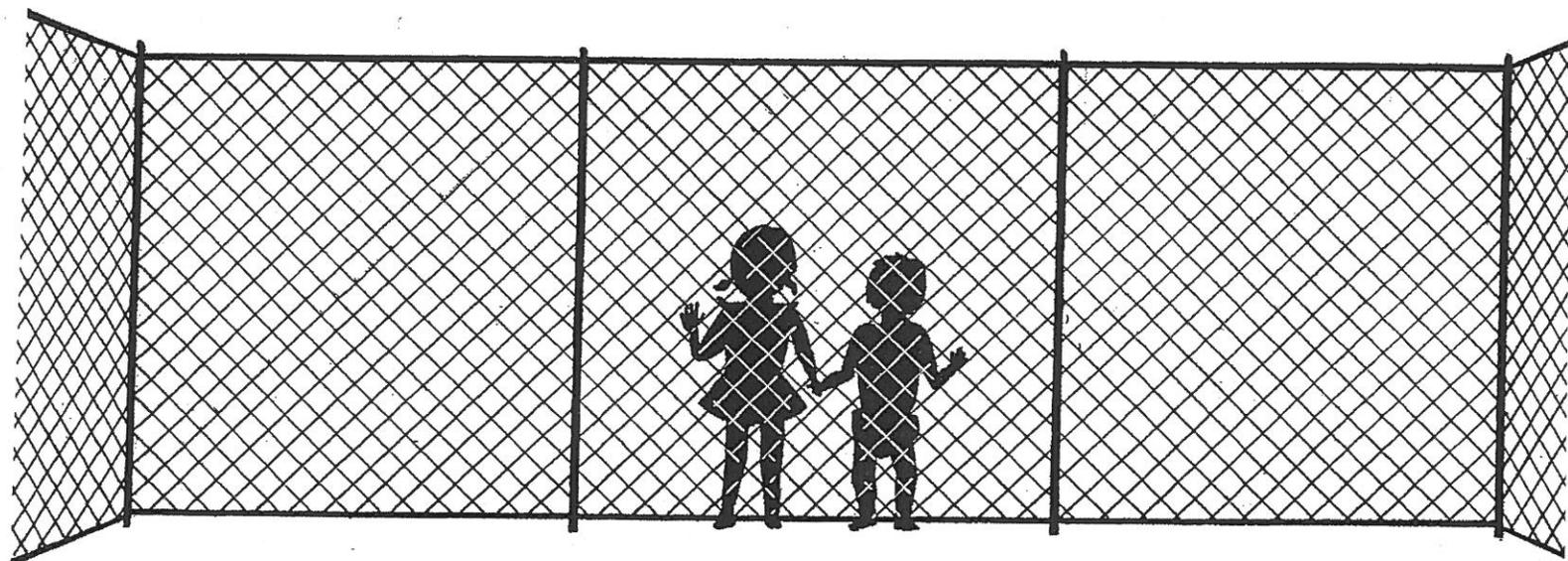


Residential Swimming Pool Application Information Florida Building Code Residential 2010, Chapter 41

PLAN REVIEW SUBMISSION REQUIREMENTS

- A) Provide two sets of structural plans originally signed, sealed, and dated by a Florida registered engineer containing, at a minimum, the following:
- Design statement showing conformance with Chapter 41 of the Florida Building Code Residential and ANSI/NSPI-3; ANSI/NSPI-4; ANSI/NSPI-5; ANSI/NSPI-6
 - Typical section through pool shell showing type and thickness of wall, type & size of reinforcement, wall connection w/deck, type & thickness of deck, deck reinforcement etc.
 - Typical longitudinal section showing pool bowl depths, radius, slope break depths, etc.
 - *NOTE: THIS OFFICE WILL ACCEPT REQUESTS TO MASTER FILE STRUCTURAL ENGINEERING PLANS.*
- B) Provide two sets of anti-entrapment piping schematics originally signed, sealed and dated by a Florida registered engineer containing, at a minimum, the following:
- Design statement showing conformance with Section R4101.6.6 of the Florida Building Code Residential.
 - Dual main drain and atmospheric vent piping arrangement or a listed/tested valve system for the pool and separate system for spa (if applicable).
 - *NOTE: THIS OFFICE WILL ACCEPT REQUESTS TO MASTER FILE ENGINEERED ANTI ENTRAPMENT PIPING SCHEMATICS.*
- C) Provide site specific pool and spa (if applicable) layout, minimum scale 1/8"=1', showing drain locations, pool depths, means of egress (ladders, stairs, swim-outs, etc.), skimmer location(s), return location(s), suction cleaner line location, equipment location, heater location, etc.
- D) Complete the below listed information:
1. Pool Size: _____
 2. Surface Area: _____
 3. Motor Horsepower: _____
 4. Volume: _____
 5. Turnover Rate: _____
 6. Pipe Size: _____
Suction - Max GPM _____ Pressure - Max GPM _____
7. Provide Testing Approval Number for all Suction Inlets
Grates/Antivortex Covers: _____
8. Suction Cleaner Line Provided? Yes No
If Yes, Self-Closing Flapper Provided? Yes No Approval # _____
- E) Complete the attached "Residential Swimming Pool Safety Requirements" affidavit.

SAFETY BARRIER GUIDELINES FOR HOME POOLS



**U.S. CONSUMER PRODUCT
SAFETY COMMISSION**
Washington, DC 20207

Pub. No. 362

Swimming pools should always be happy places. Unfortunately, each year thousands of American families confront swimming pool tragedies—drownings and near-drownings of young children. These tragedies are preventable. This U.S. Consumer Product Safety Commission (CPSC) handbook offers guidelines for pool barriers that can help prevent most submersion incidents involving young children.

This handbook is designed for use by owners, purchasers, and builders of residential pools, spas, and hot tubs.

The swimming pool barrier guidelines are not a CPSC standard and are not mandatory requirements. Therefore, the Commission does not endorse these guidelines as the sole method to minimize pool drownings of young children. The Commission believes, however, that the safety features recommended in this handbook will help make pools safer. Publication of this handbook is expected to promote pool safety awareness among owners, purchasers and builders of swimming pools.

Some localities have incorporated the guidelines in this handbook into their building codes. Check with your local authorities to see whether these guidelines are included in your area's building code or in other regulations.



Why the Swimming Pool Guidelines Were Developed

Each year, hundreds of young children die and thousands come close to death due to submersion in residential swimming pools. CPSC has estimated that each year about 300 children under 5 years old drown in swimming pools. The Commission estimates hospital emergency room treatment is required for more than 2,000 children under 5 years of age who were submerged in residential pools.

CPSC did an extensive study of swimming pool accidents, both fatal drownings and near-fatal submersions, in California, Arizona and Florida, states in which home swimming pools are very popular and in use during much of the year. The findings from that study led Commission staff to develop the guidelines in this handbook.

- In California, Arizona and Florida, drowning was the leading cause of accidental death in and around the home for children under the age of 5 years.
- 75 percent of the children involved in swimming pool submersion or drowning accidents were between 1 and 3 years old.
- Boys between 1 and 3 years old were the most likely victims of fatal drownings and near-fatal submersions in residential swimming pools.

- Most of the victims were being supervised by one or both parents when the swimming pool accident occurred.

- Nearly half of the child victims were last seen in the house before the pool accident occurred. In addition, 23 percent of the accident victims were last seen on the porch or patio, or in the yard.

- This means that fully 69 percent of the children who became victims in swimming pool accidents were not expected to be in or at the pool, but were found drowned or submerged in the water.

- 65 percent of the accidents occurred in a pool owned by the victim's immediate family, and 33 percent of the accidents occurred in pools owned by relatives or friends.

- Fewer than 2 percent of the pool accidents were a result of children trespassing on property where they didn't live or belong.

- 77 percent of the swimming pool accident victims had been missing for five minutes or less when they were found in the pool drowned or submerged.

The speed with which swimming pool drownings and submersions can occur is a special concern: by the time a child's absence is noted, the child may have drowned. Anyone who has cared for a toddler knows how fast young children can move. Toddlers are inquisitive and impulsive and lack a realistic sense of danger. These behaviors, coupled with a child's ability to move quickly and unpredictably make swimming pools particularly hazardous for households with young children.

Swimming pool drownings of young children have another particularly insidious feature: these are silent deaths. It is unlikely that splashing or screaming will occur to alert a parent or caregiver that a child is in trouble.

CPSC staff have reviewed a great deal of data on drownings and child behavior, as well as information on pool and pool barrier construction. The staff concluded that the best way to reduce child drownings in residential pools was for pool owners to construct and maintain barriers that would prevent young children from gaining access to pools. However, there are no substitutes for diligent supervision.

The Swimming Pool Barrier Guidelines

How to Prevent a Child from Getting OVER a Pool Barrier

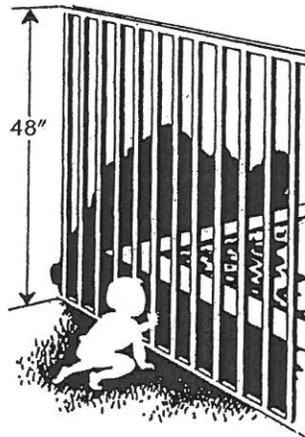
This section explains the CPSC swimming pool barrier guidelines with illustrated descriptions of pool barriers. Definitions of terms used in the guidelines are provided on page 6.

The definition of pool includes spas and hot tubs; the swimming pool barrier guidelines therefore apply to these structures as well as to conventional swimming pools.

A successful pool barrier prevents a child from getting OVER, UNDER, or THROUGH and keeps the child from gaining access to the pool except when supervising adults are present.

A young child can get over a pool barrier if the barrier is too low or if the barrier has handholds or footholds for a child to use when climbing.

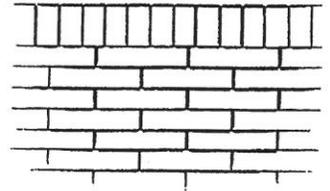
The guidelines recommend that the top of a pool barrier be at least 48 inches above grade, measured on the side of the barrier which faces away from the swimming pool.



Guidelines recommend eliminating handholds and footholds and minimizing the size of openings in a barrier's construction.

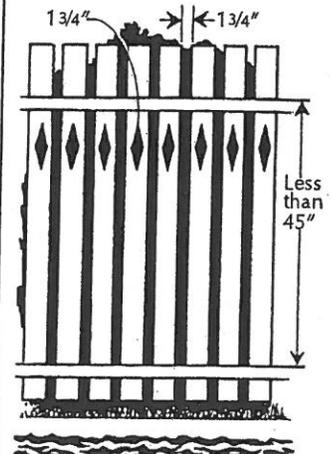
For a Solid Barrier:

No indentations or protrusions should be present, other than normal construction tolerances and masonry joints.

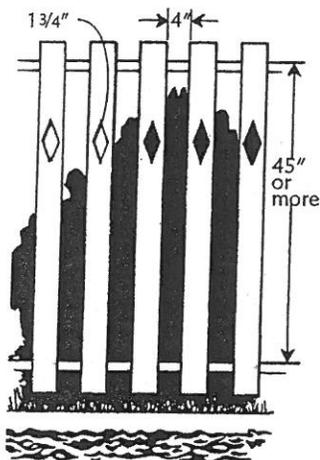


For a Barrier (Fence) Made Up of Horizontal and Vertical Members:

If the distance between the tops of the horizontal members is less than 45 inches, the horizontal members should be on the swimming pool side of the fence. The spacing of the vertical members should not exceed 1-3/4 inches. This size is based on the foot width of a young child and is intended to reduce the potential for a child to gain a foothold. If there are any decorative cutouts in the fence, the space within the cutouts should not exceed 1-3/4 inches.

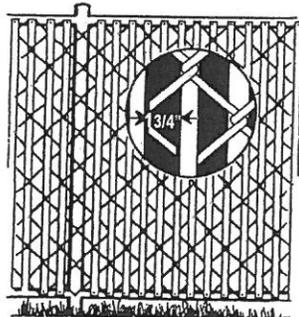
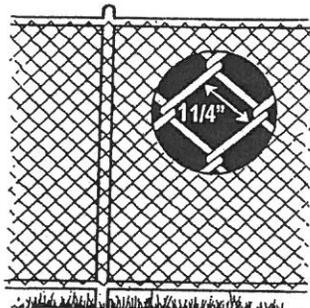


If the distance between the tops of the horizontal members is **more** than 45 inches, the horizontal members can be on the side of the fence facing away from the pool. The spacing between vertical members should not exceed 4 inches. This size is based on the head breadth and chest depth of a young child and is intended to prevent a child from passing through an opening. Again, if there are any decorative cutouts in the fence, the space within the cutouts should not exceed 1-3/4 inches.



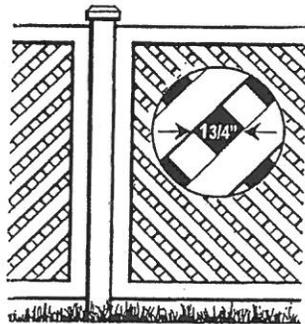
For a Chain Link Fence:

The mesh size should not exceed 1-1/4 inches square unless slats, fastened at the top or bottom of the fence, are used to reduce mesh openings to no more than 1-3/4 inches.

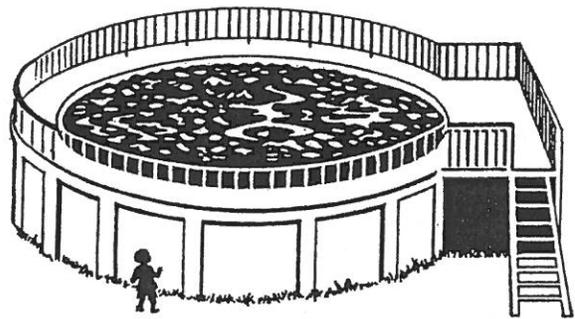


For a Fence Made Up of Diagonal Members (Latticework):

The maximum opening in the lattice should not exceed 1-3/4 inches.

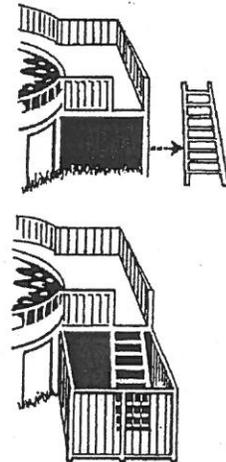


For Aboveground Pools:



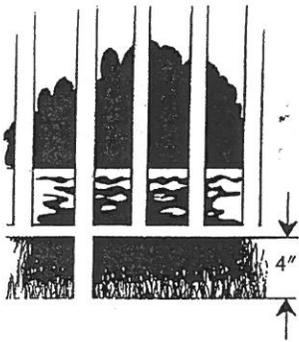
Aboveground pools should have barriers. The pool structure itself serves as a barrier or a barrier is mounted on top of the pool structure.

Then, there are two possible ways to prevent young children from climbing up into an aboveground pool. The steps or ladder can be designed to be secured, locked or removed to prevent access, or the steps or ladder can be surrounded by a barrier such as those described above.



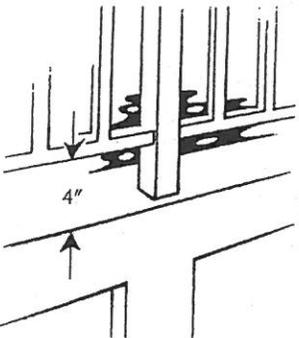
How to Prevent a Child from Getting UNDER a Pool Barrier

For any pool barrier, the maximum clearance at the bottom of the barrier should not exceed 4 inches above grade, when the measurement is done on the side of the barrier facing away from the pool.



Aboveground Pool with Barrier on Top of Pool:

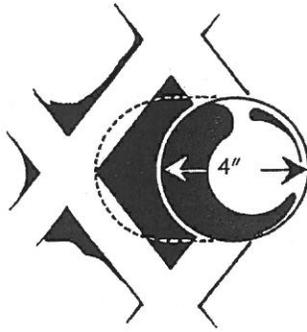
If an aboveground pool has a barrier on the top of the pool, the maximum vertical clearance between the top of the pool and the bottom of the barrier should not exceed 4 inches.



How to Prevent a Child from Getting THROUGH a Pool Barrier

Preventing a child from getting through a pool barrier can be done by restricting the sizes of openings in a barrier and by using self-closing and self-latching gates.

To prevent a young child from getting through a fence or other barrier, all openings should be small enough so that a 4-inch diameter sphere cannot pass through. This size is based on the head breadth and chest depth of a young child.



Gates:

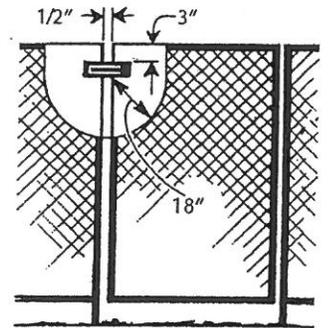
There are two kinds of gates which might be found on a residential property. Both can play a part in the design of a swimming pool barrier.

Pedestrian Gates:

These are the gates people walk through. Swimming pool barriers should be equipped with a gate or gates which restrict access to the pool. A locking device should be included in the gate design. Gates should open out from the pool and should be self-closing and self-latching. If a gate is properly designed, even if the gate is not completely latched, a young child pushing on the gate in order to enter the pool area will at least close the gate and may actually engage the latch.



When the release mechanism of the self-latching device is less than 54 inches from the bottom of the gate, the release mechanism for the gate should be at least 3 inches below the top of the gate on the side facing the pool. Placing the release mechanism at this height prevents a young child from reaching over the top of a gate and releasing the latch.



Also, the gate and barrier should have no opening greater than 1/2 inch within 18 inches of the latch release mechanism. This prevents a young child from reaching through the gate and releasing the latch.

All Other Gates (Vehicle Entrances, Etc.):

Other gates should be equipped with self-latching devices. The self-latching devices should be installed as described for pedestrian gates.

When the House Wall Forms Part of the Pool Barrier:

In many homes, doors open directly onto the pool area or onto a patio which leads to the pool.



In such cases, the wall of the house is an important part of the pool barrier, and passage through any doors in the house wall should be controlled by security measures. The importance of controlling a young child's movement from house to pool is demonstrated by the statistics obtained during CPSC's study of pool incidents in California, Arizona and Florida: almost half (46 percent) of the children who became victims of pool accidents were last seen in the house just before they were found in the pool.

All doors which give access to a swimming pool should be equipped with an audible alarm which sounds when the door and/or screen are opened. The alarm should sound for 30 seconds or more within 7 seconds after the door is opened. *Alarms should*

meet the requirements of UL 2017 General-Purpose Signaling Devices and Systems, Section 77.

The alarm should be loud: at least 85 dBA (decibels) when measured 10 feet away from the alarm mechanism. The alarm sound should be distinct from other sounds in the house, such as the telephone, doorbell and smoke alarm. The alarm should have an automatic reset feature.

Because adults will want to pass through house doors in the pool barrier without setting off the alarm, the alarm should have a switch that allows adults to temporarily deactivate the alarm for up to 15 seconds. The deactivation switch could be a touchpad (keypad) or a manual switch, and should be located at least 54 inches above the threshold of the door covered by the alarm. This height was selected based on the reaching ability of young children.

Power safety covers can be installed on pools to serve as security barriers. Power safety covers should conform to the specifications in ASTM F 1346-91. This standard specifies safety performance requirements for pool covers to protect young children from drowning.

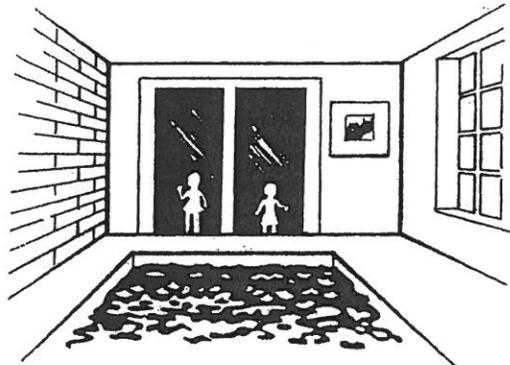
If you wish further information on this standard, contact ASTM, Inc., Philadelphia, Pa. (formerly the American Society for Testing & Materials), directly.

Self-closing doors with self-latching devices could also be used to safeguard

doors which give ready access to a swimming pool.

Indoor Pools:

When a pool is located completely within a house, the walls that surround the pool should be equipped to serve as pool safety barriers. Measures recommended above where a house wall serves as part of a safety barrier also apply for all the walls surrounding an indoor pool.



Barriers for Residential Swimming Pool, Spas, and Hot Tubs

The preceding explanations of the U.S. Consumer Product Safety Commission's pool barrier guidelines were provided in order to make it easier for pool owners, purchasers, builders, technicians and others to understand and apply the guidelines themselves. Detailed guidelines follow. Reading the following guidelines in conjunction with the diagrams previously provided may be especially helpful. For further information, consult your local building department or code authority.

Application

The guidelines presented in this document are intended to provide a means of protection against potential drownings and near-drownings to children under 5 years of age by restricting access to residential swimming pools, spas, and hot tubs.

Definitions

Aboveground/onground pool. See definition of swimming pool.

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

Hot tub. See definition of swimming pool.

Inground pool. See definition of 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 than three stories in height.

Spa, nonportable. See definition of swimming pool.

Spa, portable. A non-permanent structure intended for recreational bathing, in which all controls, water-heating, and water-circulating equipment are an integral part of the product and which is cord-connected (not permanently electrically wired).

Swimming pool. Any structure intended for swimming or recreational bathing that contains water over 24 inches deep. This includes inground, aboveground, and onground 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.

Guidelines

Section I. Outdoor Swimming Pool

An outdoor swimming pool, including an inground, aboveground, or onground pool, hot tub, or spa, should be provided with a barrier which complies with the following:

1. The top of the barrier should 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 should be 4 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, 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 should be 4 inches.
2. Openings in the barrier should not allow passage of a 4-inch diameter sphere.
3. Solid barriers, which do not have openings, such as a masonry or stone wall, should 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 should be located on the swimming pool side of the fence. Spacing between vertical members should not exceed 1-3/4 inches in width. Where there are decorative cutouts, spacing within the cutouts should 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 should not exceed 4 inches. Where there are decorative cutouts, spacing within the cutouts should not exceed 1-3/4 inches in width.

6. Maximum mesh size for chain link fences should not exceed 1-3/4 inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to no 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 should be no more than 1-3/4 inches.

8. Access gates to the pool should comply with Section I, Paragraphs 1 through 7, and should be equipped to accommodate a locking device. Pedestrian access gates should open outward, away from the pool, and should be self-closing and have a self-latching device. Gates other than pedestrian access gates should 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, (a) the release mechanism should be located on the pool side of the gate at least 3 inches below the top of the gate

and (b) the gate and barrier should 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 barrier, one of the following should apply:

(a) All doors with direct access to the pool through that wall should be equipped with an alarm which produces an audible warning when the door and its screen, if present, are opened. The alarm should sound continuously for a minimum of 30 seconds **within 7 seconds** after the door is opened. *Alarms should meet the requirements of UL 2017 General-Purpose Signaling Devices and Systems, Section 77.* The alarm should have a minimum sound pressure rating of 85 dBA at 10 feet and the sound of the alarm should be distinctive from other household sounds, such as smoke alarms, telephones, and door bells. The alarm should automatically reset under all conditions. The alarm should be equipped with manual means, such as touchpads or switches, to temporarily deactivate the alarm for a single opening of the door from either direction. Such deactivation should last for no more than 15 seconds. The deactivation touchpads or switches should be located at least 54 inches above the threshold of the door.

(b) The pool should be equipped with a power safety cover which complies with ASTM F1346-91 listed below.

(c) Other means of protection, such as self-closing doors with self-latching devices, are acceptable so long as the degree of protection afforded is not less than the protection afforded by (a) or (b) 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 (a) the ladder to the pool or steps should be capable of being secured, locked or removed to prevent access, or (b) the ladder or steps should be surrounded by a barrier which meets Section I, Paragraphs 1 through 9. When the ladder or steps are secured, locked, or removed, any opening created should not allow the passage of a 4-inch diameter sphere.

Section II. Indoor Swimming Pool.

All walls surrounding an indoor swimming pool should comply with Section I, Paragraph 9.

Section III. Barrier Locations.

Barriers should be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

Exemptions

A portable spa with a safety cover which complies with ASTM F1346-91 listed below should be exempt from the guidelines presented in this document. But, swimming pools, hot tubs, and non-portable spas with safety covers should **not** be exempt from the provisions of this document.

ASTM F1346-91. Standard Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tub.

For further information, write:
U.S. Consumer Product Safety Commission
Washington, D.C. 20207
Web site: www.cpsc.gov

To report a product hazard or a product-related injury, write to the U.S. Consumer Product Safety Commission, Washington, D.C. 20207, or call the CPSC's toll-free hotline at 1-800-638-2772 or visit its website at <http://www.cpsc.gov>.

A teletypewriter for the hearing and speaking impaired is available on: 1-800-638-8270.

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