

LIABILITY LOSS CONTROL MANAGEMENT

LIFE SAFETY BASICS

Smoke and other combustion products such as toxic gases are the most significant factors in loss-of-life fires. The prompt and safe evacuation of building occupants and immediate notification of the fire department are the primary means to prevent such loss of life and damage or loss of property. In general, saving building occupants from a fire requires the following principles, all of which are delineated in NFPA 101, Life Safety Code.

DETECTION AND ALERTING - The key components necessary to initiate occupant action

- ❖ Smoke and/or heat detectors – routine inspection and testing to assure proper operation.
 - In each habitable area and in any sleeping quarters
 - In hallways and corridors and at the head of stairways
 - In areas such as furnace/boiler rooms, cooking areas, and any other heat-generating “processing”
 - In unoccupied storage areas, attics, and basements
- ❖ Audible and visible alarm systems
 - Alarms (horns/bells) connected to the detection system
 - Manually activated alarms
 - Strobe lights
 - Voice communication systems
 - Procedure and means for notifying the fire department

MEANS OF EGRESS – Adequate number of, and well-maintained routes of escape

- ❖ From any point in the building, each occupant must have:
 - 2 or more separate exits; exits conspicuously marked and readily accessible/no obstructions
 - At least 2 routes of escape; routes properly marked, including direction of travel
 - A designated safe relocation area
- ❖ Exit hardware
 - Panic hardware on all exit doors
- ❖ Maximum travel distance to an exit (these are general guidelines only)
 - 100 ft. in facilities not equipped with automatic fire suppression sprinklers
 - 150 ft. in sprinklered facilities
 - 75 ft. in facilities with “high hazard” contents (contents that will burn with extreme rapidity or from which dense smoke, poisonous fumes or explosions are likely in a fire situation)
- ❖ Protection of egress route
 - Flame-resistant interior finish (carpets, draperies, upholstered furnishings)
 - Enclosed stairways, with means of exhausting smoke and toxic gases from the stairway

EMERGENCY POWER AND EMERGENCY LIGHTING PROVISIONS

- ❖ Illumination of:
 - Exit signs
 - Exits
 - Pathways to exits
 - Changes in elevation
 - Stairs (minimum level of illumination = 10 lux / 1 footcandle)

- ❖ Emergency lighting:
 - Frequent, routine testing
 - Include verification that light beams are properly aimed

EVACUATION PLAN

- ❖ Written plan, including procedures for notifying all appropriate emergency services
- ❖ Egress route maps posted
- ❖ Emergency response team – regular drills
- ❖ Employee training

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