OUTDOOR SWIMMING BARRIER COMPLYING WITH EIGHTH EDITION (2023) R4501.17.1.1 THROUGH R4501.17.1.14

R4501.17
RESIDENTIAL SWIMMING BARRIER REQUIREMENT.
OUTDOOR SWIMMING POOLS SHALL BE PROVIDED WITH A BARRIER COMPLYING WITH R4501.17.1.1 THROUGH R4501.17.1.14.
EXCEPTION: A SWIMMING POOL WITH AN APPROVED SAFETY POOL COVER COMPLYING WITH ASTM F1346.

R4501.17.1
OUTDOOR SWIMMING POOLS.
THE TOP OF THE BARRIER SHALL BE AT LEAST 48 INCHES (1219 MM) 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 (51 MM) 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 (102 MM).

R4501.17.1.2
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 A REMOVABLE CHILD BARRIER SHALL NOT BE REMOVABLE WITHOUT THE AID OF TOOLS. OPENINGS IN ANY BARRIER SHALL NOT ALLOW PASSAGE OF A 4-INCH-DIAMETER (102 MM) SPHERE.

R4501.17.1.3
SOLID BARRIERS WHICH DO NOT HAVE OPENINGS SHALL NOT CONTAIN INDENTATIONS OR PROTRUSIONS EXCEPT FOR NORMAL CONSTRUCTION TOLERANCES AND TOOLED MASONRY JOINTS.

R4501.17.1.4
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 (1143 MM), THE HORIZONTAL MEMBERS SHALL BE LOCATED ON THE SWIMMING POOL SIDE OF THE FENCE. SPACING BETWEEN VERTICAL MEMBERS SHALL NOT EXCEED 1-3/4 INCHES (44 MM) IN WIDTH. WHERE THERE ARE DECORATIVE CUTOUTS WITHIN VERTICAL MEMBERS, SPACING WITHIN THE CUTOUTS SHALL NOT EXCEED 1-3/4 INCHES (44 MM) IN WIDTH.

R4501.17.1.5
WHERE THE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTAL MEMBERS IS 45 INCHES (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 1-3/4 INCHES (44 MM) IN WIDTH.

R4501.17.1.6
MAXIMUM MESH SIZE FOR CHAIN LINK FENCES SHALL BE A 2-1/4-INCH SQUARE (57 MM) UNLESS THE FENCE IS PROVIDED WITH SLATS FASTENED AT THE TOP OR BOTTOM WHICH REDUCE THE OPENINGS TO NO MORE THAN 1-3/4 INCHES (44 MM).

R4501.17.1.7
WHERE THE BARRIER IS COMPOSED OF DIAGONAL MEMBERS, THE MAXIMUM OPENING FORMED BY THE DIAGONAL MEMBERS SHALL BE NO MORE THAN 1-3/4 INCHES (44 MM).

R4501.17.1.8
ACCESS GATES, WHEN PROVIDED, SHALL BE SELF-CLOSING AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTIONS R4501.17.1.1 THROUGH R4501.17.1.7 AND SHALL BE EQUIPPED WITH A SELF-LATCHING LOCKING DEVICE LOCATED ON THE POOL SIDE OF THE GATE. WHERE THE DEVICE RELEASE IS LOCATED NO LESS THAN 54 INCHES (1372 MM) FROM THE BOTTOM OF THE GATE, THE DEVICE RELEASE MECHANISM MAY BE LOCATED ON EITHER 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 FROM THE OUTSIDE. 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 (12.7 MM) WITHIN 18 INCHES (457 MM) OF THE RELEASE MECHANISM.

R4501.17.1.9
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 DBA AT 10 FEET (3048 MM). ANY DEACTIVATION SWITCH SHALL BE LOCATED AT LEAST 54 INCHES (1372 MM) ABOVE THE THRESHOLD OF THE ACCESS. SEPARATE ALARMS ARE NOT REQUIRED FOR EACH DOOR OR WINDOW IF SENSORS WIRED TO A CENTRAL ALARM SOUND WHEN CONTACT IS BROKEN AT ANY OPENING.

EXCEPTIONS:
A.SCREENED OR PROTECTED WINDOWS HAVING A BOTTOM SILL HEIGHT OF 48 INCHES (1219 MM) 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 (1067 MM) OR HIGHER WITH A COUNTER BENEATH.
2.ALL DOORS PROVIDING DIRECT ACCESS FROM THE HOME TO THE POOL MUST BE EQUIPPED WITH A SELF-CLOSING, SELF-LATCHING DEVICE WITH POSITIVE MECHANICAL LATCHING/LOCKING INSTALLED A MINIMUM OF 54 INCHES (1372 MM) ABOVE THE THRESHOLD, WHICH IS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

3.A SWIMMING POOL ALARM THAT, WHEN PLACED IN A POOL, SOUNDS AN ALARM UPON DETECTION OF AN ACCIDENTAL OR UNAUTHORIZED ENTRANCE INTO THE WATER. SUCH POOL ALARM MUST MEET AND BE INDEPENDENTLY CERTIFIED TO ASTM STANDARD F2208, TITLED "STANDARD SAFETY SPECIFICATION FOR RESIDENTIAL POOL ALARMS," WHICH INCLUDES SURFACE MOTION, PRESSURE, SONAR, LASER, AND INFRARED ALARMS. FOR PURPOSES OF THIS PARAGRAPH, THE TERM "SWIMMING POOL ALARM" DOES NOT INCLUDE ANY SWIMMING PROTECTION ALARM DEVICE DESIGNED FOR INDIVIDUAL USE, SUCH AS AN ALARM ATTACHED TO A CHILD THAT SOUNDS WHEN THE CHILD EXCEEDS A CERTAIN DISTANCE OR BECOMES SUBMERGED IN WATER.

R4501.17.1.10
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, THE LADDER OR STEPS EITHER SHALL BE CAPABLE OF BEING SECURED, LOCKED OR REMOVED TO PREVENT ACCESS, OR THE LADDER OR STEPS SHALL BE SURROUNDED BY A BARRIER WHICH MEETS THE REQUIREMENTS OF SECTIONS R4501.17.1.1 THROUGH R4501.17.1.9 AND SECTIONS R4501.17.1.12 THROUGH R4501.17.1.14. WHEN THE LADDER OR STEPS ARE SECURED, LOCKED OR REMOVED, ANY OPENING CREATED SHALL NOT ALLOW THE PASSAGE OF A 4-INCH-DIAMETER (102 MM) SPHERE.

R4501.17.1.11
STANDARD SCREEN ENCLOSURES WHICH MEET THE REQUIREMENTS OF SECTION R4501.17 MAY BE UTILIZED AS PART OF OR ALL OF THE "BARRIER" AND SHALL BE CONSIDERED A "NONDWELLING" WALL. REMOVABLE CHILD BARRIERS SHALL HAVE ONE END OF THE BARRIER NONREMOVABLE WITHOUT THE AID OF TOOLS.

R4501.17.1.12
THE BARRIER MUST BE PLACED AROUND THE PERIMETER OF THE POOL AND MUST BE SEPARATE FROM ANY FENCE, WALL, OR OTHER ENCLOSURE SURROUNDING THE YARD UNLESS THE FENCE, WALL, OR OTHER ENCLOSURE OR PORTION THEREOF IS SITUATED ON THE PERIMETER OF THE POOL, IS BEING USED AS PART OF THE BARRIER, AND MEETS THE BARRIER REQUIREMENTS OF THIS SECTION.

R4501.17.1.13
REMOVABLE CHILD BARRIERS MUST BE PLACED SUFFICIENTLY AWAY FROM THE WATER'S EDGE TO PREVENT A YOUNG CHILD OR MEDICALLY FRAIL ELDERLY PERSON WHO MAY MANAGE TO PENETRATE THE BARRIER FROM IMMEDIATELY FALLING INTO THE WATER. SUFFICIENTLY AWAY FROM THE WATER'S EDGE SHALL MEAN NO LESS THAN 20 INCHES (508 MM) FROM THE BARRIER TO THE WATER'S EDGE. DWELLING OR NONDWELLING WALLS INCLUDING SCREEN ENCLOSURES, WHEN USED AS PART OR ALL OF THE "BARRIER" AND MEETING THE OTHER BARRIER REQUIREMENTS, MAY BE AS CLOSE TO THE WATER'S EDGE AS PERMITTED BY THIS CODE.

R4501.17.1.14
A WALL OF A DWELLING MAY SERVE AS PART OF THE BARRIER IF IT DOES NOT CONTAIN ANY DOOR OR WINDOW THAT OPENS TO PROVIDE DIRECT ACCESS FROM THE HOME TO THE SWIMMING POOL.

R4501.17.1.14.1ADJACENT WATERWAYS.
PERMANENT NATURAL OR PERMANENT MAN-MADE FEATURES SUCH AS BULKHEADS, CANALS, LAKES, NAVIGABLE WATERWAYS, ETC., ADJACENT TO A PUBLIC OR PRIVATE SWIMMING POOL OR SPA MAY BE PERMITTED AS A BARRIER WHEN APPROVED BY THE AUTHORITY HAVING JURISDICTION. WHEN EVALUATING SUCH BARRIER FEATURES, THE AUTHORITY MAY PERFORM ON-SITE INSPECTIONS AND REVIEW EVIDENCE SUCH AS SURVEYS, AERIAL PHOTOGRAPHS, WATER MANAGEMENT AGENCY STANDARDS AND SPECIFICATIONS, AND ANY OTHER SIMILAR DOCUMENTATION TO VERIFY, AT A MINIMUM, THE FOLLOWING:
1.THE BARRIER FEATURE IS NOT SUBJECT TO NATURAL CHANGES, DEVIATIONS, OR ALTERATIONS AND IS CAPABLE OF PROVIDING AN EQUIVALENT LEVEL OF PROTECTION AS THAT PROVIDED BY THE CODE.
2.THE BARRIER FEATURE CLEARLY IMPEDES, PROHIBITS OR RESTRICTS ACCESS TO THE SWIMMING POOL OR SPA.

R4501.17.1.15
A MESH SAFETY BARRIER MEETING THE REQUIREMENTS OF SECTION R4501.17, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND COMPLYING WITH ASTM F2286, SHALL BE CONSIDERED A BARRIER AS DEFINED IN THIS SECTION. WHERE A HINGED GATE IS USED WITH A MESH FENCE, THE GATE SHALL COMPLY WITH SECTION R4501.17.1.8. MESH FENCES SHALL NOT BE INSTALLED ON TOP OF ABOVE-GROUND/ON-GROUND PRIVATE SWIMMING POOLS.

PLUMBING NOTES

(AS PER CHAPTER 45 FBC (8TH) EDITION PRIVATE SWIMMING POOLS)

1. ALL POOL EQUIPMENT PIPING SHALL BE SCHEDULE 40, PVC-PW, NON-THREADED, NSF APPROVED SUPPORTED CONTINUOUSLY ON GROUND OR ON MAXIMUM 4'-0" CENTERS WITH CLEVIS HANGERS.
2. ALL SUCTION PIPING SHALL BE 2" DIAMETER AND ALL PRESSURE PIPING 1-1/2" DIAMETER UNLESS OTHERWISE NOTED.
3. POOL WATER DISPOSAL SHALL BE IN ACCORDANCE WITH LOCAL BUILDING DEPARTMENT REQUIREMENTS.
4. ANTI VORTEX MAIN DRAINS SHALL HAVE ITS PLATE SECURELY FASTENED WITH TAMPERPROOF SCREWS.
5. POOL VACUUM SHALL HAVE SPRING LOADED CAP IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.
6. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE-PLUMBING SECTION 309 AS IT PERTAINS TO BUOYANCY.
7. THE WATER VELOCITY THOUGH ALL SUCTION PIPING SHALL BE LESS THAN 8 FEET PER SECOND.
8. THE WATER VELOCITY THROUGH ALL PRESSURE PIPING SHALL BE LESS THAN 10 FEET PER SECOND.
9. ALL PIPING SHALL BE SUITABLE FOR EXPOSURE TO ULTRA VIOLET RADIATION AND NORMAL OPERATING TEMPERATURES.
10. R4501.7.1 STRAINER: .POOL CIRCULATING PUMPS SHALL BE EQUIPPED ON THE INLET SIDE WITH AN APPROVED-TYPE HAIR AND LINT STRAINER WHEN USED WITH A PRESSURE FILTER.

STRUCTURE NOTES

ALL WORK SHALL COMPLY WITH THE F.B.C. EIGHTH EDITION (2023) . THE AMERICAN CONCRETE INSTITUTE ACI-318-19, ASCE 7-22 AND ALL OTHERS APPLICABLE CODES AND REGULATIONS.

1. ALL POOL CONCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
2. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60.000 PSI.
3. ALL DECK CONCRETE (WHEN INSTALLED UNDER THESE PLANS) SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI.
4. THE DESIGN OF THIS PROJECT HAS INCORPORATED A RATIONAL DESIGN APPROACH BASED ON ACCEPTED ENGINEERING PRINCIPALS.
5. ALL REINFORCING STEEL SPLICES SHALL BE 18" IN LENGTH UNLESS OTHERWISE INDICATED ON THESE PLANS.
6. ALL REINFORCING STEEL BENDS SHALL BE BY HAND WITHOUT THE APPLICATION OF HEAT TO THE STEEL.

SOIL STATEMENT
A VISUAL INSPECTION AT JOB SITE SHOWED A SOIL COMPOSED OF SAND AND ROCK. A BEARING CAPACITY OF 2000 P.S.F. HAS BEEN ASSUMED. FURTHER MORE, UPON BREAKING OF GROUND, A LETTER SHALL BE SUBMITED TO THE BUILDING OFFICIAL VERIFYING AND ATTESTING THAT THE SITE CONDITIONS ARE SIMILAR TO THOSE UPON THE DESIGN BASED.

ELECTRICAL NOTES

1. ALL POOL ELECTRICAL WORK ELECTRICAL EQUIPMENT WIRING AND INSTALLATION, INCLUDING THE BONDING AND & GROUNDING OF POOL COMPONENTS SHALL COMPLY WITH CHAPTER 27 OF THE FLORIDA BUILDING CODE, (8TH EDITION) BUILDING.
2. ALL POOL ELECTRICAL WORKS, GROUNDING AND BONDING MUST BE CONFORM WITH THE NEC 2020. ART. 680
3. AT LEAST ONE GFCI PROTECTED, 125-VOLT RECEPTACLE OUTLET IS REQUIRED BETWEEN 6 AND 20 FEET OF THE INSIDE WALL OF THE POOL. NEC 680.22(A)(1)(RESIDENTIAL AND COMMERCIAL)
4. THE EQUIPMENT GROUNDING CONDUCTOR MUST BE A MINIMUM 12 AWG COPPER. NEC 680.21(A)(1); 680.23(F)(2);680.25(B)(1)
5. EQUIPOTENTIAL BONDING TO COMPLY WITH 2014 NEC 680.26(B) SHALL BE INSTALLED IN OR UNDER PAVED WALKING SURFACES FOR THREE FEET HORIZONTALLY BEYOND THE WALLS OF THE POOL. NEC 680.26(C) [4 POINTS & DECK BONDING (360 DEGREES)]
6. RECEPTACLEOUTLETS ARE NOT PERMITTED WITHIN 6 FEET OF THE INSIDE WALLS OF A POOL. NEC 680.22(A)(2)
7. POOL PUMP MOTOR CIRCUITS, MUST BE PROVIDED WITH GFCI PROTECTION. NEC 680.21(C)
8. LIGHTING OUTLETS MUST BE LOCATED A MINIMUM OF 5 FEET FROM THE INSIDE WALL OF A POOL OR MOUNTED A MINIMUM OF 12 FEET ABOVE THE MAXIMUM WATER LEVEL. NEC 680.22(B)(1.)
9. OVERHEAD CONDUCTORS ARE NOT PERMITTED OVER THE POOL OR WITHIN 10 FEET HORIZONTALLY FROM THE EDGE OF THE POOL. FBC 424.1.4.2.4
10. OVERHEAD CONDUCTORS SHALL NOT BE PERMITTED OVER THE POOL OR WITHIN 10 FEET HORIZONTALLY FROM THE EDGE OF THE POOL UNLESS PROVIDED WITH CLEARANCE TO COMPLY WITH NEC 680.8.
11. A CONDUCTIVE ELEMENT THAT IS PART OF THE POOL BONDING SYSTEM MUST BE IN DIRECT CONTACT WITH THE POOL WATER. IN THE ABSENCE OF RAILS, LADDERS OR NICHES, A WATER BONDING SHALL MEET THE REQUIREMENT. NEC 680.26(C)
12. ALL METAL PARTS WITHIN 5 FEET OF THE POOL MUST BE BONDED TO A COMMON BONDING GRID. NEC 680.26(B)(5)
13. OUTLETS SUPPLYING POOL PUMP MOTORS CONNECTED TO SINGLE-PHASE 120-VOLT THROUGH 240-VOLT BRANCH CIRCUITS, WHETHER BY RECEPTACLE OR BY DIRECT CONNECTION, AND OUTLETS SUPPLYING OTHER ELECTRICAL EQUIPMENT AND UNDERWATER LUMINAIRES OPERATING AT VOLTAGES GREATER THAN THE LOW VOLTAGE CONTACT LIMIT, CONNECTED TO SINGLE-PHASE, 120 VOLT THROUGH 240 VOLT BRANCH CIRCUITS, RATED 15 OR 20 AMPERES, WHETHER BY RECEPTACLE OR BY DIRECT CONNECTION, SHALL BE PROVIDED WITH GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL

FLOOR INLETS NOTE:

FLOOR INLETS SHALL BE DESIGNED AND INSTALLED SUCH THAT THEY DO NOT PROTRUDE ABOVE THE POOL FLOOR AND ALL INLETS SHALL BE DESIGNED AND INSTALLED SO AS NOT TO CONSTITUTE SHARP EDGES OR PROTRUSIONS HAZARDOUS TO POOL BATHERS.
NOTE: PROVIDE PIPE SLEEVES WHERE PIPING PASSED THROUGH FLOOR SLAB OR EXTERIOR WALL PROVIDE SEALING OF THE ANNULAR SPACE BETWEEN PIPE SLEEVES AND PIPING PASSING TROUGH FLOOR SLAB OR WALL

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JORGE CRESPO ON THE DATE ADJACENT TO THE SEAL USING A AUTHENTICATION CODE.

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Jorge A Crespo
Digitally signed by Jorge A Crespo
Date: 2024.11.18 19:00:24 -05'00'

DRAW BY
GIA DESIGN GROUP INC.
305.741.3442

CALYPSO POOLS

NEW SWIMMING POOL, SPA & POND FOR :
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5900 SW 114TH TER, PINECREST, FL 33156

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REVISIONS

NO.	DATE

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