



ADDITIONAL INSPECTION REQUIRED FOR POOLS/SPAS

Recent changes in the codes have caused us to review our current inspection process for swimming pools and spas. The codes now require a bonding grid in paved decks of pools/spas. Based on these new requirements the Town of Gilbert is implementing an additional inspection for pools/spas. This inspection will occur prior to completion of any pool/spa deck to verify the bonding grid application that must now “extend within or under paved walking surfaces for 3 feet horizontally beyond the inside walls of the pool.” This inspection will be called a **“pre-deck”** inspection. This inspection will be in addition to the “pre-gunite” and “pre-plaster” inspections that are currently required.

The following is a list of required pool/spa inspections with their action codes for scheduling purposes:

POOL ACTION CODES

1190	PRE-GUNITE
1195	PRE-DECK
1200	PRE-PLASTER

2006 IRC

E4104.4 Methods of bonding.

It shall not be the intent to require that the 8 AWG or larger solid copper bonding conductor be extended or attached to any remote panelboard, service equipment, or any electrode, but only that it shall be employed to eliminate voltage gradients in the pool area as prescribed. Bonding shall be accomplished by one or more of the following methods:

1. Equipotential bonding grid. The parts specified in Section E4104.2 above shall be connected to an equipotential bonding grid with a solid copper conductor, insulated, covered, or bare, not smaller than 8 AWG or rigid metal conduit of brass or other identified corrosion resistant metal conduit. Connection shall be made by exothermic welding or by listed pressure connectors or clamps that are labeled as being suitable for the purpose and that are made of stainless steel, brass, copper or copper alloy.

The equipotential bonding grid shall conform to the contours of the pool and shall extend within or under paved walking surfaces for 3 feet (1 m) horizontally beyond the inside walls of the pool and shall be permitted to be any of the following:

Exception: The equipotential bonding grid shall not be required to be installed under the bottom of or vertically along the walls of vinyl lined polymer wall, fiberglass composite, or other pools constructed of nonconductive materials. Any metal parts of the pool, including metal structural supports, shall be bonded in accordance with Section E4104.1. For the purposes of this section, poured concrete, pneumatically applied (sprayed) concrete, and concrete block, with painted or plastered coatings, shall be considered as conductive materials.

1.1. The structural reinforcing steel of a concrete pool or deck where the reinforcing rods are bonded together by the usual steel tie wires made up tight or the equivalent. Where deck reinforcing steel is not an integral part of the

pool, the deck reinforcing steel shall be bonded to the other parts of the bonding grid using a solid conductor not smaller than 8 AWG. Connections shall be in accordance with Item 1.4.

1.2. The wall of a bolted or welded metal pool.

1.3. As an alternative means, the system shall be constructed as specified in Items 1.3.1 through 1.3.3:

1.3.1 Materials and connections. The equipotential bonding grid shall be constructed of bare solid copper conductors not smaller than 8AWG. Such conductors shall be bonded to each other at all points of crossing. Connections shall be made as required by Item 1.4.

1.3.2. Grid structure. The equipotential bonding grid shall cover the contour of the pool and the pool deck extending 3 feet (1 m) horizontally from the inside walls of the pool. The equipotential bonding grid shall be arranged in a 12 inch (300 mm) by 12 inch (300 mm) network of conductors in a uniformly spaced perpendicular grid pattern with tolerance of 4 inches (100 mm).

1.3.3. Securing. The below-grade grid shall be secured within or under the pool and deck media.

1.4. Connections. Where structural reinforcing steel or the walls of bolted or welded metal pool structures are used as an equipotential bonding grid for nonelectrical parts, the connections shall be connected by exothermic welding, listed pressure connectors, listed clamps, or other listed means. Connection devices or fittings that depend solely on solder shall not be used. Sheet metal screws shall not be used to connect bonding conductors or connection devices.

2. For indoor hot tubs and spas, metal to metal mounting on a common frame or base.

3. For indoor hot tubs and spas the interconnection of threaded metal piping and fittings.

4. For indoor hot tubs and spas the provision of a solid copper bonding jumper, insulated, covered, or bare, not smaller than 8 AWG.