

INDUSTRY NEWS

NEC Exempts Portable Spas From Requirement

By Rebecca Robledo | 3.23.2011

The National Electrical Code has been temporarily changed to exempt portable spas from bonding requirements.

In 2008, the National Fire Protection Association added language requiring that pools and spas be connected to a bonding grid under the deck to prevent shock hazards. The mandate didn't differentiate portable hot tubs from inground spas or pools.

"It would have meant that any portable spa would require an equipotential bonding grid underneath it, and anytime you'd move the spa, you'd have to move the installation as well," said Carvin DiGiovanni, senior director, technical and standards at the Association of Pool & Spa Professionals. "Equipotential bonding may serve a purpose, but it doesn't apply to portable spas."

Manufacturers and retailers alike called the mandate prohibitively expensive and unnecessary. For homeowners to tear out portions of the deck and install a bonding grid could cost more than the hot tub itself, they said. Furthermore, currently the units must meet UL and ANSI/APSP standards, making a bonding grid redundant. And, finally, when portable spas are installed above ground, it's nearly impossible to experience a shock from the deck, they said, because a bather would not be on the deck and in the water at the same time.

"In [an inground] swimming pool, you can be in the water, then crawl out on the deck surrounding it, and if the deck or water is electrified you could get shocked," said Larry Nicholson, senior electronic engineer at Watkins Manufacturing in Vista, Calif. "If you're stepping out of an above-ground spa, you won't have one leg in the water and the other touching the deck," added Nicholson, who helped draft the argument to alter the requirement.

Industry officials tried to enact a change in time for the 2011 code writing, but met with resistance from the NFPA. APSP then submitted a request for a tentative interim amendment

(TIA), which is essentially a temporary addendum to the body of the code that had already passed. It automatically goes up for reconsideration during the next code-writing cycle.

Bonding wires and grids no longer will be needed on portable spas in states and localities adopting the 2011 NEC. Those still enforcing the 2008 language, however, may still require the grids. In those areas, professionals may try to show local building officials a copy of the TIA, found here, to try getting a waiver.

To push a TIA through, those requesting it must prove that the proposed change has technical merit and addresses a potential safety risk posed by the code language. The first committees hearing the proposal agreed that the change had technical merit, but didn't believe it was an emergency. APSP appealed the decision, submitting that it did potentially put consumers at risk.

"People were having to tear up their whole patio and repour the concrete, and it was costing more to do that than to actually purchase the spa," Nicholson said. "[The requirement] was forcing people to say, 'You know what? I'm just not going to get a permit.' I've seen installations where the electrical job was absolutely atrocious, and it was because the homeowner was doing it on their own and shortcutting things."

A higher committee overturned the original decision.

The NEC is revised every three years, at which point all TIAs are automatically put up for reconsideration and public comment so that, if approved, it is adapted in the body of the code. The next NEC comes out in 2014.