



CODE REVIEW COMMITTEE

SACRAMENTO VALLEY ASSOCIATION OF BUILDING OFFICIALS

Committee Chair: Bob Stetson PH: 916-781-6600

Code Review Committee Question/Survey for Dec 2007/Jan 2008 Results and Committee Supported Responses

Subject: Automatic Smoke Shutdown Systems

In the following situations would your jurisdiction require the units to have automatic shutdown for smoke as per CMC Section 609?

1a. Given an open office space is conditioned by two air handlers rated at 1200 cfm each?

	YES		NO
12	50%	12	50%

1b. Given an open office space is conditioned by an air handler rated at 1200 cfm and a second 1200 cfm handling unit serves private offices along the perimeter of the open office?

	YES		NO
10	42%	30	54%

Code Review Committee Supported Responses

Jurisdictions are more diverse on this issue. Some jurisdictions believe that this example is one air-moving system if the private offices and the open office space are connected by doors. However, both IAPMO and ICC consider them to be separate if each system is ducted separately. (See the California State Fire Marshal's Code Interpretation.) Therefore, if each and every private office has its own return air duct (and there are no transfer ducts between the two areas served), the air moving systems are separate and automatic shut down is not required, so the committee response is no.

Subject: Design Professional In Responsible Charge

Given: New CBC Appendix Chapter One, Section 106.3.4 - Design Professionals in Responsible Charge,

2a. Will your jurisdiction require a designated design professional in responsible charge for all buildings and structures designed by an engineer or architect?

	YES		NO
19	79%	5	21%

2b. Will your jurisdiction require a design professional in responsible charge to be designated on the building permit application?

	YES		NO
13	54%	11	46%

2c. Will your jurisdiction require a designated design professional in responsible charge to be designated on the plans?

	YES		NO
11	46%	12	50%

Comments by Spokespersons

2a. There will be some projects that this is applicable, just not "all".

Code Review Committee Supported Responses

These are survey questions. CBC Section 106.3.4 authorizes (but does not require) the building official to require the applicant to designate a registered design professional in responsible charge. However, CBC Section 106.3.4.2 relating to deferred submittals assumes that a registered design professional in responsible charge has been designated. Further, the registered design professional in responsible charge shall list the deferred submittals on the construction documents and review them prior to their submittal to the building official.

Subject: 2007 CBC Seismic Design Category Survey

3. What is the minimum seismic design category for your jurisdiction?

A	0
B	1
C	11
D	12

Comments by Spokespersons

- I believe that the minimum seismic design category for our jurisdiction is E.
- D is the default for us. Vague? The entire thing!
- Our minimum is SDC-C. We will require the designer to prove it though because most of our jurisdiction is SDC-D.

Code Review Committee Supported Responses

This is a survey question, because it is based upon local conditions. Please be aware of CBC Section 1613.5.2 and 1613.5.6 for Seismic Design Category and ASCI 7.05.



California State Fire Marshal **CODE INTERPRETATION**

Date Issued	06-17-02	Interpretation #	02-024
Topic	Automatic Shutdown with Multiple HVAC Units <2000 CFMs		
Code Section(s)	§608, California Mechanical Code (1998)		
Requested by	Mark F. Redmond Ted Jacob Engineering Group, Inc. 1763 Broadway Oakland, CA 94612-2105		

1. *Does the California Mechanical Code require that automatic shutoff be provided for air-moving systems which are comprised of multiple terminal air volume boxes for zone control, all of which are less than 2000 cfms, that cumulatively supply air in excess of 2,000 cubic feet per minute to an enclosed space within buildings?*

Yes. Section 608 of the California Mechanical Code requires that automatic shutoff be provided for *air-moving systems supplying air in excess of 2,000 cubic feet per minute* to enclosed spaces within buildings. Multiple HVAC distribution units including terminal air volume boxes for zone control which cumulatively supply air in excess of 2,000 cubic feet per minute to an enclosed space within buildings also would require automatic shutoff upon smoke detection. Several exceptions to the CMC Section 608 may apply based on individual conditions.

2. *Do smoke detectors need to be installed in the main supply-air ducts of all of these HVAC units and interconnected for automatic shutoff of all the fan units?*

Yes. CMC Section 608 requires the automatic shutoff for air-moving systems to be upon detection of smoke in the main supply-air duct served

by such equipment. Duct smoke detectors must comply with this requirement when they are listed for the air velocity, pressure, humidity, and temperature present in the HVAC system and located in all the main supply-air ducts downstream of both the fan and filters.

As an alternate to smoke detection installed in the main HVAC supply-air duct, Section 608 Exception #1 allows an area smoke detection system to be used to accomplish the required automatic shutoff, when smoke detectors are located in all areas served by the HVAC system.