

STATE BUILDING CODE INTERPRETATION NO. I-17-06

July 12, 2006

The following is offered in response to your June 29, 2006 request for an official interpretation of the provisions of Section 713.2 of the BOCA National Building Code/1996 portion of the 1999 State Building Code.

Question 1: In a building of Type 2A construction with two-hour rated non-bearing exterior masonry walls, the one and one-half-hour rated floor slab stops short of the exterior brick veneer such that 2 ½ inches of rigid insulation and a one-inch air gap pass by the slab edge. Is it the intent of the code that gaps in the exterior wall (both at the underside of the slab and at the sides of tubular steel columns) be filled with a joint system with the same rating as the slab?

Answer 1: Yes. Section 713.2 of the referenced code reads, in part, "floor assemblies which are required to be fire-resistance rated shall extend to and be tight against exterior walls, or other provisions shall be made for maintaining the fire-resistance rating of the assembly at such locations." The intent of the code is that there is continuity in the slab to prevent the passage of smoke or flame from floor to floor. If the slab were tight against a non-combustible exterior wall covering, this would be accomplished. In this case, there is combustible material (insulation) bridging the slab as well as an air gap that goes from floor to floor, much like curtain wall construction. The code requirement for continuity could be met by a rated joint at the slab level that interrupts the insulation and the air space, or could be met by providing joints in the rated exterior wall that have the same rating as the slab.

Question 2: Given the same scenario as Question 1, does the code allow the gaps to be filled with non-rated draft-stopping that will prevent the migration of smoke?

Answer 2: No. See the response to Question 1.