

# NFPA 101 *Life Safety Code - 2009 Edition*

## Excerpts from Chapter 4 General

### 4.1\* Goals.

**4.1.1\* Fire.** A goal of this Code to provide an environment for the occupants that is reasonably safe from fire by the following means:

- (1)\*Protection of occupants not intimate with the initial fire development.
- (2) Improvement of the survivability of occupants intimate with the initial fire development

**4.1.2\* Comparable Emergencies.** An additional goal is to provide life safely during emergencies that can be mitigated using methods comparable to those used in case of fire.

**4.1.3\* Crowd Movement.** An additional goal is to provide for reasonably safe emergency crowd movement and, where required, reasonably safe nonemergency crowd movement.

### 4.2 Objectives.

**4.2.1 Occupant Protection.** A structure shall be designed, constructed, and maintained to protect occupants who are not intimate with the initial fire development for the time needed to evacuate, relocate, or defend in place.

**4.2.2 Structural Integrity.** Structural integrity shall be maintained for the time needed to evacuate, relocate, or defend in place occupants who are not intimate with the initial fire development.

**4.2.3 Systems Effectiveness.** Systems utilized to achieve the goals of Section 4.1 shall be effective in mitigating the hazard or condition for which they are being used, shall be reliable, shall be maintained to the level at which they were designed to operate, and shall remain operational

### 4.3\* Assumptions.

**4.3.1\* General.** The protection methods of this Code are based on the hazards associated with fire and other events that have comparable impact on a building and its occupancy.

**4.3.2 Single Fire Source.** The fire protection methods of this Code assume a single fire source.

## 4.4 Life Safety Compliance Options.

**4.4.1 Options.** Life safety meeting the goals and objectives of Sections 4.1 and 4.2 shall be provided in accordance with either of the following:

- (1) Prescriptive-based provisions per 4.4.2
- (2) Performance-based provisions per 4.4.3

### 4.4.2 Prescriptive-Based Option.

**4.4.2.1** A prescriptive-based life safety design shall be in accordance with Chapters 1 through 4, Chapters 6 through 11, Chapter 43, and the applicable occupancy chapter, Chapters 12 through 42.

**4.4.2.2** Prescriptive-based designs meeting the requirements of Chapters 1 through 3, Sections 4.5 through 4.8 and Chapters 6 through 43 of this Code shall be deemed to satisfy the provisions of Sections 4.1 and 4.2.

**4.4.2.3** Where specific requirements contained in Chapters 11 through 43 differ from general requirements contained in (Chapters 1 through 4 and Chapters 6 through 10, the requirements of Chapters 11 through 45 shall govern.

**4.4.3 Performance-Based Option.** A performance-based life safety design shall be in accordance with Chapters 1 through 5.

## 4.5 Fundamental Requirements.

**4.5.1 Multiple Safeguards.** The design of every building or structure intended for human occupancy shall be such that reliance for safety to life does not depend solely on any single safeguard. An additional **safeguard(s)** shall be provided for life safety in case any single safeguard is ineffective due to **inappropriate human actions or system failure.**

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**4.5.2 Appropriateness of Safeguards.** Every building or structure shall be provided with means of egress and other fire and life safety safeguards of the kinds, numbers, locations, and capacities appropriate to the individual building or structure, with due regard to the following:

- (1) Character of the occupancy; including fire load
- (2) Capabilities of the occupants
- (3) Number of persons exposed
- (4) Fire protection available
- (5) Capabilities of response personnel
- (6) Height and construction type of the building or structure
- (7) Other factors necessary to provide occupants with a reasonable degree of safety

### 4.5.3 Means of Egress.

**4.5.3.1 Number of Means of Egress.** Two means of egress, as a minimum, shall be provided in every building or structure, section, and area where size, occupancy, and arrangement endanger occupants attempting to use a single means of egress that is blocked by fire or smoke. The two means of egress shall be arranged to minimize the possibility that both might be rendered impassable by the same emergency condition,

**4.5.3.4 Lighting.** Where artificial illumination is needed in a building or structure, egress facilities shall be included in the lighting design.

**4.5.4\* Occupant Notification.** In every building or structure of such size, arrangement, or occupancy that a fire itself might not provide adequate occupant warning, fire alarm systems shall be provided where necessary to warn occupants of the existence of fire.

**4.5.5\* Situation Awareness.** Systems used to achieve the goals of Section 4.1 shall be effective in facilitating and enhancing situation awareness, as appropriate, by building management, other occupants and emergency responders of the functionality or state of critical building systems, the conditions that might warrant emergency response, and the appropriate nature and timing of such responses.

**4.5.6 Vertical Openings.** Every vertical opening between the floors of a building shall be suitably enclosed or protected, as necessary, to afford reasonable safety to occupants while using the means of egress and to prevent the spread of fire, smoke, or fumes through vertical openings from floor to floor before occupants have entered exits.

**4.5.7 System Design/Installation.** Any fire protection system, building service equipment, feature of protection, or safeguard provided to achieve the goals of this *Code* shall be designed, installed, and approved in accordance with applicable NFPA standards.

**4.5.8 Maintenance.** Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this *Code*, such device, equipment, system, condition, arrangement, level of protection, or other feature shall thereafter be maintained, unless the *Code* exempts such maintenance.

### 4.6 General Requirements.

#### 4.6.1 Authority having Jurisdiction.

**4.6.1.1** The authority having jurisdiction shall determine whether the provisions of this *Code* are met.

**4.6.1.2** Any requirements that are essential for the safety of building occupants and that are not specifically provided for by this *Code* shall be determined by the authority having jurisdiction.

**4.6.1.3** Where it is evident that a reasonable degree of safety is provided, any requirement shall be permitted to be modified if it's the judgment of the authority having jurisdiction, its application would be hazardous under normal occupancy conditions

#### 4.6.13 Maintenance, Inspection, and Testing.

**4.6.13.1** Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, fire-resistive construction, or any other feature is required for compliance with the provisions of this *Code*, such device, equipment, system, condition, arrangement, level of protection, fire-resistive construction, or other feature shall thereafter be continuously maintained. Maintenance shall be provided in accordance with applicable NFM requirements or requirements developed as part of a performance-based design, or as directed by the authority having jurisdiction.

**4.6.13.2** No existing life safety feature shall be removed or reduced where such feature is a requirement for new construction.

**4.6.13.3\*** Existing life safety features obvious to the public, if not required by fire *Code*, shall be either maintained or removed.

**4.6.13.4** Any device, equipment, system, condition, arrangement, level of protection, fire-resistive construction, or any other feature requiring periodic testing, inspection, or operation to ensure its maintenance shall be tested, inspected, or operated as specified elsewhere in this *Code* or as directed by the authority having jurisdiction.

**4.6.13.5** Maintenance, inspection, and testing shall be performed under the supervision of a responsible person who shall ensure that testing, inspection, and maintenance are made at specified intervals in accordance with applicable NFPA standards or as directed by the authority having jurisdiction.