





1-CODE REQUIREMENTS:
PRIVATE SWIMMING FOOL AND SPAS MUST COMPLY WITH CHAPTER 4, SECTION 424 & CHAPTER 41, SECTION R4101 FLORIDA BUILDING CODE 2010

MECHANICAL REQUIREMENTS:
ALL PIPING EQUIREMENT AND MATERIALS USED IN THE PLUMBING SYSTEM OF SWIMMING POOLS AND SPAS THAT ARE BUILT IN PLACE SHALL CONFORM TO THE FLORIDA BUILDING CODE 2010, PLUMBING 424.2.3 & R4101.3. ALL PIPING MATERIALS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION STANDARDS.

9-COMPLIANCE:

ALL MATERIALS, PIPING, VALUES, EQUIPMENT OR APPLIANCES ENTERING INTO THE CONSTRUCTION OF SWIMMING POOLS-SPAS OR PORTIONS THEREOF SHALL BE
OF A TYPE COMPLYING WITH THE CODE OR OF A TYPE RECOMMENDED AND APPROVED BY A NATIONALLY RECOGNIZED TESTING AGENCY OR CONFORMING TO
OTHER RECOGNIZED STANDARDS ACCEPTABLE TO ADMINISTRATIVE AUTHORITY.

4- ENGINEERING DEBIGN :
DEBIGN, CONSTRUCTION AND MORKMANSHIP SHALL BE IN COFORMITY WITH ANSINSPIB, 4, 5 AND 6 2005, PUBLISHED BY THE INTERNATIONAL AGUATICS
FOUNDATION OR OTHER ACCEPTED ENGINEERING PRACTICES.
5- TESTING AND CERTIFICATION : ALL POOL AND SPA SUCTION INLETS SMALL BE PROVIDED WITH A COVER THAT HAS BEEN TESTED AND ACCEPTED BY A RECOGNIZED TESTING FACILITY AND COMPLY WITH ANSIASME A112.19.8M" SUCTION FITTINGS FOR USE IN SWIMMING POOLS, SPAS, HOT TUBS AND WHIRPOOL BATHTUB APPLIANCES". EXCEPTION: SURFACE SKIMMERS.

6- SAFETY NOTE : BO NOT USE OR OPERATE POOL OR SPA IF THE SUCTION INLET FITTING IS BROKEN, MISSING OR LOOSE

## I-WATER VELOCITY PER ANSI/APSP-7 2006 #4.4

WATER VELOCITY IN FIELD FABRICATED PIPING IS BASED ON THE MAX. SYSTEM FLOW RATE, MAX. WATER VELOCITY IN BRANCH PIPING (THE PIPING BETWEEN THE DRAINS) SHALL BE LIMITED TO 6 FEET PER SECOND /FPS WHEN ONE OF A PAIR IS BLOCKED. IN NORMAL OPERATION THEN, THE BRANCH SUCTION PIPING VELOCITY IS 3 FEET PER SECOND /FPS, ALL OTHER SUCTION PIPING VELOCITY IS 5 FEET PER SECOND /FPS, ALL OTHER SUCTION PIPING VELOCITY IS 5 FEET PER SECOND /FPS, ALL OTHER SUCTION PIPING VELOCITY IS 5 FPS FOR PUBLIC POOLS OR 8 FPS FOR RESIDENTIAL POOLS.

S-MAX. SYSTEM FLOW RATE PER ANSWAPSP-7 2006 #4.4.1

THE MAXIMUM SYSTEM FLOW RATE SHALL BE DETERMINED BY ONE OF THE FOLLOWING:
- TDH CALCULATION FOR THE CIRCULATION SYSTEM OF EACH PUMP, OR
- SIMPLIFIED TOH CALCULATION, OR
- THE MAX FLOW CAPACITY (DETERMINE FROM PUMP FLOW CURVE) OF THE NEW OR REPLACEMENT PUMP, WHICH SHALL BE LIMITED BY THE CRITERIA OF ANSWAPSP-7 #4.4

## IF 50, THE TOTAL DYNAMIC HEAD TOH CALCULATION SHALL BE REQUIRED TO DETERMINE IF THE SYSTEM IS ACCEPTABLE. USING TOH, DETERMINE NEW MAX. FLOW RATE FROM PUMP CURVE, IF IT IS GREATER THAN DRAIN FLOW RATE OR S FES SUCTION FLOW RATE OR S FES SUCTION STORY IN THE SYSTEM IS NOT ACCEPTABLE. - IF A VARIABLE SPEED PUMP IS USED, USE THE MAX. PUMP FLOW IN CALCULATIONS - FOR SIDE DRAINS, USE AFPROPRIATE SIDE WALL DRAIN FLOW AS PUBLISHED BY MANUFACTURER - IN-FLOOR SUCTION OUTLET COYERGERATE MUST CONFIRM TO MOST RECENT EDITION OF ASMEJANSI AT 12, 14,8 AND BE EMBOSSED WITH THAT EDITION - PUMP, FILTER & HEATER MAKE AND MODEL CANNOT CHANGED AND EQUIPMET LOCATION CANNOT BE MOVED CLOSER TO POOL WITHOUT SUBMITTING A REVISED PLAN AND - PUMP, FILTER & HEATER MAKE AND MODEL CANNOT CHANGED AND EQUIPMET LOCATION CANNOT BE MOVED CLOSER TO POOL WITHOUT SUBMITTING A REVISED PLAN AND - PUMP, FILTER & HEATER MAKE AND MODEL CANNOT CHANGED AND EQUIPMET LOCATION CANNOT BE MOVED CLOSER TO POOL WITHOUT SUBMITTING A REVISED PLAN AND - TOH CALCULATION FOR APPROVAL IMPORTANT NOTE : IF THE MAX, PUMP FLOW RATE GREATER THAN DRAIN FLOW RATE OR 8 FPS SUCTION FLOW RATE OR 10 FPS DISCHARGE FLOW RATE, THEN THE "MAX, FLOW FROM THE PUMP CURVE" OPTION HAS FALLED,

- MIN, SYSTEM FLOW BASEDON MI, FLOW PER SKIMMER OF 33 GPM - SYSTEM FLOW RATE MUST NOT EXCHED APPROVED FLOW RATES - CENTER TO CENTER DISTANCE BETWEEN THE SUCTION PIPE DUTLETS SHALL BE 36 INCH MIN. - CHANNEL TYPE (WITH 2 OR 3 OUTLETS IN ONE PORT) SHALL BE AT LEAST 3" MIDE BY 31" LONG

4. PUMP:

PER FBC 2010 SECTION 424.2.7.1 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, PER 424.2.7.2 INSTALLATION TO BE COMPLETED IN ACCORDANCE MANUFS RECOMMEDATIONS. PER 424.2.7.3 CAPACITY; PUMPS SHALL HAVE DESIGN CAPACITY AT THE FOLLOWING HEADS; 1) PRESSURE DIATOMACEDUS ELRETH A LEAST 60 FEET, 2) YACUUM DIE. 20 INCH YACUUM ON THE SUCTION SIDE AND 40 FEET TOTAL HEAD, 3) RAPID SAND - AT LEAST 45 FEET, 4)HIGH RATE SAND. AT LEAST 60 FEET, PER 424.2.7.4 PUMP IMPELLERS, SHAFT, WEAR RINGS AND OTHER MORKING PARTS SHALL BE CORRISION RESISTANT MATERIALS.

10- CLEANER FITTINGS:

PER ANSUNSPIS 9.12:10. THE VACUUM OR PRESSURE CLEANER FITTING(S) SHALL BE LOCATED IN AN ACCESSIBLE POSITION AT LEAST 6 INCHES AND NOT GREATER
THAN 18 INCHES BELOW THE MINUMUM OPERATING WATER LEVEL, OR AS AN ATTACHMENT TO THE SKIMMER ALL CLEANER SUCTION INLETS SHALL BE PROTECTED
BY AN APPROVED, PERMANENTLY INSTALLED, SELF CLOSING FLAPPER ASSEMBLY.

# PER FBC 2010 SECTION 424.2.0.1 & R4101.0.1 VALYES SHALL BE MADE OF MATERIALS THAT ARE APPROVED IN THE FLORIDA BUILDING CODE, FLUMBING. VALYES LOCATED UNDER CONCRETE SLABS SHALL BE SET IN A PIT HAVING A LEAST DIMENSION OF FIVE PIPE DIAMETERS, MINIMUM 10 INCHES, FITTED WITH A SUITABLE COVER

12- WASTE WATER DISPOSAL :
FER FBC 4242.10 & R4101.10 DIRECT OR INDIRECT CONNECTIONS CANNOT BE MADE TO EXISTING FACILITIES UNLESS APPROVED BY THE

PIPING SHALL BE SCH. 40 BEARING NSF APPROVAL PER FBC 2010, R4101. PIPING CAN BE (IF NEEDED) ENCASED IN THE CONCRETE OF THE POOL SHELL

14- TE979;
ALL POOL PIPING SHALL BE INSPECTED AND APPROVED BEFORE COVER OR CONCEALMENT, IT SHALL BE TESTED ANDPROVED TIGHT UNDER A STATIC MATER OR AIR PRESSURE TEST OF NOT LESS THAN 35 PSI FOR 15 MINUTES, PER MANUFACTURER'S RECOMMENDATIONS, NO AIR TEST SHALL BE APPROVED FOR PVC PIPE AND FITTINGS, SECTION 424.2.12.1 & R4101.12.1 & R4101.12.2 PRESSURE TESTS. 15- WATER HEATING EQUIPMENT: SWIMMING POOL WATER HEATING!

SWIMMING FOOL WATER HEATING EQUIPMENT SHALL CONFORM TO THE DESIGN CONSTRUCTION AND INSTALLATION REQUIREMENTS IN ACCORDANCE WITH ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES AND SHALL BEAR THE LABEL OF A RECOGNIZEDTESTING AGENCY, AND SHALL INCLUDE A CONSIDERATION OF COMBUSTION AIR VENTING AND GAS SUPPLY REQUIREMENTS FOR WATER HEATERS SEC. 434,2 14,1 & 84,101.14.11 THOST CONTAIN A THERMOSTATIC OR HIGH PRESSURE CONTROL SWITCH SO THE POOL WATER DOES NOT EXCEED 104 DEGREES F. SEC. 424,2 14,4 & 84,101.14.17 THOST CONTAINA THERMOSTATIC OR HIGH PRESSURE CONTROL SWITCH SO THE POOL WATER DOES NOT EXCEED 104 DEGREES F. SEC. 424,2 14,4 & 84,101.14.17 WATER HEATING EQUIPMENT SHALL BE INSTALLED WITH FLANGES OR UNION CONNECTIONS ADJACENT TO THE HEATER, MATER HEATING EQUIPMENT SHALL COMPLY WITH FBC 2010 SECTION 412,1 ALL HEATERS WISH AND HEATER, MATER HEATING EQUIPMENT SHALL COMPLY WITH FBC 2010 SECTION 412,1 ALL HEATERS WISH AND HEATER, MATER HEATING EQUIPMENT SHALL COMPLY WITH FBC 2010 SECTION 412,1 ALL HEATERS WISH AND HEATER, MATER HEATING EQUIPMENT SHALL BE PROVIDED WITH A COVER TO REDUCE HEAT LOSS (IF REQUIRED BY THE CITY)

## 16-GAS PIPING: GAS PIPING SHALL COMPLY WITH FBC 2010, SECTION 424:2:15 & R4101:15 FUEL GAS.

11- ELECTRICAL :
POOL LOCATION AND ELECTRICAL WIRING AND EQUIPMENT SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE 2008, SPECIFICALLY SECTION 680.

LADDERS AND STEPS:
PER FBC 2010, SECTION 424.2.18 & R4101.18 ALL POOLS SHALL BE PROVIDED WITH A LADDER OR STEPS INTHE SHALLOW END WHERE WATER EXCEEDS 24 PER FBC 2010, SECTION 424.2.18 & R4101.18 ALL POOLS SHALL BE LADDERS, STAIRS OR UNDERWATER BENCHESSWIDWOUTS IN THE DEEP END.

PER FBC 2010, SECTION 424.2.20 & R4101.20 THE ENTIRE DESIGN OF MATCHED COMPONENTS SHALL HAVE SUFFICENT CAPACITY TO PROVIDE A COMPLETE TURNOVER OF POOL MATER IN 12 HOURS OR LESS.

20- POOL FITTINGS :
PER FBC 2010, 9ECTION 424.2.21 & R4101.21 POOL FITTINGS SHALL BE OF AN APPROVED TYPE AND DESIGN AS TO BE APPROPRIATE FOR THE SPECIFIC APPLICATION. PER FBC 2010, SECTION 424.2.213.2 JOINTS AND C CONNECTIONS, FBC PLUMBING SEC. 605.21, PURPLE PRIMER REQUIRED ON PVC PIPING

21- SKIMMERS:
PER FBC 2010, SECTION 424.2.21.2 & R4101.21.2 SKIMMERS SHALL BE INSTALLED ON THE BASIS OF ONE PER 800 SF OF SURFACE AREA OR FRACTION THEREOF 22- HYDROSTATIC RELIEF DEVICE :
PER FBC 2010, SECTION 424.2.21.4 & R4101.21.4 IN AREAS OF ANTICIPATED WATER TABLE, AN APPROVED HYDROSTATIC RELIEF DEVICE SHALL
BE INSTALLED, EXCEPTION IS PLASTIC LINER POOLS.

### 28- CONCRETE / STEEL:

CONCRETE 19 TO BE A MIX DESIGNED IN ACCORDENCE WITH ASTM C-44 BY A RECOGNIZED TESTING LABORATORY TO ACHIEVE A STRENGTH OF 2000 PSI, AT 20 DAYS (UNLESS OTHERWISE NOTED) WITH A PLASTIC AND YORK-ASELE MIX. PREUMÁTICALLY APPLIED CONCRETE AND/OR SHOTCKETE SHALL BE PLACED IN ACCORDANCE WITH ACI 394.2764 AND ACI 396.240, A DESTED SHOULD SHOULD APPLIED TO SHOULD APPLIED IN ACCORDANCE WITH ACI 394.2764 AND ACI 396.240, A CERTIFICATE OF MANUFACTURERES MIX AND STRENGTH 19 TO BE PORVIDED IN OWNTER 19 TO BE ADDED AFTER TRUCK LEAVES PLANT WITHOUT APPROVAL OF ENGINEER PLANT CONTROL 19 REQUIRED. MAXIMUM MIX TIME AT POINT OF DEFOSIT 19 40 MINUTES. CONCRETE WORK SHALL BE AS PER REQUIREMENTS AND RECOMMENDATIONS OF ACI 201-34. PRINTORING, DEFORMED STEEL BARS SHALL BE ASS GRADE 46/15 GRADE 50/11 ERVISES NOTED). FREE FROM OIL, LOGIS SCALE AND LOGIS RUST, REINFORCING, DEFORMED STEEL BARS SHALL BE ASS GRADE 46/15 GRA

24-50IL STATEMENT:
IN ACCORDANCE WITH FBC SECTION 1818, HYMZ BEARING CAPACITY OF SOIL; BASED UPON RATIONAL ANALYSIS AND KNOWN VALUES IN THE YICINITY, THE IN-PLACE BEARING CAPACITY OF THE SOIL BENEATH THE POOL AND RELATED STRUCTURES SHOWN WITHIN THESE PLANS IS 2000 FSF. AFTER EXCANATION AND COMPACTION IN ACCORDANCE WITH CURRENT EDITION OF FBC. SHOULD ANY MUCK, MARL OR OTHER ORGANIC SOILS BE DISCOVERED ON EXCANATION, THEY SHOULD BE REMOVED IN THEIR ENTIRETY, ALL CONSTRUCTION SHALL STOP AND THE ENGINEER OF RECORD SHALL BE CONTACTED TO CONDUCT AN INSPECTION, STRUCTURAL ELEMENTS ARE DESIGNED WITH A REQUIRED BEARING CAPACITY OF 2000 FSF. UNLESS OTHERWISE SPECIFIED.

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## 25- POOL STAKING :

THIS DESIGN ENGINEER ASSUMES NO RESPONSIBILITY FOR POOL CONSTRUCTION IN EASEMENT OR REQUIRED SETBACKS AREAS, PLOT PLANS NOT PREPARED FROM LEGAL SURVEYS OF THE EXISTING LOT AND RESIDENCE ARE SO INDICATED. THE POOL CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND ESTABLISH LOT LINES & LOCATION OF UTILITIES AT THE SITE AND CONTACT THE H.C.E. IF DIFFERENT THAN INDICATED ON PLAN. MINIMUM CLEARENCE DIMENSIONS SHALL BE HELD AS REQUIRED BY THE LOCAL REGULATORY AGENCY.

26- EXSTING STRUCTURES:
THE POOL CONTRACTOR SHALL ALMAYS TAKE ALL PRECAUTIONS TO PROTECT EXISTING STRUCTURES FROM FAILURE BY SHEETING AND/OR SHORING OR OTHER METHODS. THE DESIGN ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE SAFETY OF EXISTING STRUCTURES.
IN CASE OF FOOTINGS UNDERWINING, CONTRACTOR SHALL POUR CONCRETE BETWEEN POOL AND FOOTING, TOP OF CONCRETE SHALL BE BOTTOM OF FOOTING, MIDTH OF FOURED CONCRETE SHALL BE FOOTING MIDTH AT A MINUMUM

27- WATER SERVICE:
PER FBC 2010 SECTION 424.2.9.8. R4101.9 UNLESS AN APPROVED TYPE OF FILLING SYSTEM IS INSTALLED, ANY MATER SUPPLY WHICH IN THE JUDGMENT OF THE ADMINISTRATIVE AUTHORITY MAY BE USED TO FILL THE POOL, SHALL BE EQUIPPED WITH BACKFLOW PROTECTION, NO OVER THE RIM FILL SPOUT SHALL BE ACCEPTED UNLESS LOCATED UNDER A DIVING BOARD OR PROPERLY QUARDED.

## ALL POOL EQUIPMENT SLABS SHALL COMPLY WITH SECTION 1820.3 OF FBC 20:

24- HANDHOLD :
ANSI-NSPI-5 ARTICLE XV SECTION 13.13. A SECURED ROPE OR CERAMIC HANDHOLDS MUST BE PLACED AT OR NO MORE THAN 12" ABOVE THE NORMAL MATERLINE OF THE POOL 90- POWER LINE : RHEAD ELECTRIC LINES MUST BE LOCATED 10 FEET AND UNDERGROUND ELECTRIC LINES MUST BE LOCATED 5 FEET FROM POOL WATER

### 91- BACKFILL & COMPACTION BACKFILL CONSTRUCTION ARE

BACKFILL CONSTRUCTION AREAS TO PROPER ELEVATION, IF NEEDED USING CLEAN GRANULAR MATERIAL FREE OF ORGANICS AND OTHER DELETERIOUS MATERIALS AND PLACED IN LIFTS NOT TO EXCEED 12 INCHES IN THICKNESS AND COMPACTED TO 493% OF THE ASTM. D.1937 MODIFIED PROCTOR METHOD, BACKFILLING SHALL COMMENCE ONLY FOLLOWING REMOVAL FROM EXCAVATION OF ALL FORMS, MODD, DEBRIS, AND OTHER DELETERIOUS MATERIALS, COMPACTION SHALL BE WITH EQUIPMENT SOILLE BING COMPACTED, MOISTEN OR AERATE MATERIAL AS NECESSARY TO PROVIDE MOISTURE CONTENT COMPACT EACH LAYER TO NOT LESS THAN PERCENTAGE OF THAT WHICH WILL READILY FACILITATE OBTAINING SPECIFIED COMPACTION WITH EQUIPMENT USED, ENSURE THAT THE COMPACTION OF PREVIOUSLY PREPARED FILL AREAS HAS BEEN MAINTAINED PRIOR TO PLACING NEW LAYERS, AFTER INSTALLATION OF ANY PLUMBING AND ELECTRICAL PIPING DISTURBED AREAS SHALL BE RECOMPACTED.

TO EMPTY POC TO EMPTY POOL AFTER CONSTRUCTION, FOR REPAIRS OR ANY OTHER REASON, THE HYDROSTATIC UPLIFT PRESSURES BENEATH THE POOL MUST BE ELIMINATED TO PREVENT THE POOL FROM FLOATING UPWARD. THE OWNER MUST CONSULT A POOL CONTRACTOR OR POOL REPAIR CONTRACTOR EXPERIENCED IN ELIMINATING UPLIFT PRESSURES.

### 99- NOTE 1: THIS PLAN IS NOT TRANSFERABLE FROM ONE CONTRACTOR TO ANOTHER

94- NOTE 2:
UNLESS OTHERWISE SPECIFIED, ALL DETAILS SHOWN ARE NOT TO SCALE.

95- NOTE 3 :
POOL MALL SHALL BE REINFORCED MITH #5@6" O.C.E.M. MHERE LESS THAN 3 FEET FROM ANY EXISTING STRUCTURE OR PATIO (SEE SHEETING & SHORING DETAIL)

## 96- NOTE 4: POOL AND DECK ELEVATION SHALL BE LOWER THAN FINISH FLOOR ELEVATION OF THE HOUSE

97- NOTE 5: THERE IS ALVAYS THE POSSIBILITY THAT CONDITIONS IN THE FIELD WAY BE DIFFERENT FROM THOSE INDICATED IN AN ENGINEERING PERMIT DRAWINGS; THEREFORE, IF DIFFERENT CONDITIONS ARE ENCOUNTERED BEFORE OR DURING CONSTRUCTION, THE ENGINEER OF RECORD SHALL BE NOTIFIED TO REVIEW THE FINDINGS AND MAKE RECOMMENDATIONS AS

39- NOTE 6:
STRUCTURAL ENGINEER MUST CERTIFY OR DESIGN REPLACEMENT ANCHOR AND DEADMAN SYSTEM FOR SEAVALL MITH IN 15 FEET OF POOL SEAVALL ANCHOR SYSTEM INSTALLATION MUST BE COMPLETE FRIOR TO START OF POOL CONSTRUCTION.

94. NOTE 7: NO DIVING BOARD AND NO DIVING IS ALLOW ON ANY FOOL LESS THAN 8 FEET DEEP AND SPECIFIALLY DESIGN FOR DIVING

### 40- BONDING

CONTINUOUS SINGLE #3 ANG BARE COPPER WIRE SHALL BE BURIED TO A MIN. 4" TO 6" BELOW SUBGRADE, 18" TO 24" FROM INSIDE THE WALL OF SWIMMING POOL-SPA AROUND THE SMIMMING POOL-SPA PERIMETER, AND SHALL BE CONNECTED TO THE POOL STEEL REINFORCEMENT AT A MIN. 4 DIFFERENT LOCATIONS, EQUALLY SPACED.

## 41- NOTE 8 : IT 19 THE CONTRACTOR RESPONSIBILITY TO PROVIDE THE ENGINEER WITH AN ACCURATE SURVEY AND DRAWINGS THAT REPRESENTS THE EXISTING FIELD CONDITIONS, LE ADDITIONS, TREES, AC PADS, WALKWAYS, ETC.

42- GPCI PROTECTION

GPCI PROTECTION ; DUTLETS SUPPLYING POOL PUMP MOTORS FROM BRANCH CIRCUITS WITH SHORT-CIRCUIT AND GROUND-FAULT PROTECTION RATED 15 OR 20

AMPERES, 129 YOLT, OR 240 YOLT, SINGLE PHASE, WHETHER BY RECEPTACLE OR DIRECT CONNECTION SHALL BE PROVIDED WITH GROUND-FAULT CIRCUIT-INTERRUPTER
PROTECTION FOR PERSONNEL PER NEC 2008 660.22 (B)

