

4717.2580 INLETS AND OUTLETS.

Subpart 1. **Outlets.** All pools must have an outlet at the deepest point to permit the pool to be completely emptied.

A. Outlet openings must be covered by grating not readily removable by users.

B. Outlet openings of the grating on the floor of the pool must be at least four times the area of discharge pipe and provide enough area so the velocity of water passing the grate does not exceed 1-1/2 feet per second.

C. Grate openings must be no more than one-half inch wide.

D. When a single outlet is used, it must be at least 100 square inches in size, or have an antivortex cover.

E. In pools more than 30 feet wide, multiple outlets must be provided. The outlets must be no more than 30 feet apart, and no more than 15 feet from the side walls.

Subp. 2. **Inlets.** Water inlets must be located to produce uniform circulation of water and maintain a uniform disinfectant residual throughout the entire pool without the existence of dead spots.

A. Inlets from the recirculation system must be flush with the pool wall and submerged at least 12 inches below the water level.

B. Over-the-rim fill spouts are not permitted unless located under a diving board or installed in a manner that does not present any hazard.

C. Make up water spouts must terminate at least six inches above the fill rim of the pool or surge tank.

Subp. 3. **Adjustable inlets.** Inlets must be directionally adjustable and located so there is complete, uniform circulation of incoming water throughout the pool, a uniform disinfectant residual is maintained at all times, and there are no dead spots.

A. Each inlet must be adjustable or have an individual gate or similar valve to permit adjustment of water volume to obtain the best circulation.

B. The maximum spacing of inlets must be 20 feet based on the pool perimeter.

C. In a pool with a surface area greater than 1,600 square feet or longer than 60 feet, side inlets must be placed at 15-foot intervals around the entire perimeter.

D. An engineered, manufactured gutter system with integral supply orifices may be used instead of individual directional inlets.

Statutory Authority: *MS s 144.05; 144.12; 144.123; 145A.02; 157.01*

History: *19 SR 1419; 19 SR 1637*

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