

## NATIONAL ELECTRICAL CODE INTERPRETATION

May 22, 2000

**Question 1:** “Would a hard-wired dishwasher in a one-family dwelling with a switch with a marked off position that disconnects all ungrounded conductors require a separate disconnect switch?”

**Answer 1:** The answer to this question is no. A unit switch with a marked off position that disconnects all ungrounded conductors, is permitted as the disconnecting means required by Section 422-31(b). Section 422-33(c) provides the conditions under which a unit switch can be used as the required disconnect for an appliance in a one-family dwelling.

**Question 2:** “Section 422-33 states in part: A unit switch(es) with a marked off position that is part of an appliance (in this case a dishwasher) and disconnects all ungrounded conductors shall be permitted as the disconnecting means required by this article.”

“Does the above statement mean that the supply conductors located in the appliance junction box below the dishwasher are the same as the ungrounded conductors and are required to be turned “off” with the unit switch?”

**Answer 2:** The requirement for the unit switch is that it open all ungrounded conductors and that it have a marked “off” position. The requirement for opening all ungrounded conductors, rather it requires that where the appliance is connected to a circuit of more than one ungrounded conductor, the unit switch only qualifies as a disconnect if it opens all of the ungrounded conductors. In other words, a 240 volt, single-phase appliance would have to have a unit switch with 2-poles in order to comply with Section 422-33. The location of the two-pole switch within the appliance is not specified.

**Question 3:** “Can the required general purpose outlet be located inside of a shed or cabana which is located more then 10 feet but not more than 20 feet from the inside wall of a permanently installed pool?”

**Answer 3:** Other than establish the proximity of the required receptacle to the swimming pool, Section 680-6(a)(2) does not specify any other location requirements. However, the Fine Print Note associated with this section indicates that the distances are determined based on the shortest route an appliance cord would follow without piercing an effective permanent barrier such as a doorway or window. This section provides for an accessible receptacle that permits the use of electric appliances in the pool area. Where the pool is outdoors, it is my personal opinion that the intended location for the receptacle is outdoors. If the receptacle is located inside a structure, an appliance cord may be subjected to damage where it passes through a building opening.

Editor’s Note: Above responses are from NFPA.

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