initial engineers

File xx1131

September 29, 2025

Mr. Mo Madani
Office of Codes and Standards
Department of Business and Professional Regulation
2601 Blair Stone Road
Tallahassee, Florida 32399

Re: **PETITION FOR DECLARATORY STATEMENT BEFORE THE FLORIDA BUILDING COMMISSION**

DS 2025-041

Company: Initial Engineers, P.A.
Address: 7145 S.W. 42nd Terrace
Miami, Florida 33155
Name: Alfonso Fernandez-Fraga
Title: President
Telephone: (305) 669-9393
email: afraga@initialengineers.com

Code Section on Which Declaratory Statement is Sought:

This is to request a Declaratory Statement from the Florida Building Commission on the subject of Florida Building Code Mechanical, 2023 Edition (FBCM), Section 606.2, Section 606.4, and Section 1101.6. We have recurring commercial projects where direct expansion air conditioning systems with A2L refrigerants are required. One in particular is a doctor's office in Miami-Dade County. We are presented with what appear to be contradictory Code requirements related to the FBCM sections cited. We require clarification to effectively dispense with the apparent contradiction. Please note that in this request, I will use the following nomenclature:

"The Code" or "Code" refers to the Florida Building Code, 2023 Edition, all Volumes, all applicable referenced standards, and all Laws and Rules of the State of Florida that apply to the enforcement of "Code."

"ASHRAE 15" refers to the ASHRAE 15 2022 Edition.

I would like to present the following question:

> Section 606.2 and Section 606.4 require that equipment having capacities greater than 2000 cubic feet per minute be equipped with duct smoke detectors, and upon activation, said smoke detectors need to "**shut down** all operational capabilities of the air distribution system." Section 1101.6 states that. "...systems shall comply with the requirements of this code except as modified by this code, ASHRAE 15." Further, the exception under 1101.6

states that. "...systems that use A2L refrigerant shall be designed and installed in accordance with ASHRAE 15." ASHRAE 15, Section 7.6 discusses requirements associated with systems intended to provide human comfort when using A2L refrigerants in "high probability" systems, where "high probability" is defined in ASHRAE 15, 5.2.1. Direct expansion split systems are systems intended to provide human comfort. Further, our project's system is a high-probability system as defined in ASHRAE 15, 5.2.1. Given the foregoing, ASHRAE 15, Section 7.6 applies to our project. If we examine 7.6.1.1, in a high-probability system that has non-continuous air circulation, 7.6.1.1, a., requires that a refrigerant detector be fitted to initiate air circulation in the event of a refrigerant leak. Therefore, ASHRAE 15 dictates that equipment supply fans need to **run** to dissipate refrigerant and reduce its concentration when a refrigerant leak is detected. Therein lies the conflict. When the smoke detector and the refrigerant leak detector are both activated, should the 606.4 **shut down** requirement supersede the ASHRAE 15 **run** requirement?

Discussion: I believe the answer to the question is that 606.4 supersedes ASHRAE 15. The condition being ameliorated by 606.4 suggests that a fire is already present, whereas ASHRAE 15's requirements are attempts to prevent fire or mitigate its spread. The Code mandate that deals with an extant fire should take precedence over the mandate that's intended to prevent fire.

Please note that this question has been discussed at local ASHRAE meetings featuring this issue as a technical topic, but no resolution was definitively reached. Further, ASHRAE only publishes a standard; ASHRAE is not a Code enforcing authority. We need the Building Commission's guidance.

Respectfully submitted and
Very truly yours,
INITIAL ENGINEERS, P.A.

ALFONSO FERNANDEZ-FRAGA, P.E.
President

M:\WORDPROC\LETTERS\Letters2025\FBC_Madani__Sec606.4andASHRAE15_2022DEC(2).wpd