

## STATE BUILDING CODE INTERPRETATION NO. I-3-05

April 26, 2005

The following is offered in response to your March 21, 2005 letter to me in which you seek an official interpretation of the provisions of Chapter 39 of the 2003 International Residential Code (IRC) portion of the 1999 State Building Code.

**Question 1:** What is the maximum distance allowed from the door when entering a room with regards to the location of the switch controlling the required lighting outlet?

**Answer 1:** The code does not specify the location of the switch with respect to the door; nor does it, in fact, require that the switch be located in proximity to the door. Section E3803.2 requires, unless exceptions are met, that each habitable room and bathroom have at least one wall-switch-controlled lighting outlet. Section 3901.6 requires switches to be located such that they may be operated from a readily accessible location and limits the height of the switch above the floor or working surface. Readily accessible is a defined term requiring the switch to be reached quickly without climbing over or removing obstacles or climbing a ladder. It does not, however, include a requirement for proximity to the doorway or require that the switch be in a location as to allow operation prior to entering the room. This mirrors the requirements of the 2002 National Electrical Code from which the IRC electrical provisions were derived.

**Question 2:** How far from the edge of a tub or shower must a switch that is not part of a listed tub or shower assembly be located to be considered outside of the wet location?

**Answer 2:** Section E3901.7 prohibits such switches from being located within wet locations but does not specify the exact boundaries of the wet location. The IRC commentary to this section suggests that logic would dictate the switch be located outside the reach range of the individual inside the tub or shower, thus protecting the user. However, commentary on the requirements of the 2002 National Electrical Code from which this section derives, is completely opposite that logic. Mike Holt's publication, *Understanding the National Electrical Code – 2002 Edition*, specifically states that a switch directly outside the tub or shower compartment is code compliant. It appears that the restriction on the location of the switch is to protect the switch itself from moisture and not the user of the tub or shower from accessing it. This makes sense when you consider that other sections of the electrical code permit switches with weatherproof covers in outdoor locations. The weatherproof cover keeps the switch dry but offers no protection to the person standing in the rain who might operate the switch.

Thus, it is my interpretation that the wet location around a tub or shower extends to the point where water can no longer reach the switch from the shower spray within the enclosure. Any switch located beyond the tub or shower enclosure or curtain would therefore be outside the wet location regardless of whether or not the tub or shower user could reach the switch from within the tub or shower. This interpretation would also apply to Article 404.4 of the 2002 National Electrical Code from which the IRC requirements derive.