



Haunted Houses and Special Amusement Buildings

The Office of the State Fire Marshal (OSFM) reminds local authorities, owners, and operators of haunted houses that these occupancies can present special hazards that make them particularly vulnerable to fire and fire injuries if applicable codes are not followed. By their nature, haunted houses are often structures that may be constructed of plywood or other combustible materials. Also, because of their temporary nature owners often believe that haunted house occupancies are exempt from fire sprinkler protection or fire detection system requirements. Furthermore, haunted houses are usually designed to be dark and offer low visibility to visitors and frequently are set up in “maze-like” designs that can be confusing to the occupants. This document reviews the fire safety regulations required by the rules adopted by Illinois.

NFPA *Life Safety Code* classifies haunted houses as “Special Amusement Buildings.” The rules of OSFM serve as the minimum requirements in non-home rule municipalities. If the local fire and/or building departments has more stringent requirements these more stringent requirements must be followed. Haunted houses found in home-rule municipalities that have not adopted OSFM’s LSC must comply with that municipalities requirements and OSFM’s Life Safety Code does not apply.

Fire History

At least two tragic fires have occurred in haunted house occupancies in the United States:

- In October 1973, just four days prior to Halloween, a fire occurred at the Washington Reid School PTA haunted house in Prince William County, Virginia. In that haunted house a simulated maze caught fire killing a PTA volunteer and injuring two others that were helping to construct the maze inside a school classroom. The PTA members had created the effect of a haunted house in one of the classrooms by erecting eight-foot high panels of flannel cloth secured to one by three-inch wood strips. The flannel was then sprayed with a black lacquer-based paint. To reduce light, brown paper was taped over the windows and over the flannel panels directly in front of the windows. “Black lights” were installed with temporary wiring at various locations. Power was supplied to test the lights prior to the start of the function, at which time one of the panels burst into flames. The fire occurred just one-half hour prior to when over 200 students were to have entered the haunted house.
- In May 1984 a fire in the “Haunted Castle” at Six Flags Great Adventure Park in New Jersey resulted in the death of eight visitors. At the time of the fire there were three employees and an estimated 28–34 visitors in the structure. The eight victims were unable to immediately exit from the structure died in the fire. The haunted house was constructed using 17 commercial trailers (each about 8 ft wide by 40 ft long). The trailers were connected using plywood. The interior of the Haunted Castle was constructed of plywood partitions that created a convoluted path of travel approximately 450 ft long. Materials used for the interior included synthetic foam, various fabrics and plastics, plywood, and tarpaper. The exact cause of the fire was undetermined, but some witnesses indicated that they had seen a visitor lighting a cigarette lighter inside the occupancy and possibly igniting foam insulation. According to NFPA’s investigation of the Six Flags fire, several major factors were noted to have contributed to the loss of life. Those factors included the failure to detect and extinguish the fire at its incipient stage by means of fixed fire detection and suppression

systems; ignition of synthetic foam materials and subsequent fire and smoke spread involving combustible interior finishes; and the difficulty of escape by occupants based on fire conditions in the haunted-house type of environment.

Illinois Code Requirements

Haunted Houses are considered a “Special Amusement Building” in accordance with the 2015 edition of NFPA 101, *Life Safety Code* (LSC).

The LSC’s definition of “Special Amusement Building” is found in Section 3.3.36.10 and states:

A building that is temporary, permanent, or mobile that contains a device or system that conveys passengers or provides a walkway along, around, or over a course in any direction as a form of amusement arranged so that the egress path is not readily apparent due to visual or audio distractions or an intentionally confounded egress path, or is not readily available due to the mode of conveyance through the building or structure.

The LSC Annex makes it clear that a haunted house is intended to be classified as a special amusement building:

A.3.3.36.10:Special Amusement Building.

Special amusement buildings include amusements such as a haunted house, a roller coaster-type ride within a building, a multilevel play structure within a building, a submarine ride, and similar amusements where the occupants are not in the open air.

Special amusement buildings are addressed by the LSC in Section 12.4.8 (for new special amusement buildings) or Section 13.4.8 (for existing special amusement buildings). Both Section 12.4.8 and 13.4.8 prescribe identical requirements so only the Section 12.4.8 requirements are addressed below.

Special amusement buildings, regardless of occupant load, shall meet the requirements for assembly occupancies in addition to the requirements of 12.4.8, unless [the special amusement building is a] multilevel play structures not more than 10 ft in height and have aggregate horizontal projections (footprint) not exceeding 160 ft².

Every special amusement building, other than buildings or structures not exceeding 10 ft in height and not exceeding 160 ft² in horizontal projection, shall be protected throughout by an approved, supervised automatic sprinkler system installed and maintained in accordance with Section 9.7. Where the special amusement building is movable or portable, the sprinkler water supply shall be permitted to be provided by an approved, temporary means.

Where the nature of the special amusement building is such that it operates in reduced lighting levels, the building shall be protected throughout by an approved automatic smoke detection system in accordance with Section 9.6. Actuation of any smoke detection system device shall sound an alarm at a constantly attended location on the premises. Actuation of the automatic sprinkler system, or any other suppression system, or actuation of a smoke detection system having an approved verification or cross-zoning operation capability shall provide the following:

- Cause illumination in the means of egress to increase to that required by Section 7.8
- Stop any conflicting or confusing sounds and visuals

Exit marking shall be in accordance with Section 7.10.

Floor proximity exit signs shall be provided in accordance with 7.10.1.5.

In special amusement buildings where mazes, mirrors, or other designs are used to confound the egress path, approved directional exit marking that becomes apparent in an emergency shall be provided. The LSC annex note to this section indicates that consideration should be given to the provision of directional exit marking on or adjacent to the floor.

Interior finish shall be Class A throughout in accordance with Section 10.2.

Special amusement buildings are subject to other requirements of the LSC's assembly occupancy chapter. These include, but are not limited to:

- Provision of an adequate number and width of means of egress to accommodate occupant loads within the building.
- Provision of panic hardware on exit doors.
- Restrictions on dead end pathways.
- Stairway construction, including riser height and tread depth, provision of handrails, and fire rated enclosure in some situations.
- The use of open flame devices or pyrotechnic special effects must comply with Illinois regulations found in Title 41 Ill. Adm. Code 235.
- Furnishings and decorations (including all draperies and curtains) are required to be flame resistant as proven in a test in accordance with NFPA 701 *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*.
- In accordance with both LSC requirements and Illinois' Furniture Fire Safety Act (Title 41 Ill. Adm. Code 300), any upholstered furniture in the occupancy must comply with testing and labeling requirements.

For clarification, the LSC annex explanation indicates that where a special amusement building is installed inside another building, such as within an exhibit hall, the special amusement building requirements apply only to the special amusement building.

For further information regarding haunted houses or special amusement building, contact the OSFM's Technical Services Division at SFM.Techservices@illinois.gov.