

STATE OF CALIFORNIA  
STATE AND CONSUMER SERVICES AGENCY  
CALIFORNIA BUILDING STANDARDS COMMISSION  
2525 NATOMAS PARK DR., SUITE 130  
SACRAMENTO, CA 95833  
(916) 263-0916 Phone  
(916) 263-0959 Fax  
Email: BSC@dgs.ca.gov

Office Use Item No. \_\_\_\_\_

**PARTICIPATION COMMENTS FOR THE NOTICE DATED OCTOBER 2, 2009**  
Written comments are to be sent to the above address.

**WRITTEN COMMENT DEADLINE: NOVEMBER 16, 2009**

Date: November 16, 2009

From:

Rick Thornberry, PE

Name (Print or type)

(Signature)

The Code Consortium, Inc. on behalf of the Air Movement and Control Association (AMCA)

Agency, jurisdiction, chapter, company, association, individual, etc.

2724 Elks Way

Street

Napa

City

CA

State

94558-3500

Zip

I/We ~~do~~(do not) agree with:

[  ] The Agency proposed modifications As Submitted on Section No. 716.5.4 Exception 1 of Part 2

and request that this section or reference provision be recommended:

[  ] Approved [  ] Disapproved [  ] Held for Further Study [  ] Approved as Amended

**Suggested Revisions to the Text of the Regulations:**

**716.5.4 Fire partitions.** In other than Group A, E, I and R occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, ducts and air transfer openings that penetrate fire partitions shall be protected with listed fire dampers installed in accordance with their listing.

**Exceptions:** In occupancies other than Group H and L, fire dampers are not required where any of the following apply:

STATE OF CALIFORNIA  
STATE AND CONSUMER SERVICES AGENCY  
CALIFORNIA BUILDING STANDARDS COMMISSION  
2525 NATOMAS PARK DR., SUITE 130  
SACRAMENTO, CA 95833  
(916) 263-0916 Phone  
(916) 263-0959 Fax  
Email: BSC@dgs.ca.gov

Office Use Item No. \_\_\_\_\_

**PARTICIPATION COMMENTS FOR THE NOTICE DATED OCTOBER 2, 2009**  
Written comments are to be sent to the above address.

**WRITTEN COMMENT DEADLINE: NOVEMBER 16, 2009**

Date: November 16, 2009

From:

Rick Thornberry, PE

Name (Print or type)

(Signature)

The Code Consortium, Inc. on behalf of the Air Movement and Control Association (AMCA)

Agency, jurisdiction, chapter, company, association, individual, etc.

2724 Elks Way

Street

Napa

City

CA

State

94558-3500

Zip

I/We ~~do~~(do not) agree with:

[ X ] The Agency proposed modifications As Submitted on Section No. 909.12 of Part 2

and request that this section or reference provision be recommended:

[ ] Approved     [ ] Disapproved     [ ] Held for Further Study     [ X ] Approved as Amended

**Suggested Revisions to the Text of the Regulations:**

The status of dampers shall be determined using limit or proximity switches installed at the damper or incorporated into the damper actuator. Where multiple dampers are grouped together in an assembly requiring one or more actuators, each ~~group of dampers~~ shall be independently controlled independently by a separate actuator and provided with an individual limit or proximity switch, or the dampers shall be permanently linked together by permanent mechanical means into one or more groups controlled by one or more actuators with each group and provided with a common limit or proximity switch.

**Reason:** [The reason should be concise if the request is for “Disapproval,” “Further Study,” or “Approve As Amend” and identify at least one of the 9-point criteria (following) of Health and Safety Code §18930.]

This proposed amendment to Section 909.12 of Part 2 as proposed by the California State Fire Marshal for the adoption of the 2009 ICC International Building Code is based on Item 6 of the nine point criteria in Health and Safety Code Section 18930 which reads: “The proposed building standard is not unnecessarily ambiguous or vague, in whole or in part.”

We believe that the proposed amendment will help to clarify the intent of this paragraph being added to Section 909.12 for the situation where multiple dampers are grouped together to control the airflow through a large duct or plenum. It clarifies that when there are multiple dampers mechanically linked together and controlled by a separate actuator or actuators, that the group of dampers as a whole can be provided with a single limit or proximity switch in lieu of requiring each damper to have its own actuator and limit or proximity switch. It also further clarifies that the group of mechanically linked dampers could actually consist of more than one grouping of dampers to completely fill the opening in the duct or plenum with each mechanically linked group of dampers having its own actuator or actuators and its own limit or proximity switch.

1. Corridor walls in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 ~~or 903.3.1.2~~ and the duct is protected as a through penetration in accordance with Section 713.

**Reason:** [The reason should be concise if the request is for “Disapproval,” “Further Study,” or “Approve As Amend” and identify at least one of the 9-point criteria (following) of Health and Safety Code §18930.]

This proposed amendment to Exception 1 to Section 716.5.4 of Part 2 as proposed by the California State Fire Marshal for the adoption of the 2009 ICC International Building Code is based on Item 3 of the nine point criteria in Health and Safety Code Section 18930 which reads: “The public interest requires the adoption of the building standards.”

This proposed amendment simply deletes the reference to Section 903.3.1.2 which specifies the requirements for an NFPA 13R automatic sprinkler system. In other words, the deletion of this section reference will not allow the use of an NFPA 13R sprinkler system to utilize Exception 1 for the elimination of fire dampers in ducts penetrating 1-hour fire partitions constructed as corridor walls. This would be consistent with other State Fire Marshal amendments that have eliminated the allowable use of NFPA 13R sprinkler systems for the implementation of specific exceptions such as Exception 3 to Section 716.5.2 Fire Barriers for eliminating the fire dampers in ducts that penetrate fire barriers. Fire dampers are part of the basic building construction compartmentation features which should not be allowed to be traded-off for a life safety system such as NFPA 13R. The fire dampers are intended to minimize the spread of fire from an occupied space into a 1-hour protected corridor.

It should be noted that NFPA 13R sprinkler systems are limited to residential occupancy buildings not greater than 4 stories in height. Therefore, this Exception would apply to a very limited building stock of residential occupancies. Furthermore, Section 1.2.1 of the purpose of NFPA 13R states: “The purpose of the standard shall be to provide a sprinkler system that aids in the detection and control of residential fires and thus provides improved protection against injury, life loss, and property damage.” The Annex A note to Section 1.2 Purpose states the following:

“Various levels of sprinkler protection are available to provide life safety and property

protection. This standard is designed to provide a high, but not absolute, level of life safety and a lesser level of property protection. Greater protection to both life and property could be achieved by sprinklering all areas in accordance with NFPA 13 which permits the use of residential sprinklers in residential areas.

“This standard recommends, but does not require, sprinklering of all areas in the building; it permits sprinklers to be omitted in certain areas...”

“It should be recognized that the omission of sprinklers from certain areas could result in the development of untenable conditions in adjacent spaces...”

In addition, the Annex A note to Section A.1.1 Scope states the following:

“A sprinkler system designed and installed according to this standard cannot, however, be expected to completely control a fire involving fuel loads that are significantly higher than average for dwelling units (10 lbs/sf), configurations of fuels other than those with typical residential occupancies, or conditions where the interior finish has an unusually high flame spread index (> 225)... Conditions that allow the fire to grow beyond that point before sprinkler activation or that interfere with the quality of water distribution can produce conditions beyond the capabilities of the sprinkler system described in this standards. Unusually high ceilings or ceiling configurations that tend to divert the rising hot gasses from sprinkler locations or change the sprinkler discharge pattern from its standard pattern can produce fire conditions that cannot be extinguished or controlled by the systems described in this standard.”

The NFPA 13R sprinkler standard also allows for sprinklers to be omitted in combustible concealed spaces such as attics and floor/ceiling assemblies, as well as other areas permitted by Sections 6.6.2 through 6.6.7 of NFPA 13R-2010.

In conclusion, since an NFPA 13R sprinkler system is not as effective in controlling and/or extinguishing fires as an NFPA 13 sprinkler system, it does not appear reasonable nor prudent to allow the NFPA 13R sprinkler system to be used to trade-off the required fire damper in ducts penetrating 1-hour fire-resistance rated corridor walls. This would also be consistent with the

previous California Building Code adopted prior to the 2007 edition which prohibited any trade-offs for residential sprinkler systems.