

4717.2350 POOL STRUCTURE.

Subpart 1. **General.** The pool and all appurtenances must be constructed of materials which:

- A. are inert, nontoxic, impervious, permanent and enduring;
- B. withstand design stress;
- C. provide a tight tank with a smooth and easily cleaned surface; and
- D. can be finished in a white or light color.

Wood tank construction and vinyl liner pools are prohibited.

Subp. 2. **Finish.** The pool basin finish, including bottom and sides, must:

- A. be of white or light colored material;
- B. be nontoxic to humans;
- C. have a smooth finished surface;
- D. be void of cracks; and
- E. be bonded to the supporting members, excluding structural expansion joints.

Subp. 3. **Design, detail, and structural stability.** The pool must be designed, installed, operated, and constructed to withstand all anticipated loading for both full and empty conditions.

Subp. 4. **Designer responsibility.** The owner and the architect, engineer, contractor, or other designer is responsible for the structural stability and safety of the pool design.

Subp. 5. **Relief valve.** A hydrostatic relief valve or an underdrain system must be provided where a high water table may affect the stability of the pool.

Subp. 6. **Shape.** The pool's shape must:

- A. be such that the circulation of pool water and control of users' safety are not impaired;
- B. allow complete, continuous circulation of pool water throughout all parts of the pool; and
- C. ensure that user safety is not impaired. Underwater or overhead projections or obstructions that would endanger user safety or interfere with operation are prohibited.

Subp. 7. **Corners.** Corners formed by the intersection of walls and the bottom must be rounded with at least a one-half inch radius.

Subp. 8. **Slope of bottom.** The slope must conform to the provisions in this subpart.

A. The slope of the bottom of any part of the pool with a water depth of less than five feet must not be more than one foot in ten feet and must be uniform.

B. In parts of the pool with a water depth greater than five feet, the slope must not exceed one foot in three feet.

Subp. 9. **Side walls.** The walls of the pool must be either:

A. vertical for water depths of at least six feet; or

B. vertical for a distance of three feet below the water level, below which the wall may be curved to the bottom with a radius not greater than the difference between the depth at that point and three feet, provided that vertical is interpreted to permit slopes not greater than one foot, horizontally, for each five feet of depth of sidewall (11 degrees vertical).

Subp. 10. **Ledges.** A ledge along the pool wall within the pool basin is permitted only if it is a necessary part of the sidewall construction. The ledge must be:

A. at least two feet six inches below the water surface;

B. not over four inches wide; and

C. sloped into the pool with a rounded outside edge.

Subp. 11. **Wading pools.** Wading pools must be physically separated from other pools and have a separate recirculation system.

Subp. 12. **Fountains.** Fountains or similar features require approval by the commissioner and must be located in areas of two feet or less of water depth. They must be designed to preclude climbing.

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

History: *19 SR 1419; 19 SR 1637*

Published Electronically: *May 11, 2009*