



## SWIMMING POOL INSTALLATIONS

### PLAN & APPLICATION SUBMITTAL

A minimum of two complete sets of wet signed plans and calculations and one additional plot plan are required. The following must be included in the submittal:

#### A) **PLOT PLAN**—3 copies 11x 17

1. The location of the pool – Show the distance from the pool to the property line from any buildings (*see zoning regulations below*)
2. The method of providing drainage. *The deck and the yard should be contoured to provide a drainage gradient of a least 1% toward approved drainage facilities (This is normally the street). Show the location & size of all deck drains, interceptor drains and drainage lines. Drainage lines must be sufficient to drain water that accumulates around the pool as well as rain water run-off from the roof onto the pool deck. (Table D-2 of the Uniform Plumbing Code, Appendix "D" using 2" of rainfall per hour can be used to calculate the size of drains needed). Drainage lines cannot be corrugated or flexible without prior Building Department approval.*
3. The location of pool equipment and distance from pool equipment to the neighbor's house (*See zoning regulations below*).
4. The location of any electrical outlets and the distance from the outlets to the pool. *All outlets must be GFCI protected and at least 20 feet from the pool. One outlet must be placed between 10' & 20' from the pool. – 680-6 NEC no outlets closer than 6 feet to pool wall.*
5. The location of any easements.
6. The size and volume of the pool.
7. The scale at which the plan is drawn.
8. The address where the pool is being constructed.
9. The location and type of fence or barrier that will be used.
10. Fences cannot be used as retaining walls for raised planter beds and pool decks.

## **8. STEEL OR CONSTRUCTION DRAWINGS**

1. The address of the pool.
2. Wet signature of the engineer on drawings or approval by an approved listing company or organization such as the International Conference of Building Officials (ICBO).

## **C. STRUCTURAL CALCULATIONS** – Wet signed by a licensed engineer.

Exception: #1. Pools listed by an approved testing firm such as ICBO.

#2. For above ground pools installed below grade, manufacturers literature stating conditions for below ground installations or generic engineering provided by the manufacturer is acceptable. Engineering for a specific location must be wet signed.

## **ABOVE GROUND POOLS**

- 1) Items #1,3,4,5,6,8, & 9 of the plot plan submittal items must be provided.
- 2) Engineering may not be required. See exception #3 under structural calculations.

## **ZONING REGULATIONS**

A private swimming pool or spa, as defined \*, shall be subject to compliance with the following regulations:

1. Water-line of the pool or spa shall keep a minimum set-back of three (3) feet from the side or rear property lines.
2. Water-line of the pool or spa is required to keep a clear set-back of 5-feet from the main structure/patio cover.
3. The swimming pool or spa filtration equipment shall not encroach into the five (5) foot side or rear yard setbacks

\*Swimming Pool or Spa means pool, pond, lake or open tank capable of containing water to a depth greater than one and one-half (1 ½) feet at any point.

## **POOL GLAZING REQUIREMENTS** – R308.4.5, CA Residential Code

Glazing in walls and fences used as the barrier for indoor and outdoor swimming pools or spas shall be safety glazing meeting the requirements of section R308.4.5, CA Residential Code when all of the following conditions are present:

1. The bottom edge of the glazing is less than 60 inches above the pool side of the glazing
2. The glazing is within 5 feet of a swimming pool or spa water's edge.

## **ENCLOSURE / BARRIER REQUIREMENTS**

A pool barrier must be installed meeting the requirements of Health & Safety Code Article 2.5, Section 115920 – 115925 as well as *City of Riverbank Zoning regulations* governing pool enclosures. Following is an abbreviated guideline of those requirements:

1. If a portion of the house or garage is used as part of the barrier, doors giving direct access to the pool area must have alarms. In place of alarms, doors may be equipped with self-closing, self-latching devices with release mechanisms placed no lower than 54" above the floor.
2. Alarms shall sound continuously for a minimum of 30 seconds immediately after the door is opened, and shall be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm may be equipped with a manual mean to temporarily deactivate for a single opening. The deactivation period shall last no longer than 15 seconds. The deactivation means shall be located at least 54" above the threshold of the door.
3. Any barrier / fence shall be a minimum of 60" above the ground and have a maximum distance of 2" from the ground to the bottom of the barrier. *Fences separating the pool from the neighbors or from the front or side yards must be a minimum of 72" above the ground.*
4. Any access gates through the enclosure shall open away from the swimming pool and be self-closing with a self-latching device placed no lower than 60 inches above the ground.
5. Gaps or voids in the barrier / fence shall not allow passage of a sphere equal or greater than 4".

6. The outside surface of the barrier / fence shall be free of protrusions, cavities or other characteristics that would serve as handholds or footholds that enable a child below the age of five years to climb over.
7. Covers used to satisfy the barrier / fence requirements shall meet all the requirements and performance standards of the American society for Testing and Materials (ASTM) standard F1346-91. Documentation shall be provided at the time of permit application.

## **INSPECTIONS**

To schedule inspections call the inspection recorder at (209) 869-6286. The inspection request must be made before 7:30 A.M. of the day of the inspection. Please give the date you wish the inspection performed, the name of the firm or individual requesting the inspection, the address where the inspection is to be made, the permit or application number and the type of inspection that is requested.

### ***THE FOLLOWING INSPECTIONS ARE REQUIRED:***

#### **A) POOL STEEL & LOCATION** - At this inspection the following will be checked:

1. Distance of pool from house (5') and property lines (minimum 3' to property lines)
2. Water lines – (pump to 50 lbs – 609.4 UPC)
3. Gas line, if applicable – (pump to 15 lbs – gauge shall be 1/10 pound increments or less)
4. Location of pool equipment (5' from property line)
5. Underground electrical
6. Grounding of pool steel, diving board, wet niche (light), bonding (REC 680.26)
7. The pool steel for conformance with plans. (ties normally every other bar for 12" bar spacing & every third bar for 6" bar spacing)

#### **B) POOL DECK** – At this inspection the following will be checked:

1. Thickness of the pool deck.
2. Grounding to wire mesh or any metal within 60" of the pool deck.
3. Drainage and drain lines.
4. Clearance from the siding or stucco to the pool deck (2" minimum required)

**C) PRE PLASTER & POOL FINAL** - The following will be checked:

1. Poolfence/barrier - door alarms
2. GFCI receptacle
3. Poolequipment -grounding & installation
4. Pool electrical - Breaker electrical panel, equipment connection
5. Wet niche fixture
6. Drainage
7. Glazing (R308.4.5 CRC)
8. Clearance from deck to siding or stucco

**D) LINER & ABOVE GROUND POOLS** – The following must be inspected if applicable:

1. GFCI receptacle. Pool light grounding (if installed).
2. Ground of diving boards and rails
3. Ground to motor (pool equipment)
4. Breaker size @ main panel
5. Anchorage of motor
6. Specifications on approved plans
7. Site plan clearances and conditions
8. Poolfence/barrier - door alarms
9. Glazing (R308.4.5 CRC)

## FACTS AND FIGURES ON CHILD DROWNINGS\*

*In some of the nation's sunbelts, drowning has been the leading cause of accidental death in the home of children under 5 years old.*

Each year, nationwide, more than 300 children under 5 years old drown in residential swimming, pools, usually a pool owned by their family. In addition, more than 2,000 children in that age group are treated in hospital emergency rooms for submersion injuries. Medical costs for submersion victims during the initial hospitalization alone can be quite high. Costs can range from an estimated \$2,000 for a victim who recovers fully to \$80,000 for a victim with severe brain damage. Some severely brain damaged victims have initial hospital stays in excess of 120 days and expenses in excess of \$150,000.

Following are just a few facts uncovered by the US Consumer Product Safety Commission (CPSC) in a comprehensive study of drowning and submersion incidents involving children under age 5 years old in Arizona, California, and Florida.

- Seventy-five percent of submersion victims studied by CPSC were between 1 and 3 years old; 65 percent of this group were boys. Toddlers, in particular, often do something unexpected because their capabilities change daily.
- *At the time of the incidents, most victims were being supervised by one or both parents.* Forty-six percent of the victims were last seen in the house; 23 percent were last seen in the yard or on the porch or patio; and 31 percent were in or around the pool. In all, 69 percent of the children were not expected to be at or in the pool, yet they were found in the water.
- Submersion incidents involving children usually happen in familiar surroundings. Sixty-five percent of the incidents happened in a pool owned by the child's family and 33 per cent of the incidents happened in a pool owned by friends or relatives.
- *Pool submersions involving children happen quickly. A child can drown in the time it takes to answer a phone. Seventy-seven percent of the victims had been missing from for 5 minutes or less.*
- Survival depends on rescuing the child quickly and restarting the breathing process, even while the child is still in the water. Seconds count in preventing death or brain damage.
- *Child drowning is a silent death. There's no splashing to alert anyone that the child is in trouble. (\*\*The above information was copied from US CONSUMER PRODUCT SAFETY COMMISSION publication No. 359)*

**DECLARATION – EXIT ALARMS**

**NOTE TO HOMEOWNER(S) –**

- ✓ **THIS FORM SHOULD BE COMPLETED AFTER ALARM INSTALLATION IS COMPLETE**
- ✓ **THE ORIGINAL COPY MUST BE PROVIDED TO THE INSPECTOR AT THE PRE PLASTER INSPECTION**

I am the property owner of \_\_\_\_\_, in Riverbank, California.

I have read *The Swimming Pool Safety Act*, and understand the provisions contained therein.

I hereby declare that an exit alarm(s) meeting the provisions of *The Swimming Pool Safety Act* have been installed on each door providing direct access to the pool. I further declare that I have checked the alarms and found them to be in full compliance with all provisions of *The Swimming Pool Safety Act* relating to exit alarms.

I hereby declare that I have received a copy of *Facts and Figures on Child drowning handout provided to us by the City of Riverbank*.

\_\_\_\_\_  
Property Owner (please print)

\_\_\_\_\_  
Property Owner (please print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

## DECLARATION – ANTI-ENTRAPMENT COVER

The property located at \_\_\_\_\_ has: (check all that apply)

- Swimming Pool       Spa/Hot Tub       Wading/Toddler Pool

There is an anti-entrapment cover meeting current standards of the American Society for Testing and Materials (ASTM) or the American Society of Mechanical Engineers (ASME) installed and certified prior to final inspection. The completed Installation Certification must be provided to the building inspector at final inspection.

Under penalty of perjury, I acknowledge that I have read and understand *The Swimming Pool Safety Act* and that the above is true and correct.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

Relationship to project -

- Owner       Agent for Owner       Licensed Contractor       Agent for Licensed Contractor

If Licensed Contractor or Agent for Licensed Contractor is checked, please complete the following:

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Contractor License Number

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### INSTALLATION CERTIFICATION

For the project located at \_\_\_\_\_; I hereby certify that an anti-entrapment cover meeting current standards of the American Society for Testing and Materials or the American Society of Mechanical Engineers has been installed properly.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

Relationship to project -

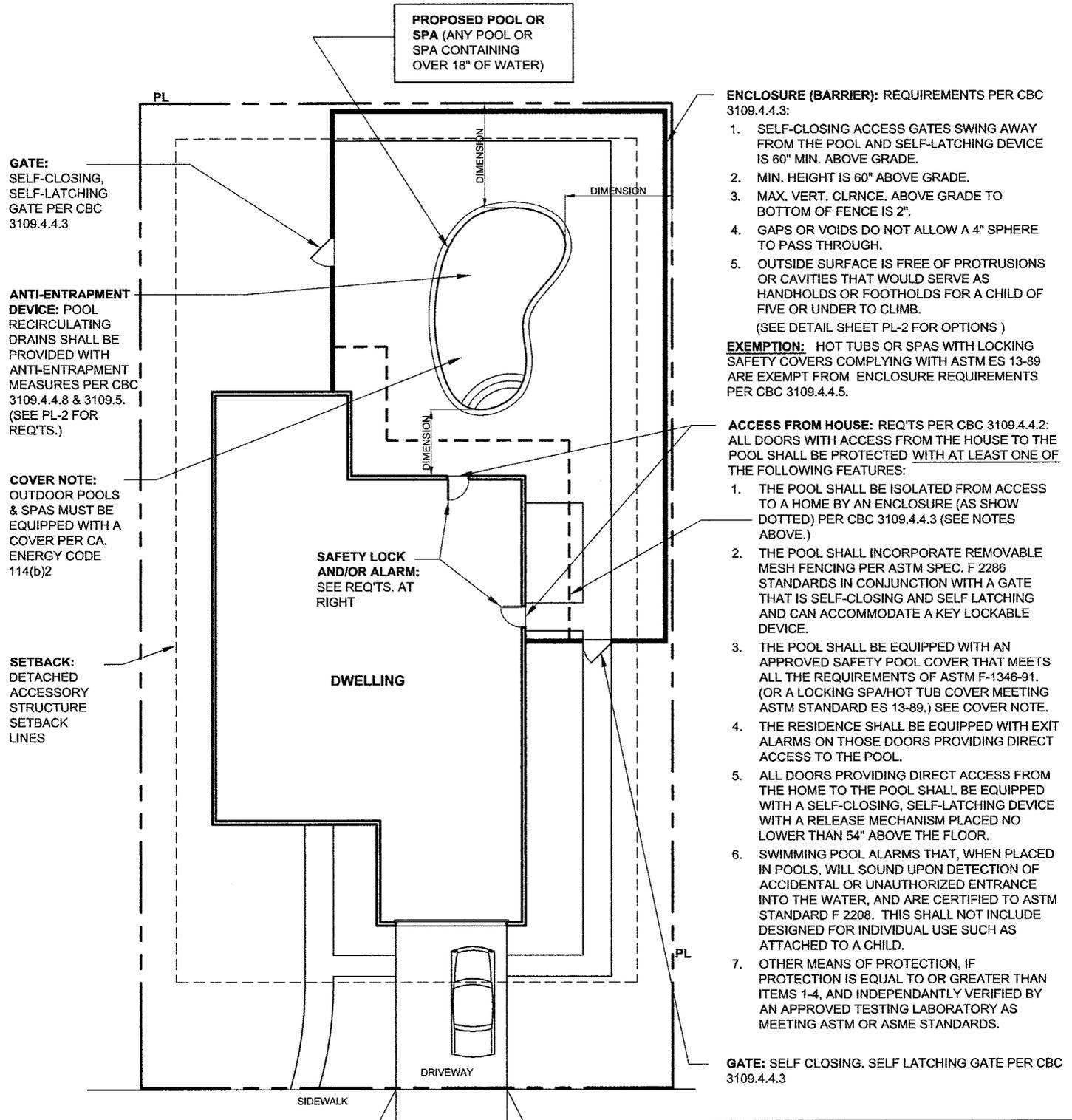
- Owner       Agent for Owner       Licensed Contractor       Agent for Licensed Contractor

If Licensed Contractor or Agent for Licensed Contractor is checked, please complete the following:

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Contractor License Number

# RESIDENTIAL SWIMMING POOL / SPA ENCLOSURE MINIMUM REQUIREMENTS - CBC 2013



**ENCLOSURE (BARRIER):** REQUIREMENTS PER CBC 3109.4.4.3:

1. SELF-CLOSING ACCESS GATES SWING AWAY FROM THE POOL AND SELF-LATCHING DEVICE IS 60" MIN. ABOVE GRADE.
2. MIN. HEIGHT IS 60" ABOVE GRADE.
3. MAX. VERT. CLRNCE. ABOVE GRADE TO BOTTOM OF FENCE IS 2".
4. GAPS OR VOIDS DO NOT ALLOW A 4" SPHERE TO PASS THROUGH.
5. OUTSIDE SURFACE IS FREE OF PROTRUSIONS OR CAVITIES THAT WOULD SERVE AS HANDHOLDS OR FOOTHOLDS FOR A CHILD OF FIVE OR UNDER TO CLIMB.  
(SEE DETAIL SHEET PL-2 FOR OPTIONS)

**EXEMPTION:** HOT TUBS OR SPAS WITH LOCKING SAFETY COVERS COMPLYING WITH ASTM ES 13-89 ARE EXEMPT FROM ENCLOSURE REQUIREMENTS PER CBC 3109.4.4.5.

**ACCESS FROM HOUSE:** REQ'TS PER CBC 3109.4.4.2: ALL DOORS WITH ACCESS FROM THE HOUSE TO THE POOL SHALL BE PROTECTED WITH AT LEAST ONE OF THE FOLLOWING FEATURES:

1. THE POOL SHALL BE ISOLATED FROM ACCESS TO A HOME BY AN ENCLOSURE (AS SHOWN DOTTED) PER CBC 3109.4.4.3 (SEE NOTES ABOVE.)
2. THE POOL SHALL INCORPORATE REMOVABLE MESH FENCING PER ASTM SPEC. F 2286 STANDARDS IN CONJUNCTION WITH A GATE THAT IS SELF-CLOSING AND SELF LATCHING AND CAN ACCOMMODATE A KEY LOCKABLE DEVICE.
3. THE POOL SHALL BE EQUIPPED WITH AN APPROVED SAFETY POOL COVER THAT MEETS ALL THE REQUIREMENTS OF ASTM F-1346-91. (OR A LOCKING SPA/HOT TUB COVER MEETING ASTM STANDARD ES 13-89.) SEE COVER NOTE.
4. THE RESIDENCE SHALL BE EQUIPPED WITH EXIT ALARMS ON THOSE DOORS PROVIDING DIRECT ACCESS TO THE POOL.
5. ALL DOORS PROVIDING DIRECT ACCESS FROM THE HOME TO THE POOL SHALL BE EQUIPPED WITH A SELF-CLOSING, SELF-LATCHING DEVICE WITH A RELEASE MECHANISM PLACED NO LOWER THAN 54" ABOVE THE FLOOR.
6. SWIMMING POOL ALARMS THAT, WHEN PLACED IN POOLS, WILL SOUND UPON DETECTION OF ACCIDENTAL OR UNAUTHORIZED ENTRANCE INTO THE WATER, AND ARE CERTIFIED TO ASTM STANDARD F 2208. THIS SHALL NOT INCLUDE DESIGNED FOR INDIVIDUAL USE SUCH AS ATTACHED TO A CHILD.
7. OTHER MEANS OF PROTECTION, IF PROTECTION IS EQUAL TO OR GREATER THAN ITEMS 1-4, AND INDEPENDANTLY VERIFIED BY AN APPROVED TESTING LABORATORY AS MEETING ASTM OR ASME STANDARDS.

**GATE:** SELF CLOSING, SELF LATCHING GATE PER CBC 3109.4.4.3

THIS DRAWING DEPICTS MINIMUM CODE REQUIREMENTS PER CBC 2013. INFORMATION IS FOR REFERENCE ONLY AND IS NOT A SUBSTITUTE FOR ACCURATE DRAWINGS PREPARED FOR EACH PROPOSED CONSTRUCTION PROJECT.

NAME, ADDRESS AND PHONE NO. OF DESIGNER  
XXX XXX XXX XXX  
XXX XXX XXX XXX

WET SIGNATURE OF DESIGNER ON EACH SHEET  
(AND PROFESSIONAL STAMP IF APPLICABLE)

**EXAMPLE  
RESIDENTIAL POOL**

**SITE PLAN**

SAMPLE DRAWING

SCALE: 1" = 20'-0"

DATE:

SHEET NO.

**PL-1**

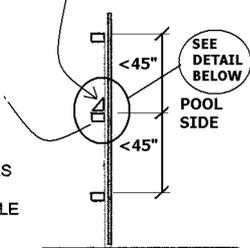
# RESIDENTIAL SWIMMING POOL / SPA ENCLOSURE MINIMUM REQUIREMENTS - CBC 2013

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## OPTIONS FOR ENCLOSURE (BARRIER): REQUIREMENTS PER CBC 3109.4.4.3:

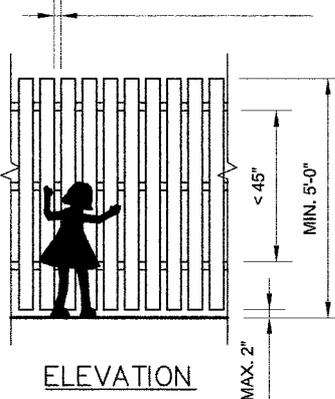
1. MIN. HEIGHT IS 60" ABOVE GRADE.
2. MAX. VERT. CLRNCE. ABOVE GRADE TO BOTTOM OF FENCE IS 2".
3. GAPS OR VOIDS DO NOT ALLOW A 4" SPHERE TO PASS THROUGH.
4. OUTSIDE SURFACE IS FREE OF PROTRUSIONS OR CAVITIES THAT WOULD SERVE AS HANDHOLDS OR FOOTHOLDS FOR A CHILD OF FIVE OR UNDER TO CLIMB.
5. A NON-REMOVABLE MESH FENCING MAY BE USED IF IT MEETS THE ASTM SPEC. F 2286 AND WITH A GATE THAT IS SELF-CLOSING AND SELF-LATCHING AND CAN ACCOMMODATE A KEY LOCABLE DEVICE.

NOTE: PROVIDE CANT STRIPE OR EQUAL IF HORIZONTAL MEMBERS ARE LESS THAN 45"



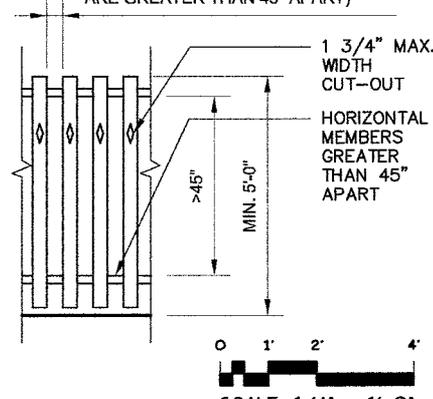
SECTION

1 3/4" MAX. (IF HORIZONTAL OR DIAGONAL MEMBERS



ELEVATION

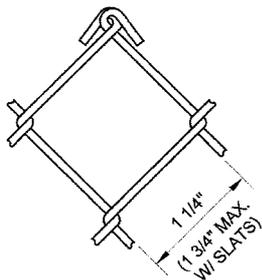
4" MAX. (IF HORIZ. MEMBERS ARE GREATER THAN 45° APART)



**EXEMPTION:** HOT TUBS OR SPAS WITH LOCKING SAFETY COVERS COMPLYING WITH ASTM ES 13-89 ARE EXEMPT FROM ENCLOSURE REQUIREMENTS PER CBC 3109.4.4.5.

## GENERIC FENCE DETAIL FOR PRIVATE POOL OR SPA ENCLOSURE

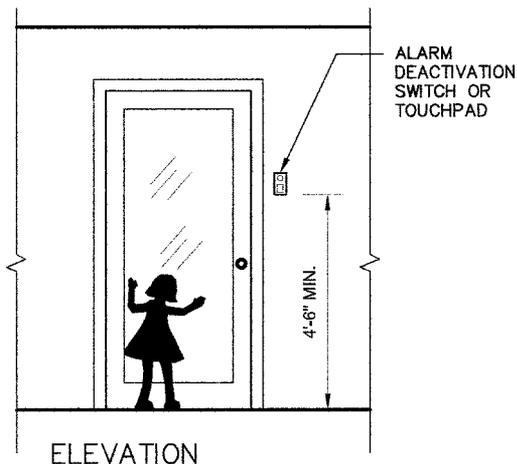
**CHAIN LINK REQUIREMENTS:**  
THE MAX. MESH SIZE FOR CHAIN LINK FENCES SHALL BE 1 1/4" SQUARE UNLESS THE FENCE IS PROVIDED WITH SLATS FASTENED AT THE TOP OR BOTTOM.



## CHAIN LINK FENCE FOR PRIVATE POOL OR SPA ENCLOSURE

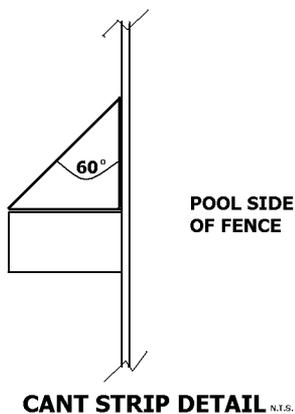
**DOOR ALARM REQUIREMENTS:**  
DOORS EQUIPPED WITH EXIT ALARMS SHALL CONFORM TO CBC 3109.4.1.8 AS FOLLOWS:

1. LISTED IN ACCORDANCE WITH UL 2017.
2. ALARM SHALL ACTIVATE WITHIN 7 SECONDS AND SOUND FOR A MIN OF 30 SECONDS AND BE AUDIBLE THROUGHOUT THE HOUSE.
3. THERE SHALL BE A MANUAL SWITCH TO DEACTIVATE THE ALARM FOR NOT MORE THAN 15 SECONDS MOUNTED A MIN. OF 54" ABOVE THE DOOR THRESHOLD.



ELEVATION

## SAFETY ALARM AT DOOR



CANT STRIP DETAIL N.T.S.

**ANTI-ENTRAPMENT REQUIREMENTS FOR ALL POOLS & SPAS:**

PER CBC 3109.5, SUCTION OUTLETS SHALL BE DESIGNED TO PRODUCE CIRCULATION THROUGHOUT THE POOL OR SPA. SINGLE OUTLET SYSTEMS, SUCH AS AUTOMATIC VACUUMS SHALL BE PROTECTED AGAINST USER ENTRAPMENT

1. SUCTION OUTLETS SHALL BE PROVIDED WITH A COVER THAT CONFORMS TO ASME A112.19.8M, OR A 12" X 12" MIN. DRAIN GRATE, OR AN APPROVED CHANNEL DRAIN SYSTEM.
2. SINGLE OR MULTIPLE CIRCULATION SYSTEMS SHALL BE EQUIPPED WITH AN ATMOSPHERIC VACUUM RELIEF SHOULD GRATE COVERS BECOME MISSING OR BROKEN. THE RELIEF SHALL EITHER CONFORM TO ASME A112.19.17, OR BE AN APPROVED GRAVITY DRAINAGE SYSTEM.
3. SINGLE OR MULTIPLE-PUMP CIRCULATION SYSTEMS SHALL BE PROVIDED WITH A MINIMUM OF TWO APPROVED-TYPE SUCTION OUTLETS LOCATED AT LEAST 3' APART. WATER SHALL BE DRAWN THROUGH THEM SIMULTANEOUSLY THROUGH A VACUUM-PROTECTED LINE TO THE PUMP(S).
4. POOL CLEANER FITTINGS (WHERE PROVIDED) SHALL BE ACCESSIBLE AT LEAST 6" TO 12" MAX. BELOW THE MIN. OPERATIONAL WATER LEVEL OR ATTACHED TO SKIMMER.

## ANTI-ENTRAPMENT DEVICE REQUIREMENTS

NAME, ADDRESS AND PHONE NO. OF DESIGNER  
XXX XXX XXX XXX  
XXX XXX XXX XXX

WET SIGNATURE OF DESIGNER ON EACH SHEET  
(AND PROFESSIONAL STAMP IF APPLICABLE)

**EXAMPLE  
RESIDENTIAL POOL**

**DETAILS**

SAMPLE DRAWING

SCALE: 1/4" = 1'-0"  
DATE:

SHEET NO.

10  
**PL-2**