



**Informal Interpretation Report
Number 6547**



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Section 13-407.AB.2.1

Question:

Is it the intent of the Florida Building Code - Building Section 13-407.AB.2.1, Exception B, to allow simultaneous heating and cooling for makeup air systems for 20 percent of kitchen hood exhaust air in Cafeterias and Dining Halls where the same air handling system also provides thermal comfort to occupied dining areas?

Answer

Although a definitive answer cannot be provided without a full review of the proposed design, based upon the limited information provided, the answer would be no. Please consider the following: The ASHRAE 90.1-2004 User's Manual states the following regarding Exception B: "Zones where special pressurization relationships, cross-contamination requirements, or code-required minimum circulation rates are such that variable air volume systems are impractical. This exception might apply to some areas of hospitals, such as operating rooms, and to laboratories that must be maintained at positive (or negative) pressures to prevent contaminants from entering (or escaping). VAV systems have been successfully used in these applications to reduce energy costs, but control is very complicated and requires precise airflow-measuring and/or pressure-measuring instruments. The risk of a failure of these controls, such as the possible release of dangerous chemicals or bacteria, must be balanced against the potential energy savings." As such, it does not appear that the use of Exception B would be permitted in the design of restaurant kitchens and / or dining areas.

Commentary:

It is also important to note that the Florida Energy Code

requires a building to be pressurized relative to the outdoors and also requires the kitchen areas to be slightly negative in pressure relative to the rest of the space. The Florida Building Code - Mechanical prohibits return air to be drawn from a kitchen unless it's from a dedicated kitchen system. Additionally, transfer air from the dining room may be used as the additional make-up air for the kitchen, however, the building must maintain a slight positive pressure relative to the outdoors, so some sort of control process will have to be in place. If the unit installed has multiple stages and a hot-gas bypass then some reheating is permitted.

Notice:

The Building Officials Association of Florida, in cooperation with the Florida Building Commission, the Florida Department of Business & Professional Regulation, ICC, and industry and professional experts offer this interpretation of the Florida Building Code in the interest of consistency in their application statewide. This interpretation is informal, non-binding and subject to acceptance and approval by the local building official.