





CODE REQUIREMENTS : PRIVATE SYMMMING FOOL AND SPAS MUST COMPLY WITH CHAPTER 424 & R4101 FLORIDA BUILDING CODE 2001

MECHANICAL REQUIREMENTS:

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

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.

ALL POOL AND SPA SUCTION INLETS SHALL 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.

4- ENGINEERING DESIGN :
DESIGN, CONSTRUCTION AND MORKMANSHIP SHALL BE IN COFORMITY MITH ANSINSPI 3, 4, 5 AND 6 2003, PUBLISHED BY THE INTERNATIONAL AQUATICS FOUNDATION OR OTHER ACCEPTED ENGINEERING PRACTICES.

SAFETY NOTE : DO NOT USE OR OPERATE POOL OR SPA IF THE SUCTION INLET FITTING IS BROKEN, MISSING OR LOOSE.

7-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 3 FEET PER SECOND /FPS, ALL OTHER SUCTION PIPING VELOCITY IS 3 FEET PER SECOND /FPS, ALL OTHER SUCTION PIPING VELOCITIES SHALL BE 6 FPS FOR PUBLIC POOLS OR 8 FPS FOR RESIDENTIAL POOLS.

8-MAX. SYSTEM FLOW RATE PER ANSI/APSP-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

- SIMPLIPIED TOH CALCULATION, OR
- THE MAX. FLOW CAPACITY (DETERMINE FROM PUMP FLOW CURVE) OF THE NEW OR REPLACEMENT PUMP (MHICH SHALL BE LIMITED BY THE CRITERIA OF ANSIMPSP-T #4.4

THE PUMP CURVE" OPTION HAS FAILED 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

IF 50, THE TOTAL DYNAMIC HEAD TDH CALCULATION SHALL BE REQUIRED TO DETERMINE IF THE SYSTEM IS ACCEPTABLE. USING TDH, DETERMINE NEW MAX, FLOW RATE FROM PUMP CURVE, IF IT IS GREATER THAN DRAIN FLOW RATE OR 8 FPG SUCTION FLOW RATE OR 10 FPS DISCHARGE FLOW RATE, THE SYSTEM IS NOT ACCEPTABLE.

-IF A VARIABLE SPEED PUMP IS USED, USE THE MAX, PUMP FLOW IN CALCULATIONS
-FOR SIDE DRAINS, USE APPROPRIATE SIDE WALL DRAIN FLOW AS PUBLISHED BY MANUFACTURER - IN-FLOOR SUCTION OUTLET COVERIGRATE MUST CONFIRM TO MOST RECENT EDITION OF ASMEIANS) A112.19,8 AND BE EMBOSSED MITH THAT EDITION
PUMP, FILTER & HEATER MAKE AND MODEL CANNOT CHANGED AND EQUIPMET LOCATION CANNOT BE MOVED CLOSER TO POOL MITHOUT SUBMITTING A REVISED PLAN AND

- MIN. SYSTEM FLOW BASED ON MI. FLOW PER SKIMMER OF 35 GPM - SYSTEM FLOW RATE MUST NOT EXCEED APPROVED COVER FLOW RATES - CENTER TO CENTER DISTANCE BETWEEN THE SUCTION PIPE OUTLETS SHALL BE 36 INCH MIN. - CHANNEL TYPE (MITH 2 OR 3 OUTLETS IN ONE PORT) SHALL BE AT LEAST 3" WIDE BY 31" LONG

9- PUMP:
PER FBC 424.2.7.1 STRAINER. POOL CIRCULATING PUMPS SHALL BE EQUIPPED ON THE INLET SIDE WITH AN APPROVED TYPE HAIR AND LINT STRAINER WHEN PER FBC 424.2.7.1 STRAINER. PER 424.2.7.2 INSTALLATION TO BE COMPLETED IN ACCORDANCE MANUFS RECOMMEDATIONS. PER 424.2.7.3 INSTALLATION TO BE COMPLETED IN ACCORDANCE MANUFS RECOMMEDATIONS. PER 424.2.7.3 INCH YACUUM PUMPS SHALL HAVE DESIGN CAPACITY AT THE FOLLOWING HEADS; 1) PRESSURE DIATOMACEOUS EARTH-A LEAST 60 FEET, 2) VACUUM D.E. 20 INCH YACUUM ON THE SUCTION SIDE AND 40 FEET TOTAL HEAD; 3) RAPID SAND -AT LEAST 45 FEET, 4)HIGH RATE - AT LEAST 60 FEET, PER 424.27.5 PUMP IMPELLERS, ON THE SUCTION SIDE AND 40 FEET TOTAL HEAD; 3) RAPID SAND -AT LEAST 45 FEET, 4)HIGH RATE - AT LEAST 60 FEET, PER 424.27.5 PUMP IMPELLERS, ON THE SUCTION SIDE AND 40 FEET TOTAL HEAD , 3) RAPID SAND - AT LEAST 45 FEET, 4)HIGH RAT SHAFT, WEAR RINGS AND OTHER WORKING PARTS SHALL BE CORRISION RESISTANT MATERIALS, CLEANER FITTINGS :

PER ANSINSPI-5 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 424.2.8.1 & R4101.8.1 VALVES SHALL BE MADE OF MATERIALS THAT ARE APPROVED IN THE FLORIDA BUILDING CODE, PLUMBING, VALVES 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

11- WASTE WATER DISPOSAL :
PER FBC 424.2.10 & R4101.10 DIRECT OR INDIRECT CONNECTIONS CANNOT BE MADE TO EXISTING FACILITIES WITHOUT THE PRIOR APPROVAL OF THE ADMINISTRATIVE AUTHORITY.

13- WATER SERVICE :
PER FBC 424.2.4 & R4101.4 BACKFLOW PREVENTION DEVICE REQUIRED ON ALL POTABLE WATER SERVICE

14-TESTS:
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 PYC PIPE AND FITTINGS, SECTION 424.2.12.1 & R4101.12.2 PRESSURE TESTS.

ACCEPTED ENGINEERING PRACTICES AND SHALL BEAR THE LABEL OF A RECOGNIZEDTESTING AGENCY, AND SHALL INCLUDE A CONSIDERATION OF COMBUSTION AR, VENTING AND 6AS SUPPLY REQUIREMENTS FOR WATER HEAFERS SEC, 424.2 14.1 & RA101.14.1 IT MUST CONTAIN A THERMOSTATIC OR HIGH PRESSURE CONTROL SWITCH SO THE POOL WATER DOES NOT EXCEED 104 DEGREES F. SEC, 424.2 14.4 & RA101.14.4 WATER HEATING EQUIPMENT SHALL BE INSTALLED MITH FLANGES OR UNION CONNECTIONS ADJACENT TO THE HEATER, WATER HEATING EQUIPMENT-SWIMMING FOOL WATER HEATING EQUIPMENT SHALL COMPLY WITH FIG. 412.1 ALL HEATERS MUST HAVE AN INTERNAL CHECK VALE, PER FBG 13-612.1 ABC 23.2 THE POOL AND SPA SHALL BE PROVIDED WITH A COVER TO REDUCE MATER HEATING EQUIPMENT:
SMIMMING POOL MATER HEATING EQUIPMENT SHALL CONFORM TO THE DESIGN CONSTRUCTION AND INSTALLATION REQUIREMENTS IN ACCORDANCE WITH HEAT LOSS (IF REQUIRED BY THE CITY)

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17-GAS PIPING SHALL COMPLY WITH FBC, FUEL GAS SEC. 424.2.15 & R4101.15

18-ELECTRICAL :
POOL LOCATION AND ELECTRICAL MIRING AND EQUIPMENT SHALL COMPLY MITH THE NATIONAL ELECTRICAL CODE 2008, SPECIFICALLY SECTION 680

LADDERS AND STEPS : PER FBC 424.2.18 & R4101.18 ALL POOLS SHALL BE PROVIDED WITH A LADDER OR STEPS INTHE SHALLOW END WHERE WATER EXCEEDS 24 INCHES. WHERE WATER DEPTH EXCEEDS 5 FEET, THERE SHALL BE LADDERS, STAIRS OR UNDERWATER BENCHES/SWIOMOUTS IN THE DEEP END.

14- FILTERS :
PER FBC 424.220 & 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 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 424.2.13.2 JOINTS AND C CONNECTIONS, FBC PLUMBING SEC, 605.21, PURPLE PRIMER REQUIRED ON PYC PIPING

21-SKIMMERS. PER FBC 424,2,21,2 & R4101,21,4 SKIMMERS SHALL BE INSTALLED ON THE BASIS OF ONE PER 800 SF OF SURFACE AREA OR FRACTION THEREOF

PER FBC 424,2,21.4 & R4101,21.4 IN AREAS OF ANTICIPATED WATER TABLE, AN APPROVED HYDROSTATIC RELIEF DEVICE SHALL BE INSTALLED. EXCEPTION 15 PLASTIC LINER POOLS. RELIEF DEVICE

23- CONCRETE / STEEL :

FOR REINFORCING CONCRETE (ACI 318-04). IN CASE OF CONFLICT, THE MORE CONSERVATIVE VALUE(S) SHALL BE USED CONCRETE IS TO BE A MIX DESIGNED IN ACCORDENCE WITH ASTM C-94 BY A RECOGNIZED TESTING LABORATORY TO ACHIEVE A STRENGTH OF 3000 PSI, AT 26 DAYS (UNLESS OTHERWISE NOTED) WITH A PLASTIC AND WORK-ABLE MIX PREUMATICALLY APPLIED CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 304.2R-04 AND ACI 506.2-04, RESPECTIVELY, ALL OTHER CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 304R-04, A CERTIFICATE OF MANUFACTURER'S MIX AND STRENGTH IS TO BE EXPEDE IN OF DEFENDED AFTER RUCK, LEAVES PLANT WITHOUT APPROVAL OF ENGINEED IN ACCORDANCE WITH ACI 304R-04, A CERTIFICATE OF MANUFACTURER'S MIX AND STRENGTH IS TO BE EXPEDE AFTER RUCK, LEAVES PLANT WITHOUT APPROVAL OF ENGINEED AFTER RUCK, LEAVES PLANT WITHOUT APPROVAL OF ENGINEER PLANT CONTROL IS REQUIRED. MAXIMUM MIX TIME AT FOINT OF DEPOSIT IS 90 MINUTES, CONCRETE WORK SHALL BE AS PER REQUIREMENTS AND RECOMMENDATIONS OF ACI 301-04, REINFORCING, DEFORMED STEEL BARS SHALL BE AS IS GRADE 40 (UNLESS OTHERWISE NOTED), FREE FROM OIL, LOOSE SCALE AND LOOSE RUST. REINFORCING, DEFORMED STEEL BARS SHALL BE AS IS GRADE 40 (UNLESS OTHERWISE NOTED), FREE FROM OIL, LOOSE SCALE AND LOOSE RUST. REINFORCING, DEFORMED STEEL BARS SHALL BE BENT, LAPPED, PLACED, PLACED, PLACED, SUPPORTED AND THE BUILDING CODE REQUIREMENTS.

24- SOIL STATEMENT:

IN ACCORDANCE WITH FBC SECTION 1818, HYHZ BEARING CAPACITY OF SOIL; BASED UPON RATIONAL ANALYSIS AND KNOWN VALUES IN THE VICINITY, THE IN-PLACE BEARING CAPACITY OF THE SOIL BENEATH THE POOL AND RELATED STRUCTURES SHOWN WITHIN THESE PLANS IS 2000 PSF AFTER EXCAVATION AND COMPACTION IN ACCORDANCE WITH CURRENT EDITION OF FBC. SHOULD ANY MUCK, MARL OR OTHER ORGANIC SOILS BE DISCOVERED ON EXCAVATION, 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 PSF, 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- EXISTING STRUCTURES:
THE POOL CONTRACTOR SHALL ALWAYS TAKE ALL PRECAUTIONS TO PROTECT
THE PARISH ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE SAFE EXISTING STRUCTURES FROM FAILURE BY SHEETING AND/OR SHORING OR OTHER STY OF EXISTING STRUCTURES.

IN CASE OF FOOTINGS UNDERMINING, CONTRACTOR SHALL FOUR CONCRETE BETWEEN POOL AND FOOTING, TOP OF CONCRETE SHALL BE BOTTOM OF FOOTING, WIDTH OF POURED CONCRETE SHALL BE FOOTING WIDTH AT A MINUMUM

28- CONCRETE SLABS PIPING SHALL BE SCH. 40 BEARING NSF APPROVAL PER FBC 2007 R4101. PIPING CAN BE (IF NEEDED) ENCASED IN THE CONCRETE OF THE POOL SHELL

ALL POOL EQUIPMENT SLABS SHALL COMPLY WITH SECTION 1820.3 OF FBC 2007

24- HANDHOLD

30- POWER LINE ANSI-NSPI-5 ARTICLE XV SECTION 15.13. A SECURED ROPE OR CERAMIC HANDHOLDS MUST BE PLACED AT OR NO MORE THAN 12" ABOVE THE NORMAL MATERLINE OF THE POOL RHEAD ELECTRIC LINES MUST BE LOCATED 10 FEET AND UNDERGROUND ELECTRIC LINES MUST BE LOCATED 5 FEET FROM POOL WATER

31- BACKFILL & COMPACTION

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 NOHES IN THICKNESS AND COMPACTED TO 95% OF THE ASTM D.155T MODIFIED PROCTOR METHOD. BACKFILLING SHALL COMMENCE ONLY FOLLOWING REMOVAL FROM EXCAVATION OF ALL FORMS, MOOD, DEBRIS, AND OTHER DELETEROUS MATERIALS, COMPACTION SHALL BE WITH EQUIPMENT SUITED TO SOIL BEING COMPACTIED, MOISTEN OR AERATE MATERIAL, AS NECESSARY TO PROVIDE MOISTURE CONTENT COMPACT EACH LAYER TO NOT LESS THAN PERCENTAGE OF THAT YHIGH ONLY FACILITATE OBTAINING SPECIFIED COMPACTION WITH EQUIPMENT USED, ENSURE THAT THE COMPACTION OF PREVIOUSLY PREPARED FILL AREAS HAS BEEN MAINTAINED PRIOR TO FLACING NEW LAYERS, AFTER INSTALLATION OF ANY PLUMBING AND ELECTRICAL PIPING DISTURBED AREAS SHALL BE RECOMPACTED.

32- ENTRAPMENT TESTING AND CERTIFICATION :
ALL POOL AND 5PA SUCTION INLETS SHALL BE PROVIDED WITH A COVER THAT HAS BEEN TESTED AND ACCEPTED BY A RECOGNIZED TESTING FACILITY AND COMPLY ANSIASME A112.19.8 "SUCTIONFITTINGS FOR USE IN SYMMMING POOLS, SPAS, HOT TUBS AND WHIRLPOOL BATHTUB APPLIANCES," EXCEPTION : SURFACE SKIMMERS, ANSIASME A112.19.8 "SUCTIONFITTINGS FOR USE IN SYMMMING POOLS, SPAS, HOT TUBS AND WHIRLPOOL BATHTUB APPLIANCES," EXCEPTION : SURFACE SKIMMERS, 33- MARNING HAS BEEN TESTED AND ACCEPTED BY A RECOGNIZED TESTING FACILITY AND COMPLY WITH

34- NOTE 1 TO EMPTY POOL AFTER CONSTRUCTION, FOR REPAIRS OR ANY OTHER REASON, THE HYDROSTATIC UPLIET 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 UPLIET PRESSURES.

THIS PLAN IS NOT TRANSFERABLE FROM ONE CONTRACTOR TO ANOTHER

36- NOTE 3 :
POOL WALL SHALL BE REINFORCED WITH #3@6" O.C.E.M. WHERE LESS THAN 5 FEET FROM ANY EXISTING STRUCTURE OR PATIO (SEE SHEETING & SHORING DETAIL) 35- NOTE 2: UNLESS OTHERWISE SPECIFIED, ALL DETAILS SHOWN ARE NOT TO SCALE.

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

38- NOTE 5

THERE IS ALMAYS THE FOSSIBILITY THAT CONDITIONS IN THE FIELD MAY BE DIFFERENT FROM THOSE INDICATED IN AN ENGINEERING PERMIT DRAMINGS; 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

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

40- NOTE T : NO DIVING BOARD AND NO DIVING 15 ALLOW ON ANY POOL LESS THAN 8 FEET DEEP AND SPECIFIALLY DESIGN FOR DIVING

42- NOTE 8 CONTINUOUS SINGLE #8 ANG BARE COPPER MIRE SHALL BE BURIED TO A MIN. 4" TO 6" BELOM SUBGRADE, 18" TO 24" FROM INSIDE THE WALL OF SMIMMING 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.

IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE THE ENGINEER WITH AN ACCURATE SURVEY. REPRESENTS THE EXISTING FIELD CONDITIONS, I.E. ADDITIONS, TREES, AC PADS, WALKWAYS, ETC. ACCURATE SURVEY AND DRAWINGS THAT

43- GFCI PROTECTION

GFCI PROTECTION; OUTLETS SUPPLYING POOL PUMP MOTORS FROM BRANCH AMPERES, 125 VOLT OR 240 VOLT, SINGLE PHASE, WHETHER BY RECEPTACLE O PROTECTION FOR PERSONNEL PER NEC 2008 680.22 (B) 1 CIRCUITS WITH SHORT-CIRCUIT AND GROUND -FAULT PROTECTION RATED 15 OR 20 OR DIRECT CONNECTION SHALL BE PROVIDED WITH GROUND-FAULT CIRCUIT-INTERRUPTER



4-8-2011