

New 2003 International Residential Code, Section AG 106, Entrapment Protection for Swimming Pool and Spa Suction Outlets

AG106.1 General. Suction outlets shall be designed to produce circulation throughout the pool or spa. Single outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.

AG106.2 Suction Fittings. All Pool and Spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a 12"X 12" drain grate or larger, or an approved channel drain system.

Exception: Surface Skimmers

AG106.3 Atmospheric Vacuum Relief System Required. All pool and spa single or multiple outlet circulation systems shall be equipped atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems shall include at least one approved or engineered method of the type specified herein, as follows:

- 1. *Safety vacuum release systems (SVRS) conforming to ANSI/ASME A112.19.17, or***
- 2. *Approved gravity drainage system.***

AG106.4 Dual Drain Separation. Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three feet (3') shall separate such outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum relief-protected line to the pump or pumps.

AG106.5 Pool Cleaner Fittings. Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least six (6) inches and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s)."

**New 2003 International Building Code, Section 3109, Swimming Pool
Enclosures and Safety Devices**

3109.5 (Supp) Entrapment avoidance. Suction outlets shall be designed to produce circulation throughout the pool or spa. Single outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.

3109.5.1 (Supp) Suction Fittings. All Pool and Spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a 12"X 12" drain grate or larger, or an approved channel drain system.

Exception: Surface Skimmers

3109.5.2 (Supp) Atmospheric Vacuum Relief System Required. All pool and spa single or multiple outlet circulation systems shall be equipped atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems shall include at least one approved or engineered method of the type specified herein, as follows:

- 1. Safety vacuum release systems (SVRS) conforming to ANSI/ASME A112.19.17, or**
- 2. Approved gravity drainage system.**

3109.5.3 (Supp) Dual Drain Separation. Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three feet (3') shall separate such outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum relief-protected line to the pump or pumps.

3109.5.4 (Supp) Pool Cleaner Fittings. Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least six (6) inches and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).