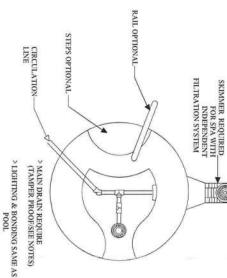
SB836, 6-20-07 FOR BONDING AND GROUNDING SYSTEMS FOR SWIMMING POOLS, THE USE OF FOR BONDING AND GROUNDING CONDUCTOR MADE OF #8 AWG. BARE SOLLD AN UNDERGROUND BONDING CONDUCTOR MADE OF #8 AWG. BARE SOLLD COPPER WIRE BURIED TO A MINIMUM DEPTH OF 4 INCHES TO 6 INCHES BELOW SUBGRADE, AND 18 TO 24 INCHES FROM INSIDE WALL OF A SWIMMING POOL OR SPA, IS DEEMED A PERMISSIBLE ALTERNATIVE OR EQUIVALENT TO COMPLIANCE WITH 8, 680,26(e) OF THE NATIONAL ELECTRICAL CODE. EXCEPTION: ROPE AND FLOATS INSTALLED IF LESS THAN 4'-6" FOOTING OPTIONAL OPTIONAL 12V LIGHT W/IRANS ½" BRASS OR PVC (SEE NOTES) SWIM-OUT OR LADDER REQUIRED (GR/#8 CU) WHERE DEPTH OVER 5' DEEP (SEE NOTES) GENERAL POOL PLAN POOL SECTION DETAIL - 8" X 8" FOOTING W/(2) #3 BARS PAVERS OR 4" DECK 3,000 psi (Min.) CONC. W/#3 BAR, 30" O.C. 2'-9" Min EXCEPT FOR SLOPING ENTRIES, 4'-0" Max NO LIMITATIONS TO SHAPE EXCEPT FOR 8' Min. TO SLOPE CHANGE ENTRY REQUIRED (SEE NOTES) BEAM & "7" BAR OPTIONAL DIVING HANDHOLDS DECK FINISH PER CONTRACT (NON-SLIP) ■ 11.0° Max. OPTIONAL DECK W/ POOL FINISH PER CONTRACT



FLORIDA BUILDING CODE R4501

SPECIAL SPA REQUIREMENTS:

FLOW THRU SPA NO SKIMMER

SKIMMER

TYPICAL GR FOR #3
REBAR, 2' OUT WITH
#8 CU TO PUMP

THE POOL CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL DETAIL DESIGN REQUIREMENTS FOR EACH INDIVIDUAL POOL IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, AND ALL CONSTRUCTION SHALL MEET ALL APPLICABLE CODES INCLUDING PLUMBING, ELECTRICAL AND GAS. PIPING SHALL BE SCH. 40 PVC, NSFpw, MAX PRESSURE VELOCITY 10 FPS, SUCTION 6 FPS. THE POOL PLAN SHALL SHOW THE DESIGN PLUMBING AS PER THE SAMPLE WITH THE INFORMATION REQUIRED SHOWN. MAIN DRAIN AN ALTERNATE THE APPROVED DRAINS MAY BE PLACED ON DIFFERENT PLANES. THE TWO DRAINS PLUMBING SHALL BE TWO DRAINS SEPARATED BY 3' WITH APPROVED ANSI/ASME A112.19.8.2009 COVERS. AS

-MAXIMUM WATER DEPTH 4', MAXIMUM SEAT DEPTH 28", MAX
-FLOOR SLOPE 1:12
-STEPS. MIN. TREAD 10" X 12", 7" MIN. RISER, 12" MAX
RISER EXCEPT THE BOTTOM STEP MAY BE 14" IF IT IS
THE SEAT. INTERMEDIATE TREADS AND RISERS TO
BE UNIFORM. IF THE SPA IS OPERATED
INTERMITTENTLY IT SHALL HAVE A ONE HOUR
TURNOVER, IF CONTINUOUS A SIX HOUR TURNOVER
-MAXIMUM TEMPERATURE 104 DEGREES.
-MEET ANSI/NSPI ARTICLE XVII, SAFETY
INSTRUCTION/SAFETY SIGNS,
-PRESSURE TEST PIPING AT 35 PSI FOR 15 MINUTES OR
MEET LOCAL CODE IF GREATER.

MUST BE DESIGNED FOR A MINIMUM 25 gpm.
THE FOLLOWING SHALL BE LABELED WITH
LABEL MARKER TAPE AT THE FILTER LOCATION:
PIPES, VALVES, PUMP(S) OFF SWITCH.

SHALL HAVE A COMMON SUCTION LINE. SUCTION GRATES MAY BE USED IF APPROVED AT A MAXIMUM OF 1 ½ FPS AND THE SUCTION PIPING IS RECESSED FROM THE GRATE THE DISTANCE EQUAL TO THE

SUCTION PIPE SIZE, SKIMMERS DO NOT REQUIRE

GENERAL SPA PLAN

> NO LIMITATIONS ON SHAPE

7TH EDITION-RESIDENTIAL AND NEC 2017.
-NO OUTLET OR OVERHEAD POWER WITHIN 10' IF -WIRING AND BONDING AND ALL ELECTRICAL TO WITHIN IS' PROTECT BY GFI, TRANSFORMER MIN. 10' FROM POOL, 8" ABOVE WATER, J BOX 4' FROM POOL, BRASS TO J BOX OR TRANSFORMER WHICH EVER IS COMPLY WITH CHAPTER 42, FLORIDA BUILDING CODE

SAMPLE ONLY, EACH APPLICATION FOR PERMIT SHALL BE BASED ON A TOTAL DYNAMIC HEAD OF 60 ft.

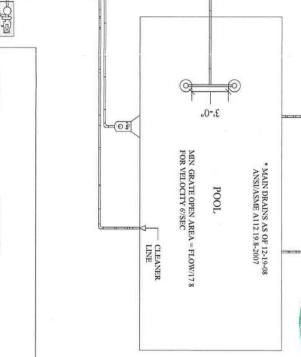
Determine System Flow Rate:
Minimum Flow Rate Required: 35gpm per skimmer (Required: 1 Skimmer per 800 sf) gallons

Pool Volume: 500 sq. ft x. 4 ave depth x 7.481 gal/cf = 15
Turnover Time in Hours: 6 hours x 60 min/hr = 360 minutes
Flow Rate: 15,000 gallons / 360 minutes = 42 gpm $\frac{4}{1000}$ ave depth x 7.481 gal/cf = 15,000 hours x 60 min/hr = 360 minutes

PIPE SIZING CHART (MAXIMUN)

SUCTION

PRESSURE



ANSI/APSP ANSI/APSP

PUMP. STARITE P6E6DL OR HAYWARD SUPERII 1/2 HP 42 GPM 60° TURN

FOR POOLS WITH VOLUME =15,000 GALS.

35 GPM 60 90 135 235

65 GPM 105 147 230 396

TURNOVER RATE = 6 HOURS = 360 MINS.

FILTER: STARITE PTM 50, 50 GPM OR HAYWARD C751, 75 GPM CAPACITY MAIN DRAIN: HAYWARD W61048E

CLEANER: HAYWARD VAC LOC

ELECTRICAL REQUIREMENTS:

INSTALI -ALL POOI PROVIDED END WHEI

INSTALLATION REQUIREMENTS.

ALL POOLS WHETHER PUBLIC OR PRIVATE SHALL BE PROVIDED WITH A LADDER OR STEPS IN THE SHALLOW END WHERE THE WATER DEPTH EXCEEDS 24 INCHES (610 MM). IN PRIVATE POOLS WHERE WATER DEPTH EXCEEDS 5

FEET (1524 MM) THERE SHALL BE LADDERS, STAIRS OR UNDERWATER BENCHES/ SWIM-OUTS IN THE DEEP END. WHERE MANUFACTURED DIVING EQUIPMENT IS TO BE

NCHES OR SWIM-OUTS SHALL BE RECESSED OR

USED, BEN LOCATED -CIRCULA

THE EXAMINED Compliance Received COPY

-APPROVIDE MANUFACUTRED INLET FITTINGS FOR THE RETURN OF RECIRCULATED POOL WATER SHALL BE PROVIDED ON THE BASIS OF AT LEAST ONE PER 300 SQUARE FEET (28 m2) OF SURFACE AREA. SUCH INLET FITTINGS SHALL BE DESIGNED AND CONSTRUCTED TO INSURE AN ADEQUATE SEAL TO THE POOL STRUCTURE AND SHALL INCORPORATE A CONVENIENT MEANS OF SEALING FOR PRESSURE TESTING OF THE POOL CIRCULATION PIPING. WHEN MORE THAN ONE INLET IS REQUIRED, THE SHORTEST DISTANCE BETWEEN ANY TWO REQUIRED THE SHORTEST DISTANCE BETWEEN ANY TWO REQUIRED SHALL MEET ANSI-ZZI-56 OR UL 1261 OR UL 559. CIRCULATION SYSTEMS, COMPONENTS AND EQUIPMENT SHALL COMPLY WITH NSF 50.
-THE MAXIMUM TURNOVER RATE IS 12 HOURS.
-FILTERS SHALL HAVE AN AIR RELEASE AND PRESSURE GAGE.
-PUMPS 3 HP AND LESS SHALL MEET ANSI/UL1081 CORROSION RESISTANT WITH STRAINER AND M THE REQUIRED FLOW.
-SURFACE SKIMMERS SHALL MEET NSF 50 AND THERE SHALL BE ONE FOR EVERY 800 SQUARE F OF SURFACE AREA. SKIMMERS SHALL MEET NSF 50 AND SHALL BE ONE FOR EVERY 800 SQUARE FEET HP AND LESS SHALL MEET ANSI/UL1081 SION RESISTANT WITH STRAINER AND MEET

-PRESSURE TEST PIPING AT 35 PSI FOR 15 MINUTES OR MEET LOCAL CODE IF GREATER. CTANT EQUIPMENT SHALL COMPLY WITH

IT HAS BEEN CERTIFIED THAT THESE DESIGN
REQUIREMENTS ARE IN COMPLIANCE WITH THE
FLORIDA BUILDING CODE 7TH EDITION, R4501, 454.2-2020,
ANSI/APSP/ICC 3, ANSI/APSP/ICC 4, ANSI/APSP/ICC 5, AND
ANSI/APSP/ICC 6 AND ANSI/APSP/ICC 7, ANSI/APSP/ICC 14, WASTE DISPOSAL TO COMPLY WITH SECTION 454.2.10 TIAL SWIMMING BARRIER REQUIREMENTS TO

HYDRO FUN POOLS, LLC

Standard Residential Pool and/or Spa Design

G.B. COLLINS ENGINEERING P.A. CERTIFICATE OF AUTHORIZATION 27934

-DESIGN, CONSTRUCTION AND WORKMANSHIP
SHALL BE IN CONFORMITY WITH THE
REQUIREMENTS OF APSP/ICC 3, APSP/ICC 4, APSP/ICC 5,
AND APSP/ICC 6 AND APSP/ICC 7 BASED ON THE
POOL TYPE
-SEE NSPI FOR DIVING WATER ENVELOPES.
-SLIDES SHALL MEET THE MANUFACTURES

GENERAL DESIGN REQUIREMENTS

AQUATIC ENGINEERING CONSULTANTS 300 ALTERNATE 19 NORTH, SUITE A PALM HARBOR, FLORIDA 34683 gb_collins@verizon.net (727)-442-8443

COMPLIES WITH FLORIDA BUILDING CODE, 7TH EDITION (2020)

POOL/SPA, DECK, BEAM, WALL, FLOOR

6" Min. WALL & FLOOR THICKNESS. 3,000 psi (MIN.) CONC. #3 BARS ON 12" CENTERS EITHER WAY, TIE ALT. INTERSECTIONS 15" MIN. OVERLAP. 2" MIN. COVERAGE ON STEEL W/CONC. TO ASTM A15. A16. ASTM A30-5

OR (1) #5 BAR

FINISH ¾*
MARCITE OR
EXPOSED
AGGREGATE

MAIN SUCTION PIPE SIZE 2" SKIMMER SUCTION PIPE SIZE 2"

Structural subject to suitable soil conditions

CLEANER/VAC PIPE SIZE 12"

RESIDENCE

SAMUEL A. LIBERATORE, P.E. #55740 **JANUARY 4, 2021**