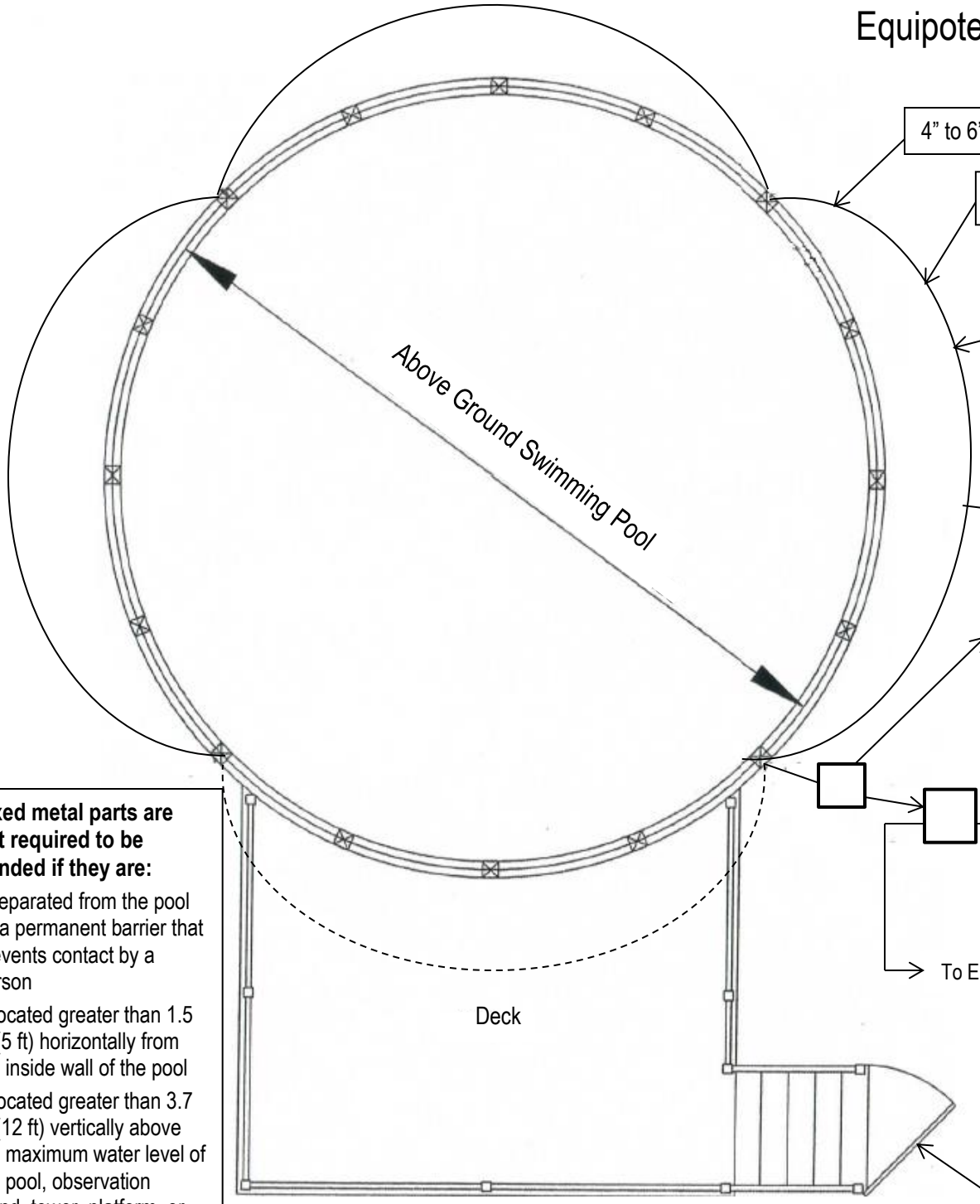
Equipotential Bonding Around Pools NEC 680-26



4" to 6" deep

18" to 24" from pool

Minimum #8 AWG Solid copper bonding conductor "Halo Loop" Bonding Wire – Required for ALL swimming pools

Pools with metal components should have bonding at four (4) locations minimum, evenly placed around the perimeter or otherwise in accordance with NEC 680.26 (B)(1) through (B)(7)

Equipment within 5' from pool must be bonded to the grid

Pool Water Bonding Device

The pool water itself must also be bonded. A minimum 5800 mm^2 ($9in^2$) of conductive surface is required to be in contact with the water

Pump Receptacle: 6' to 10' from Pool

Must be single twist lock GFCI
OR greater than 10' from pool GFCI duplex receptacle

To Electric Panelboard

Equipment and electric boxes around the pool should all be grounded and tied back to the electric panel grounded neutral bus bar.

Gate at bottom of steps

Fixed metal parts are not required to be bonded if they are:

- Separated from the pool by a permanent barrier that prevents contact by a person
- Located greater than 1.5 m (5 ft) horizontally from the inside wall of the pool
- Located greater than 3.7 m (12 ft) vertically above the maximum water level of the pool, observation stand, tower, platform, or diving structure

Re: NFPA 70 Equipotential Bonding of Above Ground Swimming Pools

reply from NFPA Staff – G. Moniz – 8-11-17 – PMCA update 2014NEC 10-23-20

Question: If we just have metal top and bottom plates to the columns and everything else is nonconductive are they required to be bonded?

Answer: Yes, according to the 2014 NEC®, the parts specified in 680.26(B)(1) through (B)(7) must be bonded together to reduce voltage gradients in the pool area. Section 680.26(B)(3) requires all metallic parts of the pool structure to be bonded.

Question: If we just have metal top and bottom plates to the columns and everything else is nonconductive are they required to be bonded? Are all of them required to be bonded?

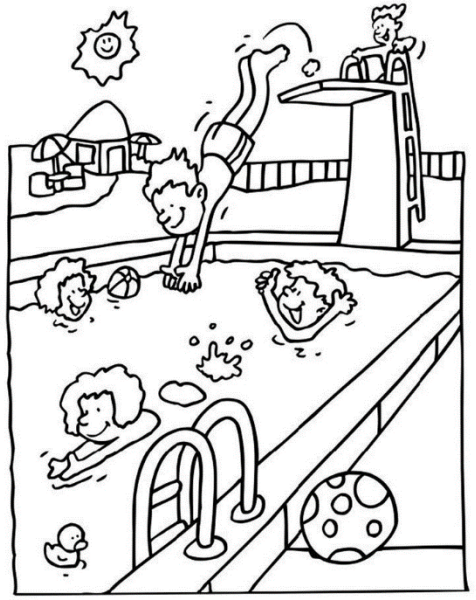
Answer: Yes, according to the 2014 NEC® 680.26(B)(3) all metallic parts of the pool structure must be bonded.

Question: If we have an all plastic or fiberglass pool obviously it would not be required to be bonded but we would still be required to have the bare copper loop buried around the perimeter of the pool, correct?

Answer: Yes, according to the 2014 NEC®, 680.26(B)(2) the perimeter surface must be bonded.

Question: If we have an all metal sided pool with metal supports obviously it would be required to have bonding at least four places along with the other requirements including the number eight bare copper ground?

Answer: If bonding to perimeter, see 680.26(B)(2)(a) or (2)(b). Perimeter bonding is required to 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.



Question: If we have a mix of components what rule of thumb or standard or other directive tells us when and how to apply the requirements for the attachment?

Answer: The parts specified in 680.26(B)(1) through (B)(7) are present they must be bonded together.