

1. THIS SAFETY VACUUM RELIEF SYSTEM IS A NON-MECHANICAL VENT SYSTEM THAT WILL LIMIT THE TRANSMISSION OF SUCTION AT THE OUTLET TO A MAXIMUM OF 4.5 INCHES OF MERCURY.
2. THIS SYSTEM IS A BACKUP TO PROVIDE SUCTION RELIEF SHOULD ENTRAPMENT OCCUR.
3. POOL AND SPA SUCTION INLETS SHALL BE PROVIDED WITH A COVER THAT COMPLIES WITH ANSI/ASME A112.19.8
4. ALL MANUFACTURED SUMPS SHALL COMPLY WITH ANSI/ASME A112.19.8. IF A FIELD-BUILT SUMP IS USED, ITS CONSTRUCTION SHALL COMPLY WITH THE MINIMUM DIMENSIONS SHOWN IN FIGURE 1.
5. THE VELOCITY ON THE SUCTION SIDE OF THE CIRCULATION SYSTEM SHALL NOT EXCEED SIX (6) FPS.
6. CHECK VALVES CANNOT BE INSTALLED ON THE SUCTION SYSTEM.
7. THIS SYSTEM SHALL BE INSTALLED AND TESTED BY A QUALIFIED, LICENSED SWIMMING POOL PROFESSIONAL.
8. THE VENT LINE LENGTH MUST NOT EXCEED THE TOTAL LENGTH OF THE MAIN DRAIN LINE.
9. VENT OPENING MUST BE COVERED WITH WIRE MESH SCREEN TO PREVENT INSECTS, DEBRIS COLLECTION AND BACTERIA.
10. LABEL VENTI: POOL SAFETY DEVICE - DO NOT HANDLE
11. PER FBC 424.2.6.6.4 (R4101.6.6.4) Suction inlets per pump: A minimum of two suction inlets shall be provided for each pump in the suction inlet system, separated by a minimum of 3 feet (914 mm) or located on two different planes; i.e., one on the bottom and one on the vertical wall, or one each on two separate vertical walls. These suction inlets shall be plumbed such that water is drawn through them simultaneously through a common line to the pump.

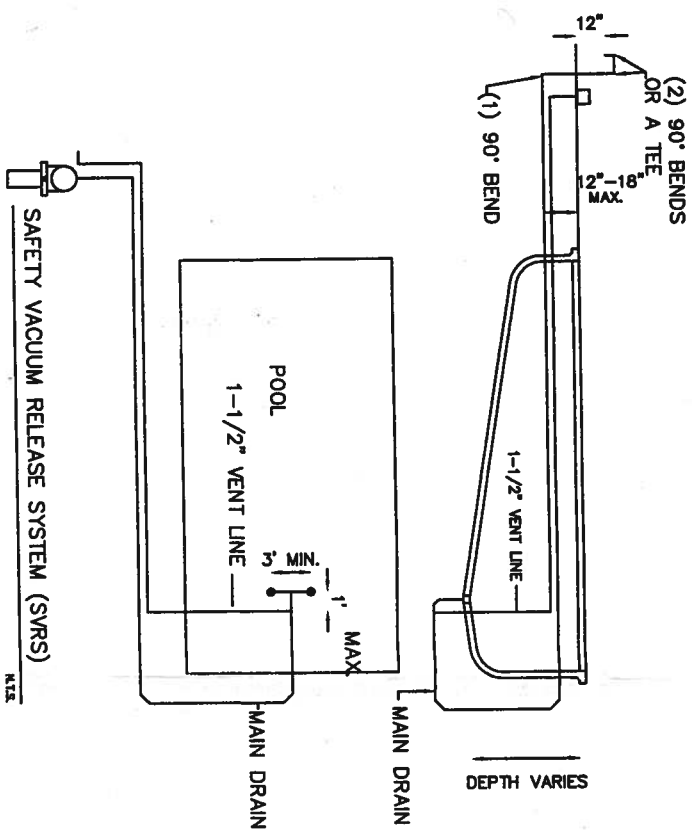
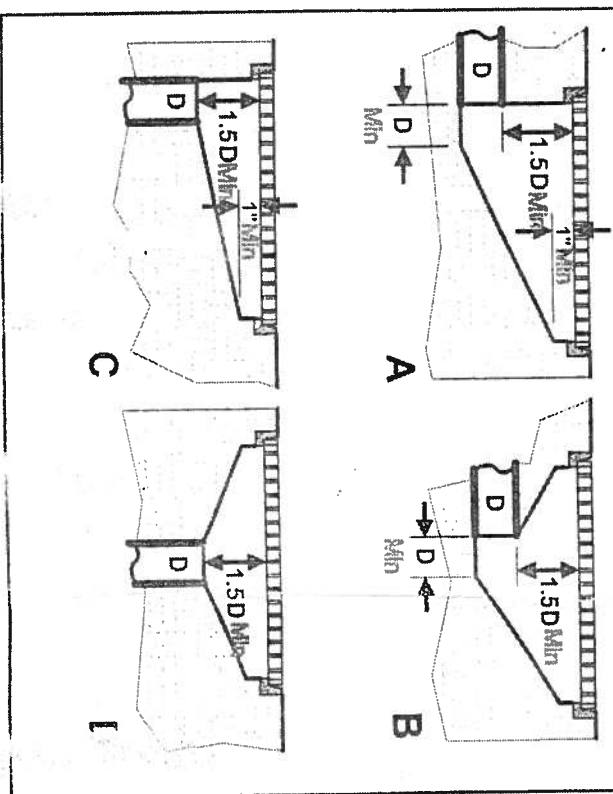


Figure 1

FIELD BUILT SUMPS

Minimum Size (Typical)
D = Inside Diameter of Pipe



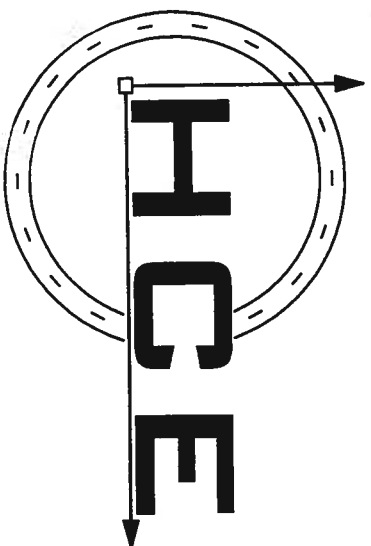
APPROVED SWIMMING POOL & SPA
DUAL MAIN DRAIN ATMOSPHERIC VENT (SVRS)
COMPLIANT WITH SECTION 424.2.6.6 (R4101.6.6), FLORIDA BUILDING
CODE FOR RESIDENTIAL APPLICATIONS.

ENTRAPMENT AVOIDANCE
VENT PIPE ANALYSIS - MAXIMUM LENGTH

PIPE SIZES INCHES	AVERAGE FLOW GPM	VELOCITY FT. PER SEC.	VENT PIPE SIZE	MAXIMUM LENGTH FT.
2"	60	5.74	1 1/2"	32
2"	75	7.17	1 1/2"	41
2 1/2"	100	6.7	1 1/2"	54
2 1/2"	110	7.37	1 1/2"	60
3"	135	5.86	1 1/2"	73
3"	145	6.29	1 1/2"	79
3"	175	7.59	1 1/2"	95
4"	325	8.19	1 1/2"	177

This analysis is based upon maintaining the length of pipe below the operating level of the pool, vertical and horizontal, to vacate within 3 seconds based on the size of the pump and the average flow rate. Due to the hydraulic gradient caused by the pump and piping, the vent line should be located as close to the tee at the dual main drain, as possible with a maximum distance of 12".

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REVISION

DATE

10-10-05

REVISE W/ NEW FBC CODE REFERENCES

DRAWN BY: JWR

CHECKED BY: JWR

DATE: 10-10-05

HCE# n/a

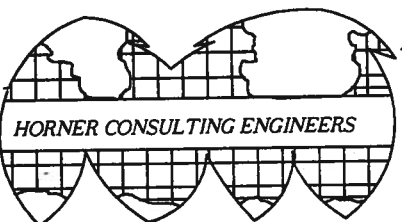
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EXPIRES 2-28-2007



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