

## STATE BUILDING CODE INTERPRETATION NO. I-22-00

March 27, 2000

The following is offered in response to your letter in which you seek clarification of the use of wire mesh fence as a barrier for a private swimming pool, spa or hot tub, as required by Section 421.10.1 of the BOCA National Building Code/1996 portion of the 1999 State Building Code.

**Question 1:** Does 48 inch high welded wire fabric fencing with an opening of 1 ½ inch (horizontal dimension) by 4 inch (vertical dimension) meet the requirements of the code for a private swimming pool enclosure?

**Answer 1:** No. The code states, at item 4 of section 421.10.1, that when the fence is comprised of both horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. In the fence you describe, the distance from top to top of the horizontal members is only 4 inches. The intent of the code is that the horizontal members be located on the inside of the fence so they cannot be utilized as a hand-hold or a foot-hold for small children to climb the fence. Welded wire fabric does not provide enough of an offset between the horizontal and vertical members to secure the intent of the code. The applicable section of the code to control the design of a welded wire fence would be item 6 of section 421.10.1 that permits a maximum opening of 1 ¼ inch square unless the spaces are filled with slats fastened at top and bottom which reduce the openings to not more than 1 ¾ inches.

**Question 2:** Does 48 inch high welded wire fabric fencing with an opening that is 1 inch by 1 inch meet the requirements of the code for a private swimming pool enclosure?

**Answer 2:** Yes. The fence you describe meets the requirements of item 6 of section 421.10.1 and is therefore code-compliant.