



EXHIBIT 680.7 Structural reinforcing steel for a poured-concrete pool that serves as the pool shell bonding grid.

the inside walls of the pool and shall include unpaved surfaces and other types of paving. Perimeter surfaces separated from the pool by a permanent wall or building 1.5 m (5 ft) in height or more shall require equipotential bonding only on the pool side of the permanent wall or building. Bonding to perimeter surfaces shall be provided as specified in 680.26(B)(2)(a), (B)(2)(b), or (B)(2)(c) and shall be attached to the pool reinforcing steel or copper conductor grid at a minimum of four points uniformly spaced around the perimeter of the pool. For nonconductive pool shells, bonding at four points shall not be required.

The requirement for bonding perimeter surfaces applies to paved and unpaved surfaces, such as a lawn surrounding a permanently installed aboveground swimming pool. Where the paved portion of the perimeter surface extends less than 3 feet horizontally from the inside walls of the pool, the perimeter bonding grid must be continued under the adjacent unpaved perimeter surface. If walls or other physical barriers prevent the perimeter from extending 3 feet beyond the inside walls of the pool, the bonding grid is required only to extend under the available perimeter area.

The perimeter bonding grid can comprise structural reinforcing metal (rebar or welded wire mesh) that is conductive to the perimeter surface and installed in or under the perimeter surface. Where structural reinforcing steel is not available, a single, bare, solid 8 AWG or larger copper conductor can be installed around the pool's perimeter in an area measuring between 18 inches and 24 inches from the inside pool walls. The 8 AWG bonding conductor can be installed in the paving material (i.e., in the concrete), or it can be buried in the material (subgrade) below the paving material. Where buried, the bonding conductor must not be less than 4 inches and not

more than 6 inches below the surface level of the subgrade material.

If structural reinforcing steel is not available, another choice for bonding the perimeter surfaces is through the use of a grid comprising bare 8 AWG solid copper conductors installed to follow the contour of the perimeter surface. The copper conductor grid pattern is arranged using the same space and tolerances as required for bonding grids installed for conductive pool shells in accordance with 680.26(B)(1)(b).

This requirement does not apply to decks constructed of nonconductive materials such as wood, plastic, or fiberglass. However, the perimeter surface under an elevated deck around a pool installed on or partially in the ground requires bonding.

The required perimeter surface bond must be connected at four evenly spaced points around the pool perimeter to the conductive pool shell. Connection between the perimeter surface bond and nonconductive pool shells is not required.

(a) *Structural Reinforcing Steel.* Structural reinforcing steel shall be bonded in accordance with 680.26(B)(1)(a).

(b) *Copper Ring.* Where structural reinforcing steel is not available or is encapsulated in a nonconductive compound, a copper conductor(s) shall be used where the following requirements are met:

- (1) At least one minimum 8 AWG bare solid copper conductor shall be provided.
- (2) The conductors shall follow the contour of the perimeter surface.
- (3) Only listed splicing devices or exothermic welding shall be permitted.
- (4) The required conductor shall be 450 mm to 600 mm (18 in. to 24 in.) from the inside walls of the pool.