October is National Fire Protection Month: Is your hotel really fire-protection ready?

Another great article from The Rooms Chronicle®, the #1 journal for hotel rooms management! ***Important notice: This article may not be reproduced without permission of the publisher or the author.*** College of Hospitality and Tourism Management, Niagara University, P.O. Box 2036, Niagara University, NY 14109-2036. Phone: 866-Read TRC. E-mail: editor@roomschronicle.com

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All too often, the success of an aspect of our lodging establishment operation introduces a brief euphoria and we give a sigh of relief, "Well, that is taken care of." Invariably, a chink in the armor appears and we are "scrambling." Your author was on staff of the predecessor American Hotel & Motel Association with responsibility for fire protection in the lodging industry. During the 1980's the industry was the target of arsonists and it was a nightmare. Loss of life was unacceptable and property losses were staggering.

Hotel fire safety regulations enacted

Congress introduced the Hotel and Motel Fire Safety Act of 1990 and the situation began to significantly change. The bill was unusual in that it was focused upon traveling members of the Federal establishment. The mandates required ALL properties must have hard-wired, single-station smoke detectors and properties four stories and above must be fully sprinklered. A Federal employee staying in a property that did not meet these mandates would not be reimbursed for the hotel stay.

Even as the bill was being drafted, John "Sonny" Scarff of Marriott and Tom Daly of Hilton were proponents of full fire protection for every one of their establishments. And it worked! By November 1994, executives of the National Fire Protection Association joined the Board of the American Hotel & Motel Association at the Waldorf=Astoria in New York City during the International Hotel, Motel & Restaurant Show to recognize them for the outstanding progress in providing a fire safe lodging industry. Furthermore, they eliminated the listing of the hotels from the annual residential fire statistics as the experience was such; the statistical instrument would not properly record actual experience.

The Williams-Steiger Occupational Safety & Health Act of 1970, better known as OSHA, has many requirements under Subpart

L - Fire Protection (1910.155-1910.165). It is here we will consider the elements under the article's title, "Is your hotel really fire protection ready?"

Fire extinguishers

Although it is permissible to eliminate fire extinguishers in many jurisdictions if the property is fully sprinklered, your author urges you to maintain full fire extinguisher capability. If a well-trained employee discovers a fire in its incipient (just getting started) stage, the extinguisher, when properly operated, will control the fire and prevent it from building enough heat to activate a

Did you know?

According to a March 2008 National Fire Protection Association report, an average of 3,900 structure fires were reported in hotels and motels annually during the fouryear period of 2002-2005.

These fires caused an annual average of 11 civilian deaths, 144 civilian fire injuries, and \$64.2 million in direct property damage. As the report reveals:

- On average, one of every 12 hotels or motels reported a structure fire each
- Cooking equipment was involved in 37% of the fires, 21% of the injuries, and 6% of the direct property damage.
- Only 5% of the fires were intentionally set, but these accounted for 33% of the associated property damage.
- Only 12% of hotel and motel fires began in bedrooms, but these fires caused 74% of the associated civilian deaths and 41% of the injuries.
- Automatic extinguishing systems were present in 41% of the hotel and motel fires. None of the hotel or motel fire deaths occurred in properties with sprinklers in the fire area.
- Most hotel and motel fires are minor. Seventy-one percent were confined to the object of origin. Only 8% extended beyond the room of origin.

sprinkler head with resultant water damage, in addition to the fire damage, before being automatically extinguished. Are there an adequate number of extinguishers installed throughout the building? Are they visible and readily accessible? Are a major portion of the units all-purpose? ABC units will help fight Class A (wood, paper, cloth, etc.), Class B (flammable liquids. gases oils, grease), and Class C (electrical) fires. For food service operations, a Class K (wet chemical) unit with an extension arm for penetrating deep fat fryer fires should be available.

Are ALL employees trained in proper use of an extinguisher? Are the units on current service date? Have the canisters been provided a hydrostatic test within five years for other than dry chemical which has an 8-year limit? Does the hotel strictly adhere to a fully charged extinguisher requirement? Unfortunately, but understandably, an employee may give a brief discharge of foam or dry chemical to extinguish a surface or pan fire to avoid

(Excluding Residential Hotels)				
Rank	City	Hotel	Date	Deaths
1	Atlanta, GA	Winecoff Hotel	December 1946	119
2	Las Vegas, NV	MGM Grand Hotel	November 1980	85
3	Milwaukee, WI	Newhall House Hotel	January 1983	71
4	Chicago, IL	LaSalle Hotel	June 1946	61
5	Houston, TX	Gulf Motel	September 1943	54
6	New York, NY	Windsor Hotel	March 1899	**45
7	Atlanta, GA	Terminal Hotel	May 1938	35
8	Lansing, MI	Kerns Hotel	December 1934	32
9	St. Louis, MO	Pacific Hotel	February 1858	32
10	Chicago, IL	Barton Hotel	February 1955	29

Ten Deadliest U.S. Hotel Fires of All Time*

- * Excludes the San Juan, Puerto Rico Dupont Plaza Hotel fire in December 1986 that killed 97 people.
- ** Reported deaths vary from 33 to 92 by source, an unusually large degree of disagreement.

Source: NFPA's archive files, *The 1984 Fire Almanac* and NFPA's Fire Incident Data Organization database.

"dumping" a hood system over ranges/stoves. A partial discharge compromises the canister extinguisher unit. If that canister was needed in a major surface flare-up, it may be inoperative and the hood extinguisher will resultantly activate. A canister with partially used content must be re-serviced and never returned to position for another partial use.

Smoke detector systems

Many organizations have moved beyond the hard-wired single station smoke detection system to a fully annunciated system wherein a control panel gives instantaneous indication of activation of a sensor so immediate response may be provided. Whatever the level of sophistication of the hotel's sensor system, be sure all units are on a regular cleaning and maintenance schedule. This will avoid false alarms or failure when a sensor reaction is needed.

Enhancements to the smoke sensors have been significant. There are two types of smoke alarms in general use throughout the lodging industry. The ionization type smoke sensor tends to respond faster to a flaming fire. On the other hand, the photoelectric type of alarm responds more quickly to smoke produced by a smoldering fire. Dual sensor smoke alarms have been developed and they include both the ionization and photoelectric capabilities in the single unit. In new or replacement initiatives, the dual sensor should be seriously considered.

Fire sprinklers

The most effective fire protection is the automatic fire extinguishment system – sprinklers. Maintenance and security of the system are critical. This involves intake piping, storage tanks, pumps, valves, controls, locks, flow alarms, standpipe and hose systems, risers, horizontal lines, sprinkler heads and sprinkler head reserves. Sprinkler heads MUST be on a regular and continuing basis. The heads must be free of lint, dust, grease, paint or any other substance that could impede immediate reaction of the sprinkler head under fire conditions. On a 24/7 basis have at least one staff member who knows where the shutoff valve is for a sprinkler line, floor by floor. However, REMEMBER if a sprinkler activates ONLY THE FIRE AUTHORITY MAY TURN IT OFF!

A FIRE-PROTECTION READINESS STATUS REPORT

- 1. Are all fire extinguishers in place, easily visible and readily available?
- 2. Is the unit fully charged and are dates for service and hydrostatic testing appropriate?
- 3. Have ALL employees been provided "hands-on" training in the use of the extinguishers? Do they know the proper unit to use according to class of fire, and when to withdraw and close the door in a fire "first aid" effort? *Pull the alarm* should have been the first thing done. We want no dead heroes.
- 4. Do all employees adhere to the need to report use of partial contents of an extinguisher so it can be serviced? Does Engineering have a replacement unit while the other is being serviced?
- 5. Are ALL smoke sensors on a regular maintenance and cleaning schedule?
- 6. If on an annunciated system, is there a response protocol that denies entry if the door surface or door knob or lever is hot? (This should not occur in a fully sprinklered property as the sprinkler would have activated and extinguished the fire.)
- 7. Are all sprinkler heads on a regular and continuing maintenance check-up?
- 8. Is there an adequate supply of replacement sprinklers, by type, on hand?
- 9. What is protocol when the flow alarm sounds? In addition to Engineering, do the M.O.D and other staff know to recognize the alarm and react?
- 10. On a 24/7 basis are the M.O.D. and other staff persons aware of emergency shut-off positions throughout the property and the need to ALWAYS IMMEDIATELY CALL THE FIRE DEPARTMENT IN ANY FIRE SYS-TEM OR ALARM EMERGENCY?

Inspect the hotel

WALK YOUR PROPERTY! In the entourage include the chief engineer, security director, others with safety and fire protection responsibilities, and department heads, on a department by department basis. And you are not going to like this suggestion; but if you are serious about fire protection, invite the A.H.J., (authority having jurisdiction). This would typically be your fire chief or commissioner. You will get some citations, but those will remove conditions that would have detracted from your fire protection response capability. List corrections needed; assign the responsibility; and establish a follow-up for prompt completion of ALL corrections. \Leftrightarrow

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