STATE BUILDING CODE INTERPRETATION NO. 1-7-06

February 23, 2005

The following is offered in response to your February 9, 2006 letter to me in which you seek a formal interpretation of the provisions of Section 1021.2 of the BOCA National Building Code/1996 portion of the 1999 State Building Code.

Question: A required guard in the stair lobby of a parking garage is installed on top of a precast concrete beam whose top edge is 4 inches above the adjacent floor. The beam is approximately 18 inches wide and the guard is located in the center such that a portion of the beam forms a 4 inch high curb, approximately 9 inches wide in front of the guard. Is the required guard height of 42 inches measured from the top of the beam (the curb) or from the adjacent lobby floor?

Answer: Section 1021.2 of the referenced code requires that the guard shall be at least 42 inches in height measured vertically above the adjacent walking surface. In the instant case, the adjacent walking surface is the floor of the lobby, not the 4 inch high, 9 inch wide curb upon which the guard is mounted, so the top of the guard must be a minimum of 42 inches above the floor, or 38 inches above the 4 inch raised curb. Section 1021.3 of the BOCA Code prohibits an ornamental pattern that would provide a ladder effect (a provision that has been deleted from the 2005 State Building Code). It is my determination that the 4 inch high curb in and of itself does not contribute to the ladder effect in an otherwise compliant design, so the guard you detail is code compliant.