



addition, the 1997 UBC and subsequent CA Building Code specifically exempted the hallway provisions from all I and R occupancies thereby requiring elevator shaft smoke protection (lobbies) in all mid rise I and R occupancies.

As CA was considering adopting the IBC, the State Fire Marshal and the Building Commission each separately made public statements that the new code provisions being adopted would be "Substantially Equivalent" to the provisions of the CA Building Code in place at the time of adoption. There is no question that the protection of the elevator shaft from vertical smoke migration is substantially less under the current CA Building Code which requires no protection of mid rise buildings, particularly for those occupancies where people are incapacitated or likely to be sleeping.

Smoke Guard believes that the problem of vertical smoke migration is even more likely to occur in mid rise buildings than in high rise buildings as evidenced by NFPA national studies which determined that smoke moved off the floor of origin in sprinklered mid rise buildings in 16% of the fires reported over a 10 year period. In comparison, smoke migration off the floor of origin occurred in 11% of the fires in sprinklered high rise buildings. The study covered fires reported by NFIRS and modified by NFPA to represent the experience of all of the United States over a 10 year period.

In addition during a similar time period NFPA provided data broken out by region of the country on deaths and injuries. This analysis looked only at fires in multi story buildings and excluded fires in one and two family residences regardless of height. It found that citizens from the western region of the US (generally covered by the UBC) had fatalities 1/7th of the national average and 1/10th in terms of injuries. The UBC was the only legacy code that required protection of mid rise buildings against smoke migration through the elevator shaft. While it is technically inappropriate to suggest that the elevator lobby requirement contributed to the substantially superior safety performance of the western US, the code had to have some effect (along with other factors such as building age, etc). Also of note is that during this period the CA fatality and injury rates were superior to even the Western region's average.

In summary, Smoke Guard supports the CA State Fire Marshal proposed changes to Exception 4 to exempt the elevator lobby requirements in mid rise buildings only where the occupancy does not require rated corridors. This amendment will restore the traditional requirements to protect mid rise buildings with enclosed elevator lobbies where the building is required to have rated corridors and will provide "substantially equivalent" protection to prior versions of the CBC.

## **HEALTH & SAFETY CODE SECTION 18930**

### **SECTION 18930. APPROVAL OR ADOPTION OF BUILDING STANDARDS; ANALYSIS AND CRITERIA; REVIEW CONSIDERATIONS; FACTUAL DETERMINATIONS**

- (a) Any building standard adopted or proposed by state agencies shall be submitted to, and approved or adopted by, the California Building Standards Commission prior to codification. Prior to submission to the commission, building standards shall be adopted in compliance with the procedures specified in Article 5 (commencing with Section 11346) of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code. Building standards adopted by state agencies and submitted to the commission for approval shall be accompanied by an analysis written by the adopting agency or state agency that proposes the building standards which shall, to the satisfaction of the commission, justify the approval thereof in terms of the following criteria:
- (1) The proposed building standards do not conflict with, overlap, or duplicate other building standards.
  - (2) The proposed building standard is within the parameters established by enabling legislation and is not expressly within the exclusive jurisdiction of another agency.
  - (3) The public interest requires the adoption of the building standards.
  - (4) The proposed building standard is not unreasonable, arbitrary, unfair, or capricious, in whole or in part.
  - (5) The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.
  - (6) The proposed building standard is not unnecessarily ambiguous or vague, in whole or in part.
  - (7) The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.

- (A) If a national specification, published standard, or model code does not adequately address the goals of the state agency, a statement defining the inadequacy shall accompany the proposed building standard when submitted to the commission.
  - (B) If there is no national specification, published standard, or model code that is relevant to the proposed building standard, the state agency shall prepare a statement informing the commission and submit that statement with the proposed building standard.
- (8) The format of the proposed building standards is consistent with that adopted by the commission.
  - (9) The proposed building standard, if it promotes fire and panic safety as determined by the State Fire Marshal, has the written approval of the State Fire Marshal.