initial engine

Contract 063838

~~January 24, 2012~~ *Revised May 18, 2012*

Mr. Mo Madani
Florida Building Commission
c/o Department of Business and Professional Regulation
~~2555 Shumard Oak Boulevard~~ *1940 North Monroe Street*
Tallahassee, FL 32399

DS 2012-044

Dear Mr. Madani:

This is to request a Declaratory Statement from the Florida Building Commission.

We have an upcoming project that will be a Level 2 renovation. The area of the work is currently an office occupancy. The new project is also an office occupancy, but most of the interior partitions will be rearranged. Therefore, there is no occupancy change, but the renovation is clearly much more than a repair. The building is, of course, existing, and was built in the mid-1980's. At the time it was constructed, the industry standard ventilation rates that were used, were on the order of 7.5 CFM per person. Today's codes are more complicated in the methodology used to arrive at required ventilation rates, but for the most part, today's required ventilation rates are significantly greater than 7.5 CFM per person.

I will be the engineer of record for the project. I have reviewed the *2007 Florida Building Code - Existing Building* and have found that we are not likely to be able to comply under 101.5.1 or under 101.5.3. This leaves 101.5.2, the Work Area Compliance Method as our only viable option.

My question is as follows:

> Is it the intent of the *2007 Florida Building Code - Existing Building*, 709.1 to require all Level 2 Alterations to conform with current Code requirements with respect to ventilation?

The problem that we have before us is the following: Our Level 2 alteration involves a small subset of the building. Everyone understands that the Level 2 alteration requirements apply to only the subset of the building that is being altered. In the case of ventilation requirements, however, it is often impossible to segregate a subset of the building in an attempt to bring it into compliance without also creating a "domino" effect that impacts the balance of the building. This would apply for even less ambitious projects than the one we are dealing with now. For example, if a 200 square foot office is to be divided into two 100 square foot offices, the scope of work is the addition of a minimal wall. Limited thought the scope may be, it is a reconfigured space that meets the definition of Level 2 alteration. In conformance with the Existing Building Code, we read 709.1 and it says, "All reconfigured spaces intended for occupancy... shall be provided with natural or mechanical ventilation or exhaust in accordance with the *Florida Building Code, Mechanical*." If, however, that office is in a 100,000 square foot office building and if that office building is ventilated using a

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single large air handling unit for the entire building, it is impossible to segregate the ventilation requirements of the two 100 square foot offices from the rest of the building. The only way to confirm that the reconfigured space meets the Code is to analyze the entire building. This is one unintended consequence of the Code verbiage. That building may or may not meet current ventilation requirements in its entirety. Further, in order to assure that the reconfigured space receives its Code-compliant pro-rata share of appropriate ventilation, it would be necessary to bring the entire building into compliance, because there is only one air handling unit. Given the capacity limitations of the equipment, it is likely that any such ventilation enhancement may require a corresponding cooling capacity enhancement. This is the second unintended consequence of the letter of the Code.

I have discussed this matter with multiple local authorities. All concur that the answer to my question is, "NO." Unfortunately, however, the Code reads differently. Please assist me in eliminating these unintended consequences.

Thank you.

Very truly yours,
INITIAL ENGINEERS, P.A.

ALFONSO FERNANDEZ-FRAGA, P.E.
President

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