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Smoke Detector Requirements for Common Supply and Return Air Systems

Code: 2002 Mechanical Code

Date: September 15, 2004

Section: Section 606.2.2

Question:

If two or more air-handling systems serve a common space and one or more of these systems serve additional spaces and the aggregate capacity of the combined system capacities exceed 2000 cfm, what are the requirements for smoke detectors per Section 606.2.2?

Answer:

Section 606.2.2 requires that when two or more air systems serve a common space and one or more of these systems also serve additional spaces, and the combined capacity of these systems exceed 2000 cfm, a smoke detector is required for each return air system that serves the additional spaces. The systems do not need to be interlocked with each other. Smoke detectors prevent the spread of smoke to other spaces not involved with a fire when the return air system and/or the combined return air systems are greater than 2000 cfm.

Keywords:

smoke detection system control