

STATE BUILDING CODE INTERPRETATION NO. I-7-03B

May 30, 2003

The following is offered in response to your letter to me dated May 16, 2003 in which you seek a formal interpretation of the provisions of Chapter 4 of the 1995 CABO One and Two Family Dwelling Code portion of the 1999 State Building Code.

Question: Given that the 1995 CABO Code does not define foundation or retaining wall, is it the intent of the code to require that foundation walls topped by a framed knee wall (no lateral support from the floor) and that support unbalanced fill, be designed as retaining walls?

Answer: Yes. Footnote 2 to Table 404.1.1a of the referenced code makes it clear that the information in the table is based on a height between lateral supports of not more than 8 feet, assuming that the bottom of the wall is braced by a slab and the top of the wall is braced by the floor system. When the floor system rests on a framed knee wall rather than being tied into the sill attached to the foundation wall, there is no lateral support at the top of the wall, and therefore special care must be taken in evaluating the design of such walls. Since the 1995 CABO Code does not offer guidance on this matter and since it would be burdensome to require the design of *all* such walls, I consulted the 2003 International Residential Code (IRC), which the State is evaluating for adoption in 2004. Section R404.1.3 of the IRC requires a design for masonry or concrete foundation walls that do not have permanent lateral support at both the top and the bottom of the wall and that support more than 48 inches of unbalanced backfill. This is a good guideline to follow until the 2003 IRC is adopted.