

#39



Long Beach Fire Department and Department of Planning and Building

FIRE SPRINKLER AND FIRE ALERTING REPORT

David W. Ellis
Fire Chief

Hank Teran, Fire Marshal

Larry Brugger, Building Official

June 19, 2007



Paradise Gardens Apartment Fire December 8, 2006





Public Safety Committee Meeting Presentations



January 30, 2007

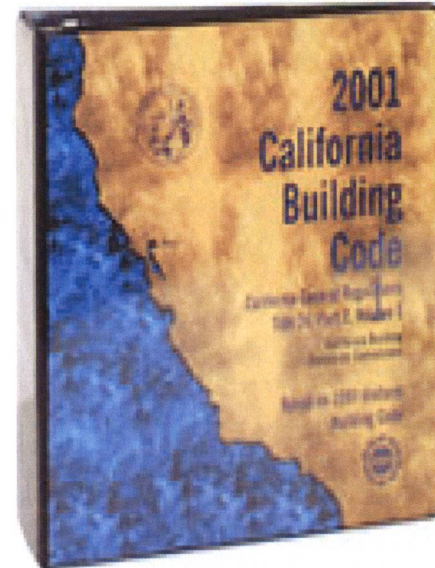
- Fire Code and Building Code adoption
- Code progression
- No Retrofit Ordinance
- High-rise

April 3, 2007

- Funding Opportunities
- Community Outreach

May 22, 2007

- Industry Presentations





Fire Sprinkler Data



- Residential fires represent approximately 80% of all fire deaths and 76% of the injuries to civilians
- Fire Sprinklers are 96% effective in the control of fire
- Safer environment for one's family, protection of investment and irreplaceable family possessions and, in some instances, lowers insurance rates 5 to 20%
- Property damage losses are 85% less in residences with fire sprinklers

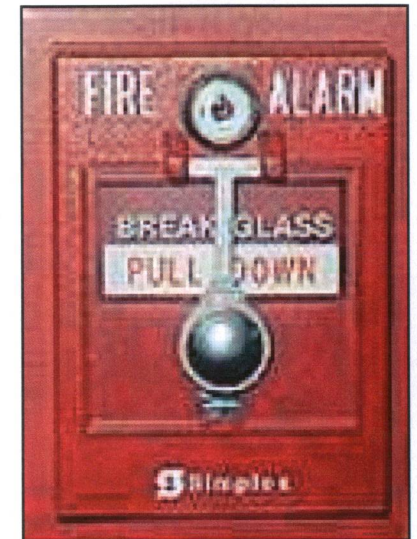




Fire Alerting Data



- Designed to provide early notification to occupants of smoke or fire within an area or occupancy.
- The systems are not designed to extinguish a fire, but simply notify the occupants that a fire condition exists.
- One of the problematic areas with existing fire alarm systems is a significant number of these systems do not meet current standards for audibility, visual notification and smoke detector locations.





COST ESTIMATE MODEL



New construction

\$2.50 to \$5.00 per square foot

Existing occupancies:

\$3.00 to \$6.00 per square foot

- 10-unit residential occupancy = \$50,000
- 25-unit residential occupancy = \$100,000
- 50-unit residential occupancy = \$195,000
- High-rise residential (10 story)= \$600,000

Fire Alarm

Existing non-high-rise \$1.00 per square foot

Existing high-rise \$1.25 per square

Owners are concerned with unforeseen costs for the installation in existing occupancies including possible asbestos abatement, lead paint and tenant relocation.





JURISDICTIONAL SURVEY



- Over 30 cities have adopted fire sprinkler ordinances that are more restrictive than the model codes.
- The City of Glendale adopted a fire sprinkler ordinance in 1989 requiring all new construction to be fire sprinklered. In 1989, they also adopted a retrofit fire sprinkler ordinance for existing residential and non-residential occupancies when building modifications are made.
- In regards to fire alarm systems, the City of Los Angeles requires buildings with existing fire alarm systems to be upgraded to comply with current code requirements throughout the building when the fire alarm panels are outdated and require replacement.
- 90% do not offer any financial incentives.



COMMUNITY OUTREACH



- Apartment Association
- Downtown Long Beach Associates
- Other community organizations



Fire Demonstration





Galaxy Towers Fire

Non-sprinklered High-rise





RECOMMENDATIONS



- New Construction – Fire Sprinklers
- Existing Construction – Fire Sprinklers
- Existing Construction – Fire Alarms



RECOMMENDATIONS

New Construction – Fire Sprinklers



1. Require all ***new multi-family (3 or more units) residential, hotels, motels and similar buildings*** to be protected by fire sprinkler systems.
2. Require all ***new single-family dwellings and duplexes*** greater than 4,000 sq. ft. or more than 2 stories in height to be protected by fire sprinkler systems.
3. Require all ***new commercial, industrial and non-residential*** buildings that require 2 or more exits or that are greater than 3,000 sq. ft. to be protected by fire sprinkler systems.



RECOMMENDATIONS

Existing Construction - Fire Sprinklers



4. (a) Require all **existing multi-family residential, hotels and motels** containing 50 or more units to be retrofitted with fire sprinkler systems **within a period not to exceed 5 years.**

(b) Require all **existing multi-family residential, hotels, motels and buildings** less than 50 units to be retrofitted with fire sprinkler systems only when (1) addition is greater than 5,000 sq. ft., or 25% of the existing square footage, or (2) alteration, repair or rehabilitation is equal to or greater than 25% of the replacement cost of the building, over a period of three years.
5. Require all **existing single-family dwellings and duplexes**, when additions are made and the total sq. ft. is greater than 4,000 sq. ft. or more than 2 stories in height, to be protected by fire sprinkler systems except when the increase in square footage of the building is 10% or less over a period of three years.
6. Require all **existing high-rise** (over 75 feet) buildings as defined by the California Building Code to be retrofitted with fire sprinklers **within a period not to exceed 10 years.**



RECOMMENDATIONS

Existing Construction - Fire Alarms



7. Require all ***existing multi-family residential, hotels and motels*** to upgrade existing fire alarm system to current code at the time of replacement of the existing non-functioning fire alarm control panel.
8. Require all ***existing high-rise*** (over 75 feet) buildings as defined by the California Building Code to upgrade existing fire alarm system to current code at the time of replacement of the existing non-functioning fire alarm control panel.



Public Safety Committee Recommendations



- A. Allow flexibility in the implementation of the requirements for retrofitting on a case by case basis.
 - Create a Fire Life Safety Advisory Board
- B. Allow buildings that cannot be retrofitted with fire sprinklers have mandatory educational programs, fire drills and fire extinguishers in each unit.
 - Create a public educational campaign to be incorporated with scheduled inspections
- C. A list of all permanent tenants that have special emergency evacuation needs be given to the Fire Chief on a voluntary basis.
 - Create a voluntary tenant evacuation program approved by the Fire Department



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