

**Conventions, Trade Shows and Exhibits  
Standard 6005**



**Orange County Fire Rescue Division  
Fire Loss Management Bureau  
109 East Church Street  
Lower Level  
Orlando, Florida 32801-3319**

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**Conventions, Trade Shows and Exhibits**  
**Standard 6005**

**AUTHORITY**

This Standard operates under the authority of Orange County Florida Ordinances, Chapter 6, Article 1B, Section 6-20.3, Standard Fire Prevention Code, Chapter 1, Section 102.5.

It is not the intention of this Standard to contradict or set aside any provision of any other higher-level law or code. If any conflict is discovered, the higher law or code shall prevail.

Compliance with this Standard does not demonstrate compliance, or lack of compliance, with any other law or code pertaining to other topics.

**SHOWS AND EXHIBITS - FIRE AND OCCUPANT SAFETY**

The wide spectrum of CONVENTIONS, TRADE SHOWS, EXHIBITS and other activities, which are staged in public assembly facilities, require the establishment of certain guidelines relative to fire and occupant safety. Visitors will not be familiar with the facilities, so fire and life safety is critically important.

Public Assembly Facilities are provided with fire and rescue services by the Orange County Fire and Rescue Services Division. The Orange County Fire and Rescue Services Division, Fire Loss Management Bureau administer consultation regarding fire safety and occupant safety.

The following are the minimum fire safety requirements for all events. These requirements shall apply whether the event is open or closed to the public.

All plans for SHOW AND EXHIBITS (Events) are reviewed for compliance with the requirements of the *Life Safety Code (NFPA 101)* as adopted by Florida Administrative Law, State Fire Marshal's Rules and Regulations, Chapter 4A-3, and the *Standard Fire Prevention Code* as adopted by Orange County Florida. Additional codes and standards may apply to an event. These codes and standards shall be applied as required by State Law and Local ordinance.

Most of the code requirements will be found in, but not limited to;

*Life Safety Code (NFPA101)*

- Chapter 5 Means of Egress
- Chapter 9 Existing Assembly Occupancies
- Chapter 17 Existing Hotels and Dormitories
- Chapter 31 Operating Features

*Standard Fire Prevention Code*

- Chapter 5 General Precautions Against Fire
- Chapter 6 Fire Protection
- Chapter 8 Maintenance of Exit Ways
- Chapter 20 Fireworks
- Chapter 31 Assembly Occupancies
- Chapter 41 Decorative Materials

*Standard Building Code*

- Chapter 7 Fire Protection Requirements
- Chapter 11 Means of Egress

1.0 PLANS REVIEW AND PERMITS

Permits have as their objective to set schedules, promote discussion and set responsibility. The permit applicant is responsible for adherence to code and general safety.

- 1.1 All events shall require a permit. The permit shall be issued upon approval of plans. A fee is charged for this permit. Fees are not refundable.
- 1.2 A minimum of eleven (11) copies of scaled floor plans (1/16 in = 1 ft, 1/8 in = 1 ft, or 1/4" = 1 ft) of the event shall be submitted to the Orange County Fire Loss Management Bureau, Plan Review/Permit Section at least twenty-one (21) days prior to the first move-in date.

- 1.3 Permit application shall be completed and submitted with the appropriate fee and scaled floor plans.
- 1.4 Plans shall indicate name of the event, date of the event, the proposed size and location of all aisles, exits, booths, show decorator's office, food stands, bars, registration areas, and other displays.
- 1.5 All pertinent data regarding flame retardant treatment used on combustible materials shall be included with the plans. Submitted plans shall identify the location and type of combustible materials that do not have flame retardant treatments.
- 1.6 Information regarding cooking appliances to be used for demonstrations shall be included; a special permit is required for cooking within any facility.
- 1.7 Rejected plans and the permit application will be sent back to the originator with notations why the plans were rejected.
- 1.8 Any major modifications or changed after the plans have been approved, shall be resubmitted to Fire Loss Management, with a new permit application.
- 1.9 Approved plans will be returned to the submitting agency or person. The show management is required to construct, operate and maintain the show according to the approved plans.

## 2.0 SPECIAL PERMITS

Special permit applications for the following activities shall be made to the Fire Loss Management Bureau twenty-one (21) days prior to the event. These special permits shall be attached to the General Show Permit.

- 2.1 Display and operation of any unusual electrical, mechanical or chemical device, which may present a hazard. The device, its application, the operation itself must be approved by the Fire Loss Management Bureau, Plan Review and Permit Section.
- 2.2 Display or operation of any heater, barbecue, open flame, candles, lamps, torches, etc.
- 2.3 Use or storage of flammable liquids, compressed gasses or dangerous chemicals as determined by the Fire Official.
- 2.4 Any pyrotechnics, fireworks, or special effects display or process (See Fireworks and Pyrotechnics/Special Effects attachment for proper procedures)
- 2.5 Any unusual use of a motorized vehicle inside a structure. (See Motorized Vehicles - Item 3)

- 2.6 Any special cooking requirements. This would include the cooking inside of ballrooms, convention areas or areas where cooking is not normally done.
- 2.7 Multilevel exhibit booths. Plans must be signed, sealed and dated by an architect or engineer. A separate permit may be required by the Orange County Building Department.
- 2.8 Tents in excess of 300 sq. ft erected inside the host facility. A separate permit may also be required by the Orange County Building Department.
- 2.9 Tents erected OUTSIDE the host facility will require a permit issued by the Orange County Building Department.

### 3.0 MOTORIZED VEHICLES

Motorized Vehicles shall be defined as any vehicle which is propelled by an internal combustion engine using a Class-I or Class-II fuel, such as, but not limited to; automobiles, trucks, motorcycles, aircraft, watercraft, lawnmowers.

When placing motorized vehicles inside an assembly occupancy consideration shall be given to exits and exit access. Vehicles must be positioned prior to the opening of an event to the public. See (e) below. Each vehicle shall be subject to inspection for compliance with items (a) through (e).

Motorized vehicles on display within assembly occupancy shall be in accordance with the *Life Safety Code* (NFPA 101) Section 9-4.4.4 which provides the following:

- 9-4.4.4 (a) All fuel tank openings shall be locked and sealed in an approved manner to prevent the escape of vapors. Fuel tanks shall not be more than one-half full or contain more than 10 gal. (37.9L) of fuel, whichever is less.
- (b) At least one battery cable shall be removed from the batteries used to start the vehicle engine. The disconnected battery cable shall then be taped. (It is preferred that the positive or "hot" cable be disconnected.)
- (c) Batteries used to power auxiliary equipment shall be permitted to be kept in service.
- (d) Fueling or defueling of vehicles shall be prohibited.
- (e) Vehicles shall not be moved during show hours.

### 4.0 EXHIBIT BOOTHS

The following applies to standard exhibit booth arrangements, whether constructed of pipe and drape, or a large exhibit enclosure designed and built from other materials, which could include small booths, open displays, large board displays, or other arrangements. Also included in this requirement are exhibit enclosures that are created

by the arrangement of products such as machinery or vehicles. All exhibit booths shall be in accordance with the *Life Safety Code*, Sections 9-4.4 that provides for the following:

9-4.4.1 No display or exhibit shall be so installed or operated as to interfere in any way with access to any required exit or with visibility of any required exit or any required exit sign; nor shall any display block access to fire fighting equipment.

9-4.4.3.2 The travel distance within the exhibit booth or exhibit enclosure to an exit access aisle shall not be greater than 50 ft (15m).

9-4.4.3.3 The upper deck of multilevel exhibits greater than 300 sq. ft (27.9 sq. m) in area shall have at least two remote means of egress.

9-4.4.3.4 Exhibit booths shall be constructed of:

(a) Noncombustible or limited-combustible materials

(b) Wood greater than 1/4 in (.6 cm) or nominal thickness or wood not greater than 1/4 in (.6cm) nominal thickness that is pressure treated fire retardant wood meeting the requirements of NFPA 703, *Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials*.

(c) Flame-retardant materials complying with NFPA 701, Standard Methods of Fire Tests for Flame-Resistant Textiles and Films; both small and large scale tests.

(d) Textile wall covering such as carpeting having napped, tufted, looped, or similar surface used as walls or ceiling finish complying with 6-5.2.3.

6-5.2.3 Textile materials having a napped, tufted, looped, woven, nonwoven, or similar surface shall not be applied to walls or ceilings.

...

Such materials having a Class A rating shall be permitted in rooms or areas protected by an approved automatic sprinkler system.

...

(e) Plastic that is limited to a Class A or Class B interior wall and ceiling finish.

(f) Foamed plastics and materials containing foamed plastics having a maximum heat release rate for any single fuel package of 100 kW when tested in accordance with UL 1975, *Standard for Fire Tests for Foamed Plastic used for Decorative Purposes*.

(g) Cardboard, honeycombed paper, and other combustible materials having a maximum heat release rate for any single fuel package of 150 kW when

tested in accordance with UL 1975, *Standard for Fire Tests for Foamed Plastic used for Decorative Purposes*.

9-4.4.3.5 Curtains, drapes, and decorations shall comply with 31-1.4

31-1.4.1 Draperies, curtains, and other similar loosely hanging furnishings and decorations shall be flame resistant as demonstrated by passing both the small- and large-scale test of NFPA 701, *Standard Methods of Fire Tests for Flame-Resistant Textiles and Films*.

9-4.4.3.6 Acoustical and decorative material including, but not limited to, cotton, hay, paper, straw, moss, split bamboo, and wood chips shall be flame-retardant treated. Materials that cannot be treated for flame retardancy shall not be used. Foamed plastics and materials containing foamed plastics used as decorative objects such as, but not limited, to mannequins, murals, and signs shall have a maximum heat release rate for any single fuel package of 150kW when tested in accordance with UL 1975, *Standard for Fire Tests for Foamed Plastic Used for Decorative Purposes*.

Where the aggregate area of such materials is less than 10 percent (10%) of the individual (Booth) floor or wall area, such materials may be used.

9-4.4.3.7 The following shall be protected by automatic extinguishing systems:

- (a) Single level exhibits booths greater than 300 sq. ft (27.9 sq. m) and covered with a ceiling.
- (b) The first level of multilevel exhibit booths. There is no square footage threshold on this requirement
- (c) A ceiling covers the second level of multilevel exhibit booths where the second level.
- (d) A single exhibit or group of exhibits with ceilings that do not require sprinklers shall be separated by a minimum of 10 ft (3m) where the aggregate ceiling exceeds 300 sq. ft (27.9 sq. m).

The water supply and piping for the sprinkler system may be of approved temporary means taken from an existing domestic water supply, an existing standpipe system, or an existing sprinkler system.

Exception No.1: Ceilings that are constructed of open grate design or listed dropout ceilings in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems*, shall not be considered ceilings within the context of this section.

A Florida Licensed Fire Sprinkler Contractor must do modifications or changes to an automatic fire sprinkler system and separate plans and permits may be required. Any proposed use of the host facilities fire protection systems for temporary protection must be disclosed at the time of permit application.

Exception No. 2: Vehicles, boats and similar exhibited products having over 100 sq. ft (9.3 sq. m) of roofed area shall be provided with smoke detectors. (Single station, battery operated or portable smoke detectors meeting the requirements for Household Fire Warning Devices in NFPA 74 are acceptable.)

#### 4.1 Unusual Booth or Display Configurations

Certain unusual booth or display configurations shall be forwarded to the Orange County Fire Official for review. The Fire Official shall determine whether the booth or display requires a Special or Temporary Building Permit. Considerations entering into this decision include:

4.1.1 Structural integrity,

4.1.2 Fire load relative to the host structure installed fire protection systems,

4.1.3 Ability of the host structure fire protection systems to come to bear on fires in or around the temporary booth or display.

4.1.4 The Building Official shall issue permits for these booths and displays. A separate fee may be required by the Building Department.

### 5.0 FLAME RESISTANCE OF DECORATIVE MATERIAL

5.1 Documentation shall be kept with the materials and provided for review upon request.

5.2 Treatments used to accomplish flameproofing shall be renewed as often as may be required to maintain the flameproof effect.

5.3 All woodwork, all stage scenery, furnishings, decorations and sets used upon a working stage (whether permanent or temporary) as defined in the *Standard Building Code*, shall be coated or treated by approved methods to make them noncombustible, inherently flame resistant, or treated and maintained flame resistant.

### 6.0 OPEN FLAME DEVICES

6.1 Open flame devices or pyrotechnics may be used in assembly occupancies providing the following requirements are met.

6.1.1 When necessary for trade shows, theme parties, special events, entertainment, ceremonial or religious purposes open flame or pyrotechnic devices (by licensed operators only) may be permitted. A separate fire department permit is required. The intended use of open flame or pyrotechnic devices must be disclosed at the time of plans submittal. For permitting procedures, see Fireworks and Pyrotechnics/Special Effects attachment.

- 6.1.2 Open flame or pyrotechnic devices (by licensed operators only) may be used on stages and platforms when necessary as part of a performance. A separate fire department permit is required. The intended use of open flame or pyrotechnic devices on stages must be disclosed at the time of plans submittal. For permitting procedures, see Fireworks and Pyrotechnics/Special Effects attachment.
- 6.1.3 Demonstrations of open flame or pyrotechnic devices (by licensed operators only) in exhibits may be allowed provided adequate precautions are taken. A separate fire department permit is required. The intended use of open flame or pyrotechnic devices on stages must be disclosed at the time of plans submittal. For permitting procedures, see Fireworks and Pyrotechnics/Special Effects attachment.
- 6.1.4 Candles may be used on tables if securely supported on substantial noncombustible bases so located as to avoid danger of ignition of combustible materials. Candle flames SHALL BE PROTECTED. The intended use of candles must be disclosed at the time of plan's submittal.

## 6.2 Special Food Service Devices

Special Food Services devices shall be in accordance with *Life Safety Code*, Section 31-2.4 that provides the following:

31-2.4 Portable cooking equipment that is not flue-connected shall be permitted only as follows:

- (a) Equipment fueled by small heat sources that can be readily extinguished by water such as candles or alcohol-burning equipment (including "solid alcohol"), may be used provided adequate precautions are taken to prevent ignition of any combustible materials.
- (b) Candles may be used on tables used for food service if securely supported on substantial noncombustible bases so located as to avoid danger of ignition of combustible materials. Candle flames shall be protected.
- (c) "Flaming Sword" or other equipment involving open flames and flamed dishes, such as cherries jubilee, crepes suzette, etc., may be permitted provided that necessary precautions are taken.

## 6.3 Cooking and Food Warming

Use of cooking devices shall be disclosed at the time of application for a permit. Each exhibit using cooking or food warming devices may be subject to individual inspection. Only cooking devices disclosed on the original permit application will be allowed. Cooking and food warming devices in exhibit booths shall be in

accordance with the *Life Safety Code*, Section 9-4.4.3.9 that provides the following;

9-4.4.3.9 Cooking and food warming devices in exhibit booths shall comply with 31-2.4 (see above) and the following:

(a) Gas fired devices.

- (1) Natural gas fired devices shall be installed in accordance with 7-1.1.

7-1.1 Equipment utilizing gas and related gas piping shall be installed in accordance with NFPA 54, *National Fuel Gas Code*, or NFPA 58, *Standard For Storage and Handling of Liquefied Petroleum Gases*.  
NOTE: A separate permit is required from the Orange County Building Department for all gas installations.

- (2) The use of LP-Gas cylinders is prohibited.

Exception to (a) (2): Non-refillable cylinders may be used.

- (b) Devices shall be isolated from the public by at least 4 ft (122 cm) or by a barrier between the devices and the public.

- (c) Multi-well cooking equipment using combustible oils or solids shall comply with 7-2.3

7-2.3 Commercial cooking equipment shall be installed in accordance with NFPA 96, *Standard for the Installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment*.

- (d) Single-well cooking equipment using combustible oils and solids shall:

- (1) Have lids available for immediate use.  
(2) Be limited to 288 sq. in (.19 sq. m) of cooking surface.  
(3) Be placed in noncombustible surface materials.  
(4) Be separated from each other by a minimum horizontal distance of 2 ft (61 cm).

Exception to (d) (4): Multiple single-well cooking equipment where the aggregate cooking surface area does not exceed 288 sq. in (.19 sq. m)

- (5) Be kept a minimum horizontal distance of 2 ft (61 cm) from any combustible material.

- (e) A 20 B.C. fire extinguisher shall be provided within the booth for each device, or an approved automatic extinguishing system shall be provided.

NOTE: All fire extinguishers shall be currently inspected and tagged by a licensed fire extinguisher company.

## 7.0 SEATING

Seats in assembly occupancies accommodating more than 200 persons shall be in accordance with the *Life Safety Code*, Section 31-2.7 that provides the following:

31-2.7.1 Seats in assembly occupancies accommodating more than 200 persons shall be securely fastened to the floor except where fastened together in groups of not less than three nor more than seven and as permitted by 31-2.7.2. All seats in balconies and galleries shall be securely fastened to the floor except in places of worship.

31-2.7.2 Seats not secured to the floor shall be permitted in restaurants, night clubs, and other occupancies where the fastening of seats to the floor may be impractical, provided in the area used for seating (excluding dance floor, stage, etc.), there shall be not more than one seat for each 15 sq. ft (1.4 sq. m) of net floor area and adequate aisles to reach exits shall be maintained at all times. Seating diagrams shall be submitted for approval.

31-2.7.3 Every room constituting assembly occupancy and not having fixed seats shall have the occupant load of the room posted in a conspicuous place near the main exit from the room. The owner or authorized agent shall maintain approved signs in a legible manner. Signs shall be durable and shall indicate the number of occupants permitted for each room use.

- 7.1 In no case shall the occupants in a room or hall exceed the posted limit for that room or hall.
- 7.2 Seating and table placement shall be in accordance with the approved plans.

## 8.0 ARRANGEMENTS OF MEANS OF EGRESS

- 8.1 Exits shall be so located and exit access shall be so arranged that exits are readily accessible at all times.
- 8.2 Where exits are not immediately accessible from an open floor area, safe and continuous unobstructed passageways, aisles, or corridors leading directly to every exit shall be maintained and shall be so arranged as to provide access for each occupant to at least two exits by separate ways of travel
- 8.3 Where more than one exit is required from a building or portion thereof, such exits shall be remotely located from each other and so arranged and constructed

as to minimize any possibility that more than one may be blocked by any one fire or other emergency condition.

8.4 At no time shall an exit door or exit access door, be locked, blocked or obstructed in a manner that will confuse or slow the movement of any people within the area. This requirement will also be in effect during the "move in" and "move out" of events.

8.4.1 During certain events the total occupancy of the room(s) being used may not require all the exit capacity provided for that area. In these cases a special review will be done on the request to close some of the exit doors. An explanation along with detailed drawings showing these doors shall be submitted for approval. If approved, the doors and the exit signs must be covered to prevent any confusion to the occupants.

## 9.0 SMOKING

9.1 Florida Statutes shall regulate smoking during exhibitions.

9.2 Smoking shall be prohibited, inside or outside of the facility, in areas used for the storage of flammable or combustible liquids, or flammable gasses.

## 10.0 FIRE LANES AND FIRE PROTECTION EQUIPMENT

10.1 Booths, displays, signs, etc., shall not block or obstruct any fire hose, fire extinguishers, fire alarm pull stations or any other fire protection appliance inside of a building.

10.2 No fire department equipment outside of the building shall be obstructed or blocked in any way. This will include sprinkler system valves, standpipes, hydrants, fire command rooms, or any item, location or device designated for fire protection use.

10.3 No vehicles shall be parked in fire lanes outside of buildings.

## 11.0 FIRE EXTINGUISHERS

11.1 Fire extinguishers that may be required for cooking or other special hazards shall be placed and accessible in accordance with NFPA 10, *Standard for Portable Fire Extinguishers*.

11.2 All extinguishers shall be currently inspected and tagged by a licensed fire extinguisher company.

## 12.0 STORAGE AND USE OF COMBUSTIBLES

For the purpose of this Standard, combustibles are defined to be readily ignitable materials.

- 12.1 Storage shall be located so as not to constitute a hazard. Storage in excess of a one (1) day supply of brochures and handouts will not be permitted in booths or exhibits. Storage shall be compact and orderly.
- 12.2 Booths or exhibits must be cleared of accumulated combustible trash or rubbish daily.
- 12.3 Literature on display shall be limited to reasonable quantities. Reserve supplies shall be kept in boxes or similar containers and stored in a neat and compact manner.