

NOTES

- 1. PROVIDE MAIN DRAIN W/ANTI-VORTEX COVER
- 2. PROVIDE SKIMMER
- 3. AS A SAFETY PRECAUTION, VALVE MAIN DRAIN ONLY 4. PROVIDE AIR RELIEF VALVE AND PRESSURE GAUGE AT FILTER 5. ELECTRICAL CONNECTIONS AND BONDING SHALL BE IN
- ACCORDANCE WITH N.E.C. 680 CURRENT EDITION . SLOPE DECK AT ¼" PER FOOT AWAY FROM POOL
- 7. FENCES, BARRIERS AND OTHER SAFETY REQUIREMENTS TO BE AS REQUIRED BY FLORIDA BUILDING CODE
- 8. ALL POOLS ARE NON DIVING 9. THIS DRAWING TO BE USED IN CONJUNCTION WITH VIKING
- POOLS SPECIFICATOINS AND INSTALLATION REQUIREMENTS 10. THIS DRAWING IS PREPARED TO SHOW GENERAL INFORMATION REGARDING POOL GEOMETRY AND DIMENSIONS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR MANUFACTURING VARIANCE
- NOR THE INSTALLATION ON A SPECIFIC SITE WITHOUT KNOWLEDGE AND INVESTIGATION BY THE ENGINEER. 11. A SITE PLAN SHALL ACCOMPANY THIS DRAWING AND SHALL
- SPECIFY SETBACKS, BARRIER TYPE AND DECK SPECIFICATIONS INCLUDING DRAINAGE
- 12. ALL POOLS ARE TYPE "O" FLOOR SLOPES ARE CONSTANT (NO SLOPE BREAK EXCEPT AS SHOWN)
- 13. STEPS TO HAVE 10" MIN. TREAD, 12" MAX. RISER
- 14. HANDRAL REQUIRED FOT ALL POOLS
- 15. POOLS ARE IN COMPLAIANCE WITH FLORIDA BUILDING CODE SEC. 424.2
- 16. PLAN DIMENSIONS ARE TO OUTSIDE EDGE OF POOL COPING. COPING WIDTH IS 6" TYPICAL, WATERLINE DIMENSIONS ARE, THEREFORE, 12" LESS THAN PLAN D!MENSIONS.

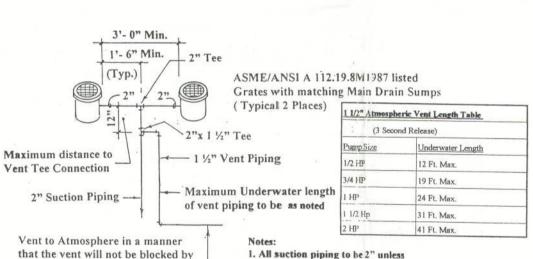
MAIN DRAIN LOCATIONS ALL MAIN DRAINS ARE TO BE LOCATED AT THE DEEPEST POINT OF THE POOL.

PUMP AND FILTER SKIMMER - WASTE TO DISCHARGE ON GROUND = 2-B & MAIN DRAINS TIED TOGETHER - 36" APART & 11/2" VENT PILE TO ATMOSPHERE (30'MAX.

DISTANCE

INLETS (2) MIN.

PLUMBING SCHEMATIC

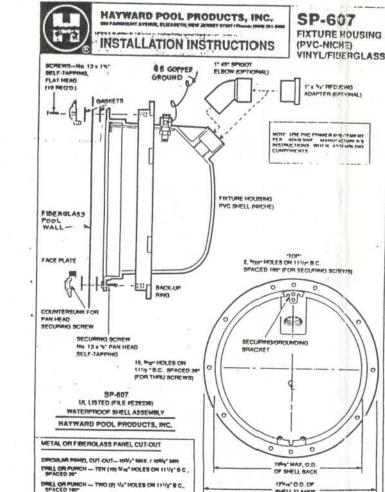


that the vent will not be blocked by infestation, debris build - up, or ____ microbiological contamination Label vent: "POOL SAFTY DEVICE -

1. All suction piping to be 2" unless noted on plan. 2. All went piping to be 1 1/2".

APPROVED SWIMMING POOL, SPA AND WADING POOL DUEL MAIN DRAIN ATMOSPHERIC VENT ARRANGEMENT FOR COMPLIANCE WITH 424.2.6.6 OF THE FLORIDA BUILDING

ATMOSPHERIC VENTING DETAIL



LIGHT DETAIL



155 Valencia Drive, Oak Hill, Florida 32759

CURTIS - SINCLAIR, INC. 8259 N. MILITARY TRAIL, SUITE 3 PALM BEACH GARDENS, FL 33418 PH. 561-630-8534 FAX 561-630-4570 C.O.A. No. 5725



Stephen M. Sinclair, P.E. Florida Certificate No. 35631

To ascertain the mechanical behavior of the above material, tensile and flexure specimens were made from materials removed from the walls of existing pools. All of these specimens were tested at Columbia Research and Testing, Healdsburg, California. The tests were conducted in accordance with ASTM D-638-91 for "Tensile Properties of Plastics" and ASTM D-790-92 for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

due to water pressure, ground settling, and dynamic loads due to earthquakes) depends on the strength

and energy absorption qualifies of the fiberglass reinforced plastic material composed of isophthalic

ENGINEERING REPORT ON THE VIKING FIBERGLASS POOL September 18, 1995

used in the construction of the Viking Pools. These pools are manufactured by the Firm

VIKING POOLS S.E., INC., OAK HILL, FLORIDA

This report deals primarily with the strength and characteristics of the fiberglass polyester material

The ability of the pool structure to carry the loads imposed on it (which are primarily static loads,

From the load tests in tension and flexure, the following mechanical properties were evaluated: (1) Tensile Strength.

(2) Flexural Strength.

resin, vinyl ester resin, fiberglass, and ceramic.

The average value of these properties appear as follows: Tensile Strength (lb/in.2):

Flexural Strength (lb/in.2): 41,976

The fiber reinforced plastic is strong, tough and resilient material. Compared to gunite, this material is stronger under tensile and flexural loadings. In conclusion, the Viking Pool, when properly installed in compacted ground against a compacted

sand cushion (compacted by wetting) can safely carry the loads due to water pressure and ground

INSTALLATION

The swimming pools consists of one-piece fiberglass construction shop-formed over a mold. The material is fiberglass reinforced plastic, 1/4 Inch thick, composed of isophthalic resin, vinyl ester resin, fiberglass and ceramic. The surface finish is a gel coat. Viking Pools, Inc. produces various styles of swimming pools and spas, the overall pool dimensions, depths and capacities are shown in Table 1.

The fiberglass has an average tensile strength of 13,308 psi, and an average flexural strength of 41,976 psi. The upper portion of the pools and spas is constrained by a concrete bond beam.

Some pools and all spas can be placed nineteen-and-one-half (191/2) inches above ground . Vertical supports consisting of 1 inch by 11/2 inches wood member integrated in the fiberglass reinforced plastic application process at four feet six inch (4'6") intervals are required. The spas do not require the vertical

supports. These pools and spas . do not require concrete or wood decking. Fig. 2. All plumbing and electrical work must comply with the code currently in effect at the construction site. The pool or spa excavation is to be performed to permit excavation profile to coincide to the contours of the pool. The overexcavation is approximately 6 inches on the sides and 12 inches on the ends. At the deep end, the

width of the pool is over excavated from 8 to 24 inches in order that the first portion of the backfill may be manually adjusted for the initial 12 inches of backfill. The overexcavation of the bottom of the pool varies from approximately 3 to 6 inches, depending on soil type. The backfill for the bottom of the pool or spa is accomplished by spreading a layer of bedding sand. Compaction of the sand layer is by means of manual tamper and water. SETTING OF THE POOL

The pool is delivered to the pool site. A hydraulic crane is present to pick up the pool and lower it carefully into the excavation. Mini pools and spas are usually manhandled into place. LEVELLING THE POOL

The qualified pool installers then check the level of the pool and its fit with the excavation by walking around on the inside of the pool feeling for any voids that might be present. The pool is then lifted out of the excavation and set back as many times as necessary to achieve a perfect fit. The perfect fit is realized by using the following techniques, namely, raking the surface of the sand in order to see where the pool is touching after it is removed and also walking around on the inside of the pool to detect low

spots. When the level of the pool is within one-half inch, the setting procedure is complete. The filling of the pool with water and simultaneous sand backfill operations are then commenced. The sand is compacted with a tamper and water. Care should be exercised to insure that the backfill level and water level are approximately the same throughout this procedure

This pool is designed to be kept full at all times. The pool shell could be damaged if the water level is allowed to drop below the pool inlet. When appreciable draw-down is noticed, or if it becomes necessary to drain the pool, contact VIKING POOLS, INC., or their agents for instructions. WHEN CONCRETE DECKS ARE POURED

Forms are now put up around the perimeter of the pool. Small sumps measuring 12" wide and 6" deep are dug under each chain along the sides of the pool. This will ensure a bonding or anchoring effect on the sides. Rebar

or wire mesh shall be used in the event of adobe soil. Concrete is then poured coming up to approximately 1/4" of the top of the coping with a slight fall away from

the pool. See Fig. 1.Cantilever deck may also be used.

2,000

420

8,500

8,000

28,000

24,000

12,500

15,500

6,000

16,500

650

15,000

POOL NAME SIZE GALLONS

8'6" X 14'0"

10'0" X 20'

15'0" X 33"

11'0" X 20'

6'6" OCTAGON

7'6" X 14'

11'10" X 25'2"

12' X 25'

16' X 40'

12'0" X 37'0"

12'0" X 25'0"

14'0" X 28'

6'6" ROUND

14'0" X 31'

14'0" X 30'

15' X 34'

12'0" X 24'

15' X 33'

7'3" ROUND

14' X 30'

8' X 10'

BAHAMAS

CAPE CORAL

CARIBBEAN

CYRPESS

DAYTONA

FREEPORT

KEY WEST

MONTEREY

ROCKPORT

SANTA BARBARA

THE EDGEWATER

SEA BREEZE II

THE ATLANTIC

THE ORLANDO

THE VENICE

SUN COAST

MYSTIC

GULF COAST

ISLAND BREEZ

DELRAY

CLEARWATER

PERIMETER

48

74

110

69

78

3.0'-5.0'

3'-6'

3.0'-5.0'

4.5'

6.5'-5.5'

3.6'-7.11'

3.5'-6.0'

3.5'-5.83'

3.5'-6.0'

3.5'-6.5'

3.5'-6.5'

3.5-5.0'

3'-6'

42"

3.6'-6'

3'-3'3"

104 3.42'-8.175'

FEET

Viking Pools Southeast, Inc.

888-407-6657 * 904-345-3500 * fax 904-345-4600

MAK U & ZUUJ

DATE: