

Electrical Code Requirements for Decks

by Glenn Mathewson

As a deck builder, you probably haven't had to deal much with the electrical code. That may be about to change. As the 2009 International Residential Code is adopted around the nation, many deck builders will need to add another subcontractor to their address book — a good electrician. New in 2009, IRC Section E3901.7 requires an electrical outlet within the bounds of any deck, porch, or balcony that's accessible from the inside of a dwelling and at least 20 square feet in area. If you're thinking, "No problem," since most homes already have an outlet at the back door, I may have some bad news. The code also requires a receptacle that's accessible from grade level at both the front and back of a home. If a new deck makes an existing receptacle inaccessible, a new one may be required (**Figure 1**).

The requirement for a receptacle outlet at the front and rear of a house is nothing new. It's been in the IRC since its inception and in the older National Electrical Code (NEC) for much longer. The *2008 NEC Handbook*, which provides commentary and explanations that many local building authorities reference, says the grade-level receptacle must be "available to a person standing on the ground." Building a deck around an existing grade-level-accessible receptacle may eliminate its original function if the receptacle is no longer accessible from ground level. This has probably occurred frequently in deck construction in the past, with no one paying much attention. But with the new electrical code requirement

New Receptacle May Be Required



Figure 1. A single receptacle may satisfy the code requirements for both a grade-level-accessible outlet and one accessible from the deck (A). A receptacle that previously served grade level but is now beyond reach (B) or blocked by a guard rail or other built-in features (C) counts as serving the deck; however, an outlet that is accessible from grade level (D) may need to be added. In all cases, the receptacle must be within 6 feet 6 inches of the standing level it serves.

relating specifically to decks, building officials may begin to take note.

An existing receptacle now encompassed by a deck can function as the required receptacle serving the deck, but whether it can still serve as the grade-level-accessible outlet may be questionable. If an outlet serving a deck is also used as the outlet required to serve the grade level, it must be located near enough to the edge of the deck that it can be reached by someone standing on the ground. The presence of guards or other built-in features at the edge of the deck cannot obstruct access to the outlet. If a deck is low enough to the ground to

easily step onto from grade, the local building official may allow an outlet in the center of the deck to satisfy both requirements.

New Light?

When a door leads to a deck or other surface with access to grade, a light controlled by a switch on the interior is required outside the door (**Figure 2, page 36**). So, if a new door were added to a home as part of a deck project, and the deck had access to grade, a light would need to be installed. Similarly, if stairs were added to a deck and access to grade was created that did not previously exist, the

New Door, New Light

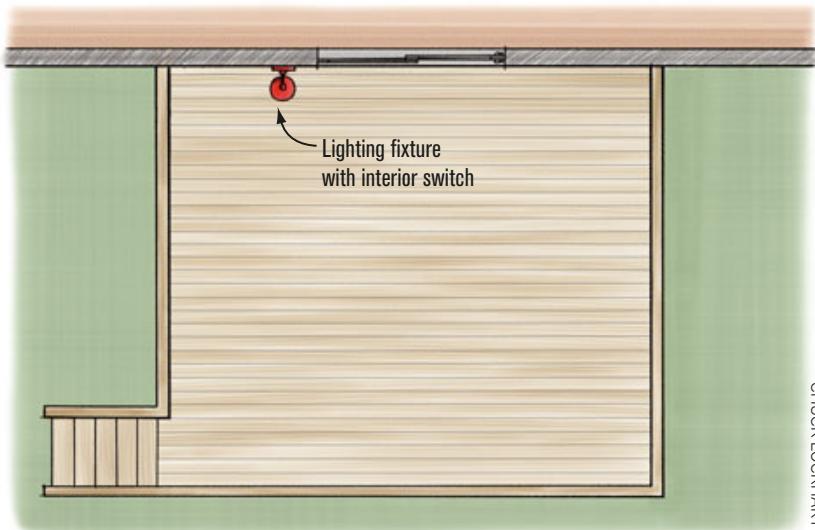


Figure 2. If a door is added as part of a deck project that has access to grade, or if adding a stairway to an existing deck creates access to grade, a light at the door and an interior switch are required.

door leading to the deck would then require a lighting fixture.

Adding a door may also trigger the need for additional interior outlets. Inside the house, an outlet is required within 6 feet of each side of any door.

In many states, electrical work of this nature can be performed only by a licensed electrician, and enforcement (and penalties) of this requirement is given significant attention. Always research the licensing requirements of your state before performing electrical work. Even when licensing is not required, always take electrical work seriously and insure that only experienced and knowledgeable professionals are performing such work on your projects. ♦

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