

**FIRE AND LIFE SAFETY  
REGULATIONS FOR  
INDOOR/OUTDOOR  
PUBLIC ASSEMBLY FUNCTIONS**



**RAPID CITY DEPARTMENT OF  
FIRE AND EMERGENCY SERVICES**

**Mike Maltaverne  
Chief  
Department of Fire & Emergency Services**

**by:**

**Fire Prevention Division  
(605) 394-5233**

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## INTRODUCTION

Fire and Life Safety Regulations for Public Assembly functions has been designed from case histories and studies of notable fires involving loss of life and significant property loss in buildings containing assembly occupancies. The analysis of the causes of this loss of life resulted in documents such as the NFPA Life Safety Code and the model fire codes. From these documents the accompanying standards for places of assembly and emergency evacuation procedures were prepared.

Although 80% of the nations fire deaths occur in the home, a large share of the fire problems in the United States center around large fires involving assembly occupancies. Case studies of these fires resulting in 50 deaths or more were analyzed by those involved in the investigations and code development fields. Much was learned about how fire develops, how we can confine and stop it, and most important how we can prevent it. Each fire studied was preventable.

Safety resources many times get stretched to their limits, sometimes due to priority management or lack of personnel and equipment. This is a serious concern to not only the Fire Department but to the Building Department, City officials, and should be of special concern to facility managers. All of us have a responsibility to ensure the public is protected from the dangers of fire. I ask that you and your staff **READ** and **FOLLOW** the procedures outlined in this document. Working together, facilities managers and the Fire Department should be able to develop a good protective plan – one that will provide the highest possible level of fire safety available to the public

The Fire Prevention Division offers you best wishes for safe and successful events.

Sincerely,

Tim Behlings  
Assistant Chief  
Fire Prevention

## OVERVIEW

**The Rapid City Department of Fire and Emergency Services, Fire Prevention Division, is dedicated to the safety of all citizens and to the efficiency of well-planned and executed events. As a host of public functions, you are also well aware that safety must remain foremost in your efforts. We believe communication is the key to successful relationships and we look forward to working with you in our community.**

This document is being provided to address our common goal of public safety. Reference for these requirements can be found in the *International Fire Code (IFC)*, the *International Building Code (IBC)* and *National Fire Protection (NFPA) Life Safety Code 101*. While the information set out below does not completely cover the ordinances and regulations contained in those codes as adopted by the City of Rapid City, this document should answer most questions relating to public assembly functions and occupancies. For further information or clarification, contact the Fire Prevention Division, (605) 394-5233.

## FLOOR PLAN APPROVAL PROCEDURES

The Rapid City Department of Fire and Emergency Services uses one primary tool for reviewing events for public assemblies. This medium is referred to herein as the master set-up floor plan.

This master set-up floor plan shall designate booth spaces, island spaces, aisle widths, storage areas, relationships of the exhibit and event spaces to the physical requirements of a convention facility, configuration and width of all emergency exit aisles, and, in general, conformance to the City of Rapid City Ordinances.

The show management **shall submit two (2) copies of the proposed master set-up floor plan, drawn to scale, to the Fire Prevention Division for review.** The master set-up floor plan submitted must be received by the Fire Prevention Division **no later than 14 days prior to the show's first contracted date** at the facility. The master set-up floor plan shall include the following information:

1. Complete a Public Assembly Function Plan Sheet, Appendix I, which includes:
2. Detailed floor plans, shall include:
  - a. Facility floor plans drawn to scale and depicting all main perimeters and cross aisles, all booth and table locations and dimensions. Boundaries should be defined and heights shall be specified (i.e., 8' hard wall, 3' wing drape, rope and stanchion, etc.). The travel distance within the exhibit booth or exhibition enclosure to an exit access aisle shall not be greater than 50 feet, thus:
    - Contiguous booth space, in any dimension, of more than 100 feet is prohibited.
    - The maximum island space is 100 feet x 100 feet, unless an unobstructed cross aisle is designed through the space.
  - b. Aisle locations and dimensions:

- Minimum 10 feet width between rows of booths and/or tables. Booths or displays in any main perimeters or cross aisles, including pre-function areas, are prohibited.
  - Main or perimeter aisles shall be a minimum of 10 feet in width.
  - Cross aisles shall be clearly marked on all floor plans and must be a minimum 10-feet wide.
  - Aisles shall flow and converge toward emergency exits.
- c. All exit components (corridors, stairways, doors, etc.) from the event area to the public way.
- Required widths shall be maintained.
- d. Fire protection and life safety equipment, their respective locations and required clearance dimensions:
- Manual fire alarm stations – 36-inch clear space and a clear 36-inch path to adjacent aisle/corridor.
  - Fire standpipe valves – 36-inch radius and a clear 36-inch path to adjacent aisle/corridor.
  - Fire sprinkler control valves – 36-inch radius and a clear 36-inch path to adjacent aisle/corridor.
  - Fire alarm control panel – 36-inch clear space and a clear 36-inch path to adjacent aisle/corridor.
  - Electrical control panels – 36-inch clear space and a clear 36-inch path to adjacent aisle/corridor.
- e. Concession areas, temporary cafeterias, concession seating areas, and lounges must be specifically identified as such.
- f. Dimensions and locations of any staging, floor lighting, general session, or seating arrangements.
- g. There shall be no storage, booths, or obstructions in front of exit doors. The width of the exit door(s) shall be maintained. (See Appendix IV, V & VI)
- h. Rows of chairs between aisles shall not exceed 14 chairs and/or 14 rows in all meeting rooms and ballrooms. On the exhibit floor, rows shall not exceed 14 chairs across and 35 rows deep, not to exceed 100 feet deep. Spacing of rows of chairs shall provide a space of not less than 12 inches from the back of one chair to the front of the most forward projection of the chair immediately behind it. The rows of chairs shall be spaced not less than 33 inches back to back. Horizontal measurements shall be made between vertical planes. The measurement shall be made with the seat in the down position. (See Appendix IV)
- i. When chair seating is for 300 persons or more, seats shall be securely fastened to the floor. Where fastening of seats to the floor is impracticable, the seats shall be fastened

together with approved fastening devices in minimum groups of 3 and maximum groups of 14. The function of this requirement is to prevent the movement of seats into aisles, rows, and access to exits during jostling that occurs during an emergency exit.

j. Figuring the occupant load for the use of an area shall be as follows:

- Assembly areas of concentrated use, such as no fixed seating or with chair set-ups, shall have the total square footage for the area divided by 7 square feet per person.
- Assembly areas of less concentrated use, such as table and chair set-ups, shall have the total square footage for the area divided by 15 square feet per person.
- Exhibit areas shall be figured on the net square feet divided by 7 square feet per person. Each mobile display and exhibit booth shall be figured with an occupant load of 2 and added to the total occupant load.

➤ *Note: When the occupant load number is greater than 49, then additional exiting and other Fire/Building code requirements shall be required.*

3. Additional considerations:

- a. Carefully review the returned master plan set-up plans comment sheet from the Fire Prevention Division. When required, the master set-up plan shall be corrected by the show management and two (2) copies re-submitted for review to the Fire Prevention Division.
- b. Should any circumstance require a major and/or significant change in the reviewed plans, the new master set-up plan must be resubmitted to the Fire Prevention Division for review as soon as such changes become known to show management.
- c. The final and approved master set-up floor plan shall meet all City requirements as set out herein and shall include, by location and dimensions, any roofed or two (2) story booths. The construction material used in any roofed booth shall be defined. See **Exhibits with Roofed Areas**.
- d. The master set-up floor plan shall include any other information that may be reasonably expected or that may clarify and define the submitted plan. *A final and reviewed master set-up floor plan shall be on file with the Fire Prevention Division prior to the show's contracted first move-in date.*

## **EXPEDITED PLAN REVIEW**

Expedited plan review and approval can be obtained by having representative floor, booth, and seating plans on file at the Fire Prevention Division office. These plans shall be kept on file and shall represent common event arrangements. When an event set-up matches a plan on file, only the standard submittal cover sheet need be submitted, identifying, among other required information i.e., name of event, date of event, number of occupants, special event information, etc.

- **Note:** *Actual event set-up **must** match the floor plan referenced, or the privilege of Expedited Plan Review may be suspended and approval must be obtained through the standard procedure.*

## **BOOTHS & TABLES DISPLAYS**

4. All curtains, drapes, and decorations must be constructed of flame-retardant material, or treated with California State Fire Marshal approved flame-retardant solution. Certification for the flame-retardant must be available, upon request, to Fire Prevention Division personnel. See **FIRE RETARDANT SELF-APPLICATION** form (**Appendix III**).
5. No storage of any kind is allowed behind the back drapes, display wall, or inside the display area unless the exhibit has specific provision for lockable storage. Operations and advertising materials equivalent to one (1) day supply and/or that amount that may be placed in the exhibit's lockable storage may be stored inside a booth. Easels, signs, display racks, etc., shall not be placed beyond booth area into aisles.

## **EXHIBITS WITH ROOFED AREAS**

1. Vehicles, boats, and similar exhibited products having greater than **100 square feet** of roofed area shall be provide with smoke detectors acceptable to the Fire Prevention Division. Battery-operated detectors are acceptable.
2. Single-level booths having greater than **100 square feet** of roofed area shall be provided with smoke detectors acceptable to the Fire Prevention Division. Battery-operated detectors are acceptable.
3. Single-level booths having **300 square feet or more** of roofed area shall be protected by automatic fire sprinklers or provide a Fire Watch as set forth by the Fire Prevention Division, and the facility management. Individuals doing the Fire Watch must be trained by the Fire Prevention Division.
4. Regardless of size or area, exhibit booths that are multi-level, consisting of multiple rooms with ceilings, shall also be protected by automatic fire sprinklers or provide a Fire Watch as set forth by the Fire Prevention Division, and the facility management. Individuals doing the Fire Watch must be trained by the Fire Prevention Division.
5. Upper-level decks of multi-level exhibits having **300 square feet or more** in an area shall have at least two means of egress.
6. Any connections to the facility's fire sprinkler system shall be performed by a licensed fire sprinkler contractor, and all work shall be accomplished under City permit.
7. Show management is required to advise the Fire Prevention Division of any such displays requiring smoke detectors or automatic fire sprinklers well in advance of the event and in

time to accommodate Fire Prevention approval of exhibit/booth set-up and fire protection modifications.

## **DECORATIVE MATERIALS**

1. Acoustical and decorative material including, but not limited to, cotton, papers, moss, split bamboo, and the like, may require additional fire retardant treatment and shall be permitted only by approval of the Fire Prevention Division.
2. Trees and similar shrubs without root systems shall be treated as a decorative material requiring fire retardant treatment. Trees and similar shrubs with a root ball must be kept wet in lieu of the fire treatment.
3. All decorative lighting (holiday lighting, border lighting, etc.) must be listed by an approved testing laboratory.
4. Electrical extension cords are not a substitute for permanent electrical wiring. The use of electrical extension cords must be approved. Electrical extension cords must be rated for the electrical load connected.
5. Manufacturer's specifications for any material labeled as flame resistant or material/processes labeled as providing flame-retardant qualities must be submitted to the Fire Prevention Division for review and approval.
6. Draperies, curtains, signs, banners, and other similar furnishings and decorations shall be flame-resistant. These materials must be tested in accordance with National Fire Protection Association Pamphlet #701, Standard Methods of Fire Tests for Flame-Resistant Textiles and Films, and shall comply with both the small- and large-scale tests.
7. When a fire retardant is applied to the combustible decorative materials a **"Fire Retardant Self-Application"** form (Appendix III) shall be submitted to the Fire Prevention Division, a copy retained at the exhibit booth during the event operation and a swatch of the treated material shall be made available for an on-site test. **Each setup requires reapplication of Fire Retardant.**
8. **The Fire Prevention Division shall impose controls on the amount and arrangement of combustible contents, including decorations, in assembly occupancies to provide an adequate level of safety to life from fire.**

## **CRATE / STORAGE**

1. All cartons, crates, containers, packing material, etc., which are necessary for repacking shall be removed from the show floor. All empty containers and refuse should be placed in the aisle directly in front of the booth for housekeeping and removal. Vacant areas on the exhibit floor may be approved for crate storage provided they meet the following requirements:

- a. All crate storage areas must be depicted on floor plans submitted for approval. The crate storage area dimensions approved must then be clearly defined on the exhibit floor with tape, barricades, stanchions, etc., to assure aisle integrity and an overall neat appearance.
- b. Crate storage areas shall not exceed 1,000 square feet in area. The largest dimension in length or in width of any crate storage area may not exceed 50 feet.
- c. Large crate storage areas must be separated by aisles not less than 10 feet in width. Aisles shall terminate at a cross aisle, foyer, door, or vomitory giving access to an exit. Crate storage shall not be arranged so as to create a dead-end aisle.
- d. In designating any area for crate storage, the preservation of the integrity of exits must be the principal concern. Under no circumstance can crate storage obstruct an exit or be located where it might directly expose a required exit(s) to fire. If, during the review of submitted plans or on-site inspection, the Fire Prevention Division staff learn that exists and exit signs are not readily visible from any direction of exit access, recognizable portable and illuminated exit signs will be required to be installed so that no point in the exit access is more than 100 feet from the nearest visible sign.
- e. Crates, boxes, and other storage may not be stacked over ten feet high. A minimum of 18 inches of clear space must be maintained below fire sprinkler heads. Individual crates, boxes, and other storage items higher than five feet may not be stacked upon.
- f. Additional outside storage shall be in locked trailers or fenced areas. Flammable liquids and compressed gases are prohibited in trailer storage and crate storage.

## **EXITS AND FIRE PREVENTION**

1. Access and egress routes shall be maintained so that any individual can move without undue hindrance, on personal initiative and at any time, from an occupied position to exits.
2. Access and egress routes shall be maintained so that crowd management, police, and firefighters can move without undue hindrance at any time to any individual.
3. When events are open to set-up and to the public, all means of egress (aisles, corridors, foyers, doors, vomitories, etc.) shall be continuous and unobstructed from any point in the building to the public way.
4. There shall be no obstruction blocking exit doors from the outside such as crates, motor vehicles, trailers, farm equipment parked in doorways, or barricades across sidewalks.
5. All exits shall terminate directly at a public way or to an exterior exit discharge. Yards, courts, open spaces, or other portions of the exit discharge shall be of required width and size to provide all occupants a safe access to a public way. The principle addressed in this requirement is that once a building occupant reaches an exit that level of protection cannot be reduced. It is not sufficient to permit the egress system to terminate at the outside of a building, because there may not be appropriate space to provide safe movement away from the building (Section 5-7.1 NFPA – 101)

6. No vehicles shall be parked in designated fire lanes outside buildings or in the fire lanes on loading docks. Unless prior approval from Fire Prevention is obtained.
7. All fire extinguishing equipment shall be maintained in designated areas and kept clear and unobstructed at all times. (See Appendix IV & V)
8. No furnishings, decorations or other objects shall be placed or hung in such manner as to obstruct access to exits or visibility of exits.
9. During move-ins and move-outs, minimum of one main aisle and one cross aisle in each hall shall be kept clear and unobstructed to a minimum of ten (10) feet to provide for clear access to an emergency exit.

## **FESTIVAL SEATING**

“Prior approval shall be obtained from the Fire Prevention Division for festival seating within a building.” Section 9-2.5.4.1 NFPA – 101. This requirement has the effect of prohibiting festival seating unless it is outdoors or prior approval and is truly a form of seating, such as lawn seating where generous spaces are commonly maintained between individuals and small groups so that people can circulate fairly freely at any time. Such lawn seating will be characterized by densities of about one person per 15 square feet. Prohibited are those uncontrolled crowd situations such as front stages at rock music concerts where the number and density of people are uncontrolled by architectural or management features. Exception #1 from 9-2.5.4.1 – LS 101.

## **HAZARDOUS MATERIALS**

Every attempt must be made to minimize the effects of fire originating from hazardous materials – any material having a degree of hazard greater than that normal to the general occupancy of the building or structure.

1. The use of compressed gases, flammable or combustible liquids, hazardous chemical or materials inside is prohibited except for demonstration and cooking as specified in enclosed sections. (See Appendix II)
2. Pyrotechnic devices shall be permitted to be used on stage and before proximate audiences in accordance with the requirements of NFPA 1126, *Standard for the Use of Pyrotechnics before a Proximate Audience*.

## **COOKING AND OPEN FLAME USE**

1. The list of tragic fires in assembly occupancies caused by “decorative” fire (e.g. alcohol or solid alcohol fires and flames used for dramatic effect) is well documented. The segments below attempt to prevent a fire by tightly controlling the use of open flame devices.
2. All devices used in connection with the preparation of food shall be so installed and operated as to avoid hazard to the safety of the occupants.

3. Portable cooking equipment, not flue-connected, shall be permitted only as follows:
  - Equipment fueled by small heat sources that can readily be extinguished by water, such as candles or alcohol-burning equipment (including solid alcohol) may be used provided adequate precautions satisfactory to the Fire Prevention Division are taken to prevent ignition of any combustible materials.
  - Candles may be used on tables for food service if securely supported on substantial, non-combustible bases so located as to avoid danger of ignition of combustible materials and only if approved by the Fire Prevention Division. Candle flames shall be protected..
  - “Flaming Sword” or other equipment involving open flames and flamed dishes, such as cherries jubilee, crepes suzette, etc., may be permitted if necessary precautions are taken and subject to the approval of the Fire Prevention Division.
  
4. Cooking and warming devices in exhibit booths shall comply with the following:
  - Natural gas-fired devices shall be installed in accordance with NFPA 54.
  - The use of LP-gas cylinders shall be prohibited. Exceptions:
    - a) Non-refillable 16 oz cylinders, a trigger controlled torch head that is self-extinguishing shall be permitted to be used where permitted by the authority having jurisdiction.
    - b) Devices shall be isolated from the public by a least 4-ft (1.2 m) or by a barrier between the devices and the public.
    - c) Multi-well cooking equipment using combustible oils or solids shall:
      - (1) Have proper tight fitting lids available for immediate use.
      - (2) Be limited to 288 sq. in. (0.19 sq. m) of cooking surface.
      - (3) Be placed on noncombustible surface materials.
      - (4) Be separated from each other by a minimum horizontal distance of 2 ft (0.6 m).
      - (5) Be kept a minimum horizontal distance of 2-ft. (0.6 m) from any combustible material.
      - (6) A Class K fire extinguisher shall be provided within the booth for each device, or an approved automatic extinguishing system shall be provided.
  
5. Open flame use, such as lanterns and candles, is prohibited with the following exceptions:
  - a. Candles may be used on tables for food service if the candles are securely supported on substantial non-combustible bases, with the bases so located as to avoid danger of

ignition of combustible materials and only if approved by the Fire Prevention Division. Candle flames shall be protected.

- b. Where open flame or candle use is necessary for ceremonial or religious purposes, provide all necessary precautions to prevent ignition of any combustible materials.
  - c. A trigger controlled torch head that is self-extinguishing shall be permitted to be used where permitted by the authority having jurisdiction.
6. Listed and approved liquid propane gas commercial food service appliances may be used when approved by the Fire Prevention Division. Portable butane fueled appliances in restaurants and in attended commercial food catering operations where fueled by no more than two 10-oz (0.28-kg) LP-Gas capacity nonrefillable butane containers having a maximum 1.08-lb (0.4-kg) water capacity per container. Containers must be directly connected to the appliance, and manifolding of containers is not permitted. Storage of cylinders is also limited to 24 containers, with an additional 24 permitted where protected by a 2-hour fire resistance-rated barrier.

These listed exceptions to open flame use must have prior approval of the facility management and Fire Prevention Division.

### **EXHIBITOR DISPLAY VEHICLES USING FLAMMABLE/COMBUSTIBLE LIQUID OR GAS FUELS**

The following are guidelines that shall be strictly adhered to as general life-safety requirements of the Rapid City Department of Fire and Emergency Services:

1. Fuel systems shall be inspected for leaks. No vehicle shall be displayed in a way that may cause fuel to leak from the vehicle. The fuel cap shall be locked or sealed to prevent the tampering or removal of the cap and allowing the escape of vapors
2. Any vehicles/equipment leaking gasoline/diesel shall be reported immediately to the Fire Department. If the leak cannot be immediately stopped, the vehicle/equipment may be required to be removed from inside the building.
3. There shall be no repair work done on vehicles/equipment while inside the building using torches or open flame devices.
4. There shall be no refueling or defueling of vehicles/equipment inside the building or outside the exhibit facilities.
5. There shall be no storage of flammable/combustible liquids inside the building, other than the amount of liquid allowed for the fuel tank.
6. There shall be an adequate number of fire extinguishers (2A-10:BC) on hand, in and around the display area.

7. The starting of internal combustion engines **shall not** be permitted other than during the move-in and move-out stages.
8. Vehicles **shall not** be moved during show hours. Vehicles may be moved after show hours or upon completion of show.
9. The negative post of the battery of each exhibitor display vehicle shall be disconnected and the end of the cable taped at all times, other than during move-in and move-out unless the vehicle is a 2001 or newer model with a computer or if pre-approved by the Fire Prevention Division.
10. **ALL** vehicles using compressed flammable gases for fuel will have fuel source shutoff at the tank.
11. LPG (propane) tanks may **NOT** be intentionally vented to the atmosphere within any building.
12. Propane bottles or tanks must be removed from the vehicle **before** being brought into the exhibit; **or**, if the propane tank/bottle is **new**, and has never contained LPG, or is **used** and has been professionally purged, may be allowed into the exhibit with a letter from the exhibitor to the Fire Prevention Division certifying that the container is gas-free.
13. The on-site use of flammable or combustible liquids for cleaning or enhancing appearance of exhibitor display vehicles is prohibited.
14. **ANY** exhibitor vehicle in the building for the purpose of unloading of exhibit material or equipment from the vehicle must be emptied and removed from the building as soon as possible and shall not be allowed to be running/idling during unloading or reloading of exhibit materials.

**These regulations shall be issued by show management to all participants who will be exhibiting or using vehicles on the premises, PRIOR to move-in of the event.**

### **INDUSTRIAL TRUCK GUIDELINES**

1. Fork trucks, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks powered by electrical motors or internal combustion engines used in assembly occupancies, must be listed by an approved testing laboratory for the use intended.
2. The use and maintenance of all industrial trucks must comply with requirements of National Fire Protection Association Pamphlet #505, *Powered Industrial Trucks*, including type designations, areas of use, maintenance and operation.
3. The storage and handling of liquid fuels shall comply with City standards. The Fire Prevention Division shall impose tight controls on the use of liquid fuel (gasoline and diesel fuel) operated industrial trucks.

4. The storage and handling of liquefied petroleum gas (LP-Gas) shall comply with City of Rapid City standards. Filling of fuel containers shall be done at locations approved by the Fire Prevention Division for that purpose.
5. Trained and designated personnel shall exchange LP-Gas containers. LP-Gas containers shall not be exchanged near sources of heat, open flames, or similar sources of ignition or near open pits, underground entrances, elevator shafts, or other similar areas unless such areas are adequately ventilated to prevent accumulation of LP-Gas.
6. It is essential that the fire safety built into power-operated trucks be maintained; any power-operated industrial truck not in safe operating condition shall be removed from service. Repairs to industrial trucks shall be conducted only in locations approved by the Fire Prevention Division for such repairs.
7. Battery-charging equipment and charging of batteries used on electric trucks must comply with City of Rapid City standards.
8. Trained and authorized personnel shall change or charge batteries.
9. Smoking shall be prohibited in areas where industrial trucks are used and stored and in battery changing areas.

## **GUIDELINES FOR THE NON-VEHICULAR USE OF LP GAS IN PUBLIC AREAS**

### **INDOORS**

1. The use of LP gas in any building used for public assembly shall be approved.
2. The maximum size LP gas container that may be used is a 16-ounce disposable container, a trigger controlled torch head that is self-extinguishing, and a barrier device between the device and the public.
3. Storage of extra LP containers in public areas is restricted. One open case may be kept at the booth.
4. Maximum number of LP containers that can be stored in areas not frequented by the public is two cases. Such cases must be in original shipping form and unopened, except for that case which is being used.
5. All devices using LP gas shall be approved for that use.
6. At least one (1) **2A-10:BC**-type extinguisher shall be within ten (10) feet of the LP gas use device.
7. All LP connections shall be tested for leaks with a soap solution or other approved material before use.

## **OUTDOORS**

1. Permission shall be obtained for the use of LP gas on any property, private or public, used for public assembly.
2. The maximum size LP gas container shall be one 100-pound DOT cylinder.
3. Changing or filling of LP cylinders shall be done before or after the time the public is in attendance.
4. Storage of extra LP cylinders is prohibited.
5. All LP cylinders shall have current qualification date as required by DOT.
6. All devices using LP gas shall be approved for such use and the cylinder shall be secured to prevent tip over.
7. At least one **2A-10:BC**-type fire extinguisher shall be within ten (10) feet of the LP gas use device.
8. All LP connections shall be tested by vendor or permittee for leaks with a soap solution or other approved material before use.

## **PUBLIC ASSEMBLY EVENTS REQUIRING TRAINED PERSONNEL**

Public Assembly Events Requiring Trained Personnel – these are firefighters working off-duty during an event. They are fully trained as firefighters as well as certified as emergency medical technicians.

When, in the opinion of the chief of the Fire Prevention Division, it is essential for public safety in a place of assembly or any other place where people congregate, due to the number of persons or the nature of the performance, exhibition, display, contest or activity, the owner, agent or lessee shall employ one or more qualified persons, as required and approved by the chief, to be on duty at such place. Such individuals shall be subject to the chief's orders at all times when so employed and shall be in uniform and remain on duty during the times such places are open to the public, or when such activity is being conducted. Before each performance or the start of such activity, such individuals shall inspect the required fire appliances provided to see that they are in proper place and in good working order, and shall inspect all emergency egress paths to see they are adequate and maintained. These individuals shall keep diligent watch for fires during the time such place is open to the public or such activity is being conducted. These individuals shall ensure the 911 system has been activated prior to taking prompt measures for extinguishment of fires that may occur. Such individuals shall not be required or permitted, while on duty, to perform any other duties than those herein specified.

When it is determined that Detail to Public Assembly Personnel are required, it is the responsibility of the event manager to ensure that arrangements are made at least two (2) weeks

prior to the event to enable proper scheduling of Detail to Public Assembly Personnel, and then notify the facility manager that personnel have been scheduled. Contact the Fire Prevention Division at 605-394-5233 for proper arrangements.

## **DEFINITIONS**

<b>Approved</b>	Acceptable to the Rapid City Department of Fire and Emergency Services, Fire Prevention Division.
<b>Area, Net</b>	Net area is the actual occupied area, which shall not include hallways, stairs, closets, columns, thickness of interior walls, exhibit booths or mobile display (i.e. displays, vehicles, trailers, etc.).
<b>Area, Gross</b>	The floor area within the inside perimeter of the outside walls of the building or portion of the building under consideration with no deduction for hallways, stairs, closets, thickness of interior walls, columns, or other features.
<b>Assembly Occupancy</b>	Assembly occupancies include, but are not limited to, all buildings or portions of buildings used for gathering together 50 or more persons for such purposes as deliberation, worship, entertainment, eating, drinking, amusement, or awaiting transportation.
<b>Building</b>	Any structure used or intended for supporting or sheltering any use or occupancy.
<b>Combustible</b>	Capable of undergoing combustion.
<b>Combustible Decorative Materials</b>	Combustible materials used for decorative effects such as: curtains, draperies, streamers, surface coverings applied over building interior finishes for decorative, acoustical or other effect, cloth, cotton batting, paper, plastics, vegetation, hay, split bamboo, straw, vines, leaves, trees, moss, and similar materials used for decorative effect. Combustible decorative materials do not include floor covering, ordinary window shades, interior finish materials used as surface coverings (for regulations of such materials, see I.B.C., and materials 1/28 inch (0.9mm) or less in thickness applied directly to a non-combustible backing.
<b>Combustible Liquid</b>	A liquid having a flash point at or above 100°F (37.8°C). This category of combustible liquids does not include compressed gases or cryogenic fluids.
<b>Exit</b>	That portion of a means of egress separated from all other spaces of the building or structure by construction or equipment to provide a protected way of travel to the exit discharge.

<b>Exit Access</b>	That portion of a means of egress that leads to an entrance to an exit.
<b>Exit Discharge</b>	That portion of a means of egress between the termination of an exit and a public way.
<b>Festival Seating</b>	That form of audience/spectator accommodation in which no seating, other than a floor or ground surface, is provided for the audience/spectators gathered to observe some performance.
<b>Flame Spread</b>	The propagation of flame over a surface.
<b>Flammable Liquid</b>	A liquid having a flash point below 100°F (37.8°C) and having a vapor pressure not exceeding 40 PSIA (276kPa) at 100°F (37.8°C). The category of flammable liquid does not include compressed gases or cryogenic fluids.
<b>Liquefied Petroleum Gas (LP-gas)</b>	A material which is composed predominantly of the following hydrocarbons or mixtures of them: propane, propylene, butane (normal butane or isobutene) and butylenes.
<b>Listed</b>	Equipment or materials included in a list published by an organization acceptable to the City of Rapid City and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.
<b>Occupancy</b>	The purpose for which a building or portion thereof is used or intended to be used.
<b>Occupant Load</b>	The IFC states the number of persons for which the means of egress of a building or portion thereof at any one time.
<b>Public Way</b>	Any street, or other similar parcel of land essentially open to the outside air, deeded, dedicated, or otherwise permanently appropriated to the public for public use and having a clear width and height of not less than 20 feet.
<b>Vomitory</b>	In amphitheaters and theaters, any of the entrances leading to the tiers of seats.

## **APPENDIX**

- I. Public Assembly Function Transmittal Sheet
- II. Special Event Information Form/Permit Form
- III. Fire Retardant, Self-Application
- IV. Meeting, Exhibit and Ball Rooms (Chair and Aisle Requirements)
- V. Exhibit Hall (Booth and Aisle Requirements)
- VI. Dead End Aisles, Exit Discharge to Public Way
- VII. Meeting and Dining Rooms (Chair, Table and Aisle Requirements)
- VIII. Fire Lane Signage Requirements

**Appendix I**

**PUBLIC ASSEMBLY FUNCTION  
TRANSMITTAL SHEET**

**RAPID CITY DEPARTMENT OF FIRE AND EMERGENCY SERVICES  
FIRE PREVENTION DIVISION  
(Please attach scale drawings)**

**Facility:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

**FAX #:** \_\_\_\_\_ **After Hours Telephone:** \_\_\_\_\_

**Title Of Event:** \_\_\_\_\_

**Event Date(s):** \_\_\_\_\_

**Event Hours:** \_\_\_\_\_

**Event Decorator/Theme:** \_\_\_\_\_

**Set-Up Date & Time:** \_\_\_\_\_

**Type Of Function:** \_\_\_\_\_

**Seating Type:** \_\_\_\_\_

**Anticipated Number of Occupants:** \_\_\_\_\_

**Special Hazards (i.e. Pyrotechnics, Fog Generator, Decorative Material, Flame Retardant, Decorative Lighting or Open Flame)\*:** \_\_\_\_\_

\_\_\_\_\_

**Special Request:** \_\_\_\_\_

\_\_\_\_\_

---

*\*These items require documentation and/or Special Event Information/Permit Form.*

Please mail, hand deliver or FAX to:

**Rapid City Department of Fire and Emergency Services  
1930 Promise Road  
Rapid City, SD 57701  
Phone (605) 394-5233 / FAX (605) 394-5235**

Appendix II

SPECIAL EVENT INFORMATION FORM/PERMIT FORM
RAPID CITY DEPARTMENT OF FIRE AND EMERGENCY SERVICES
FIRE PREVENTION DIVISION

Event Name \_\_\_\_\_

Event Date(s) \_\_\_\_\_ Event Times \_\_\_\_\_ # of Booths \_\_\_\_\_

Business Name \_\_\_\_\_

Business Representative \_\_\_\_\_ Phone \_\_\_\_\_

Business Address \_\_\_\_\_ City/State/Zip \_\_\_\_\_

Remit Form ONLY if your exhibit includes one or more of the following:

Open Flame Devices \_\_\_\_\_ Candles Stoves \_\_\_\_\_ Lanterns \_\_\_\_\_ Other \_\_\_\_\_

Describe Device \_\_\_\_\_

Describe Use \_\_\_\_\_

Describe Safety Precautions \_\_\_\_\_

Flammable/Combustible Liquids \_\_\_\_\_ Gasoline \_\_\_\_\_ Solvents \_\_\_\_\_ Alcohol \_\_\_\_\_ Other \_\_\_\_\_

Describe Use \_\_\_\_\_

Describe Container and Capacity \_\_\_\_\_

Compressed Gases \_\_\_\_\_ Propane \_\_\_\_\_ Butane \_\_\_\_\_ Natural Gas \_\_\_\_\_ Other \_\_\_\_\_

Describe Use \_\_\_\_\_

Describe Container and Capacity \_\_\_\_\_

Fireworks/Pyrotechnic \_\_\_\_\_ Indoor \_\_\_\_\_ Outdoor \_\_\_\_\_ (See NFPA 1124 and 1126 or 1123)

Describe Devices & Triggering Method \_\_\_\_\_

Bond/Liability Carrier \_\_\_\_\_ Amount of Coverage \_\_\_\_\_

Storage Area/Magazine \_\_\_\_\_

Note: ONLY inert gases that do not possess fire, explosive or health hazards are exempt from special use permits (although they still need "kickover" protection). A few examples of associated gases would be carbon dioxide, nitrogen, helium, and oxygen in small quantities. Facility Management approval is required prior to use of listed inert gases.

I understand that a pre-event, on-site inspection will be done by the Fire Prevention Division and that if I do not comply with the International Fire Code, my permit may be revoked.

Signature \_\_\_\_\_ Date \_\_\_\_\_

FOR OFFICIAL USE ONLY
PERMIT # \_\_\_\_\_ FEE \_\_\_\_\_ DATE INSPECTED \_\_\_\_\_
This Permit Valid From \_\_\_\_\_ To \_\_\_\_\_
By \_\_\_\_\_

**Appendix III**

**FIRE RETARDANT  
SELF-APPLICATION**

**RAPID CITY DEPARTMENT OF FIRE AND EMERGENCY SERVICES  
FIRE PREVENTION DIVISION**

Professional flame retardant treatments, or materials that are inherently flame retardant in their manufacture, shall meet Nationally Recognized Standards.

**SELF-APPLICATION OF FLAME RETARANT MATERIALS**

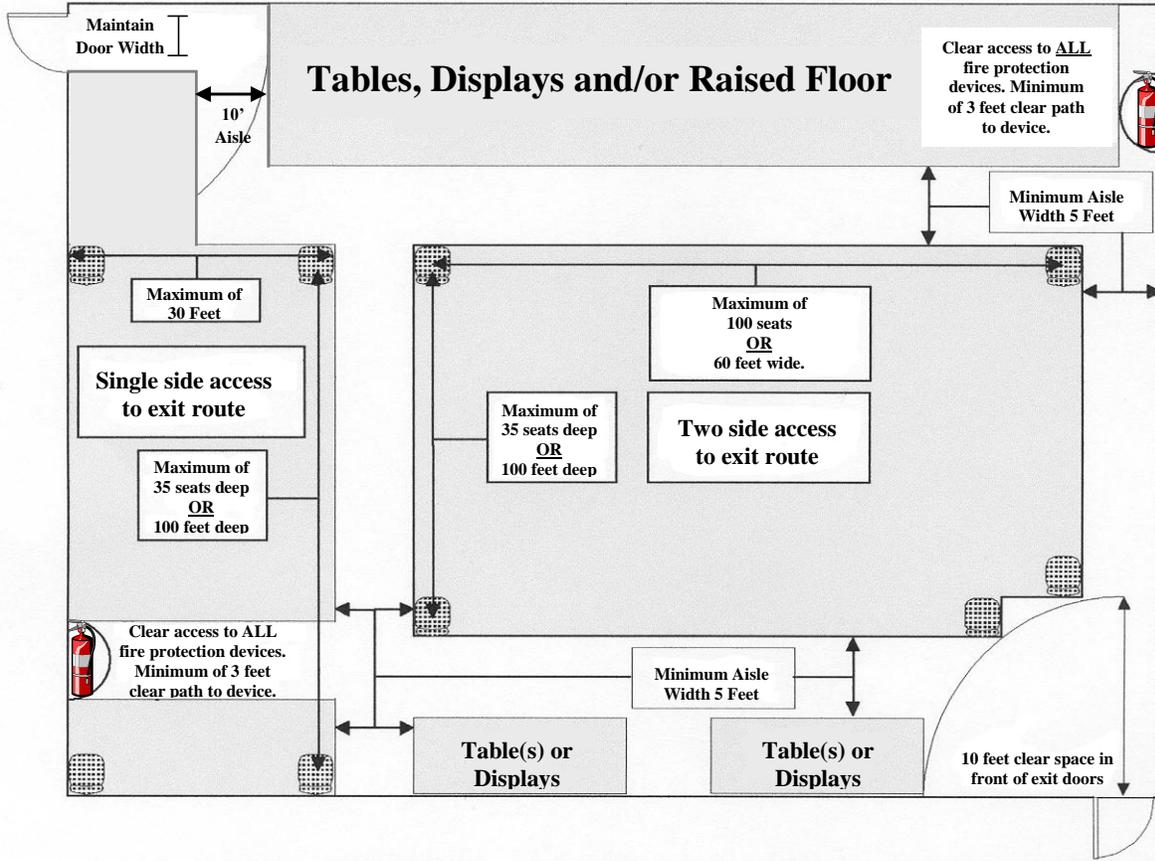
**Individuals or contractors actually applying fire retardant chemicals must provide the following information:**

<b>Event</b> _____	<b>Event Date</b> _____
<b>Exhibitor / Contractor Name</b> _____	
<b>Address</b> _____	
<b>Telephone Number</b> _____	
<b>Contact Person</b> _____	_____
(Print Name)	(Signature)
<b>Treated Item(s)</b> _____	
_____	
<b>Product used to Fire Retard</b> _____	
_____	
<b>Product Registration Number</b> _____	
_____	
<b>Method of Application (spray on application shall be reapplied for each show setup)</b>	
_____	
<b>Longevity of Product</b> _____	
_____	
<b>Name of Person who applied Fire Retardant and Date applied to item</b>	
_____	_____
(Name)	(Date)

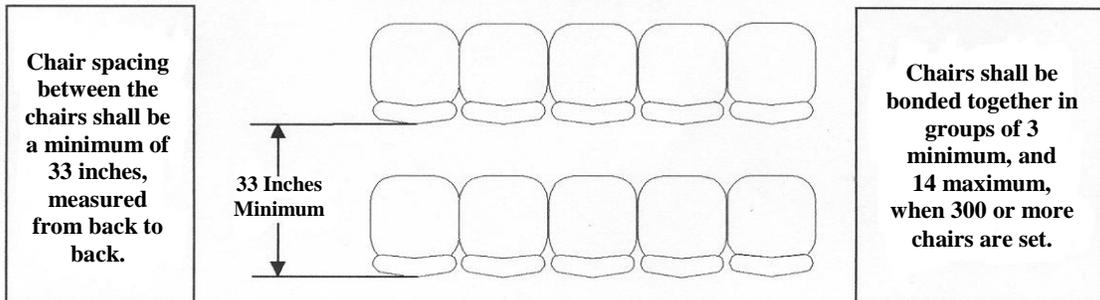
*NOTE: A swatch of treated material is required for an on-site test.*

Appendix IV

**Meeting, Exhibit and Ball Rooms  
(Chair and Aisle Requirements)**

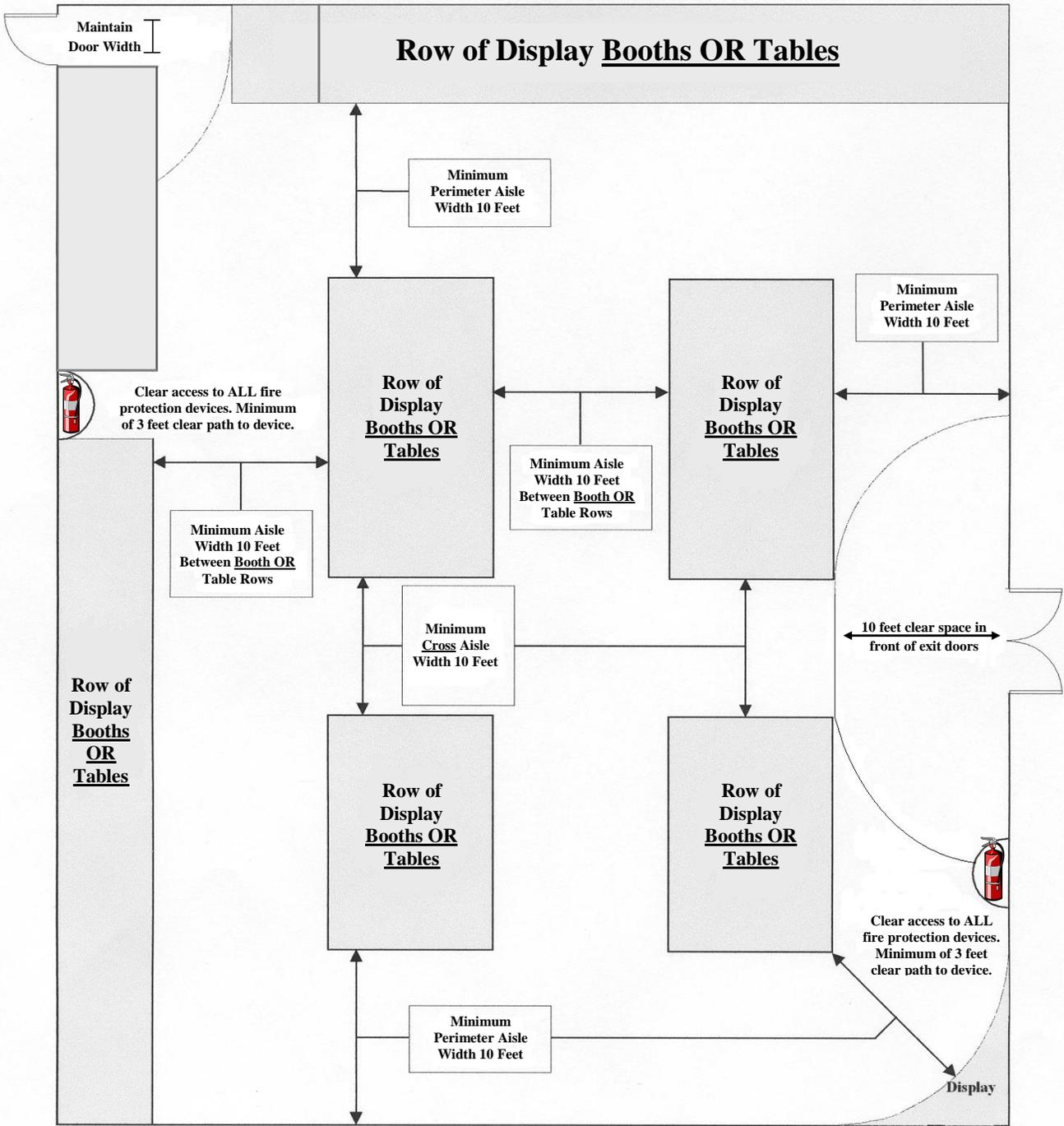


**Meeting, Exhibit and Ball Rooms  
(Chair Requirements)**



# Appendix V

## Exhibit Hall (Booth and Aisle Requirements)

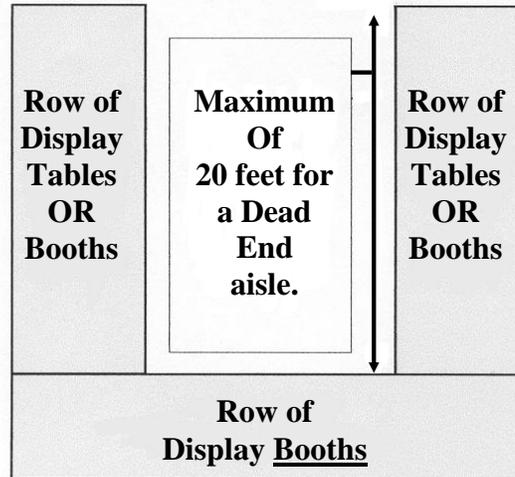


***NOTE: Displays can NOT block the EXIT lights.***

## Appendix VI

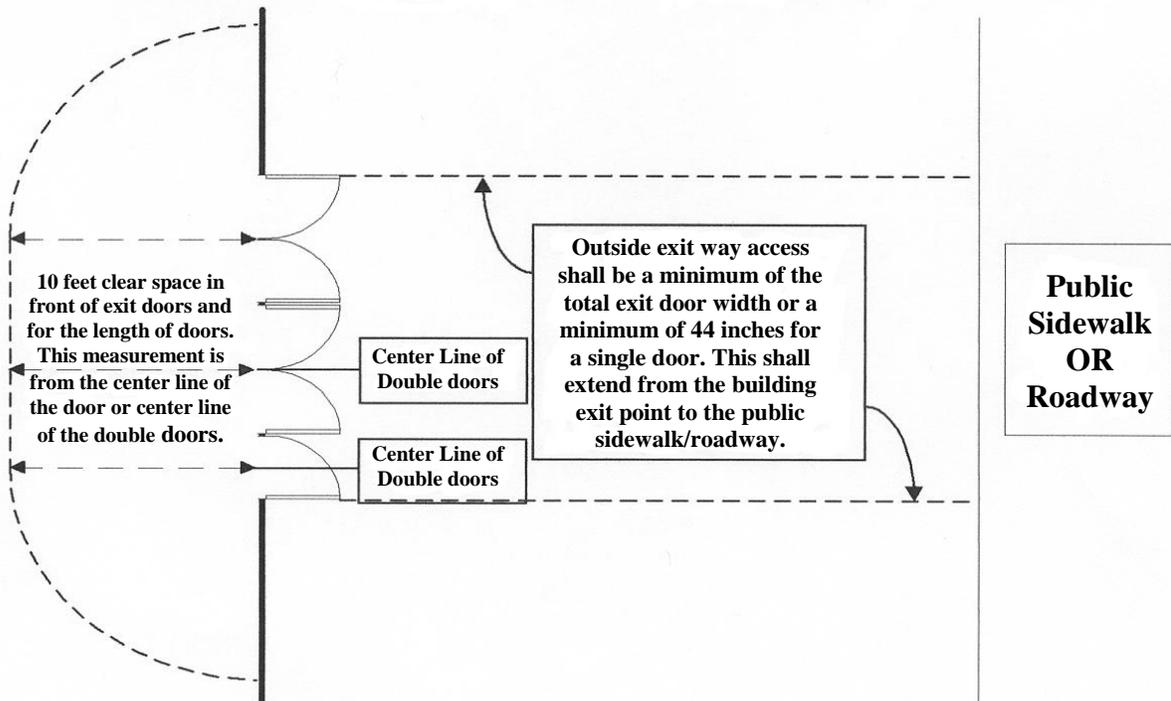
### Dead-End Aisles, Exit Discharge to Public Way

# Dead-End Aisles

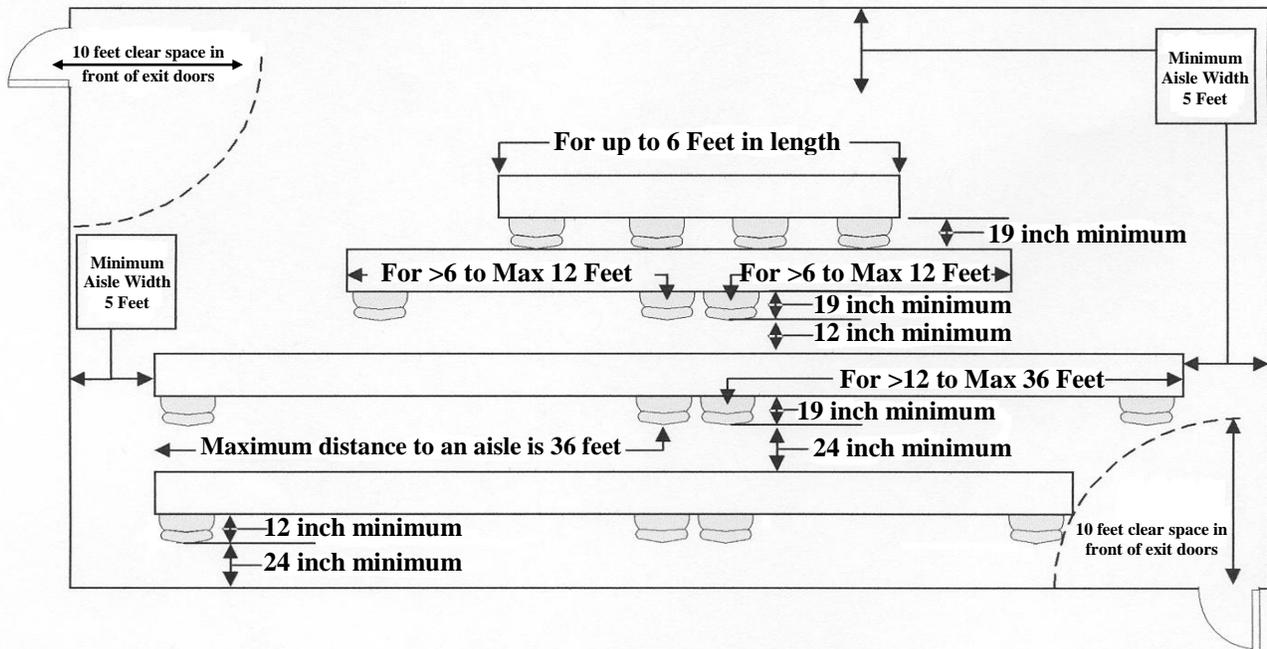


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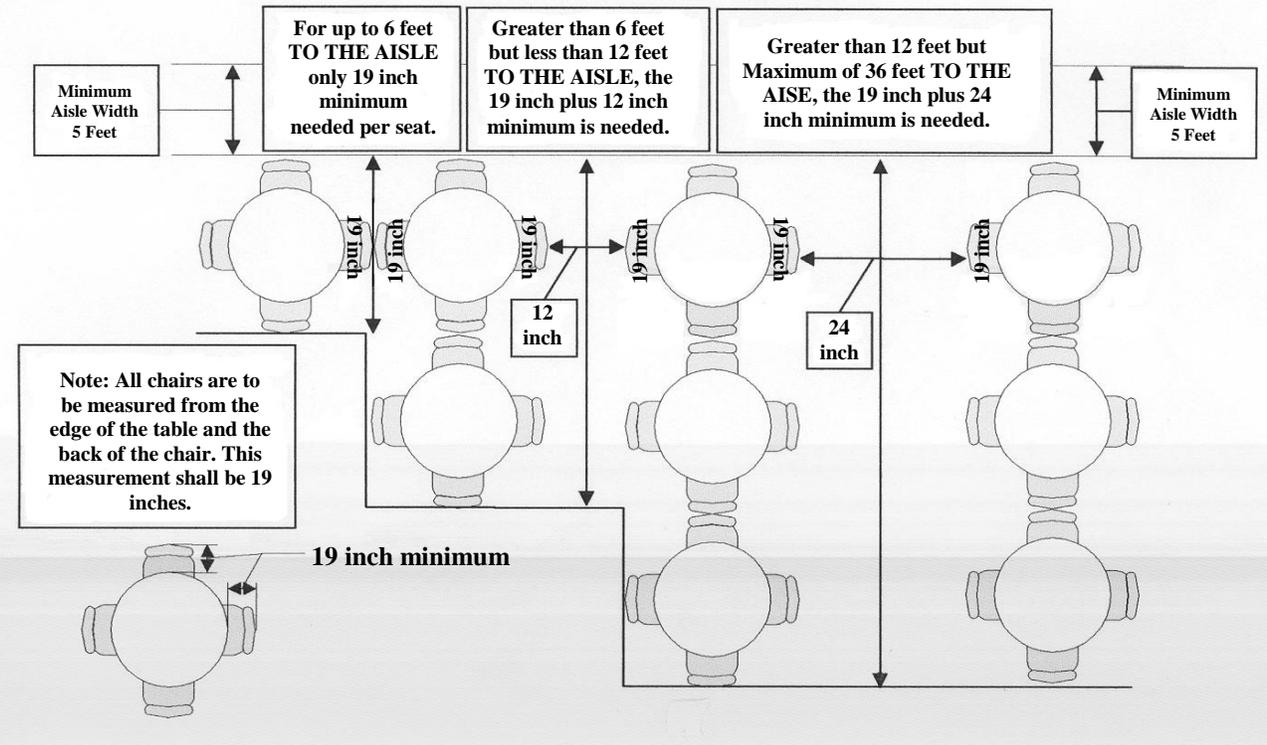
# Exit Discharge to Public Way



## Appendix VII Meeting and Dining Rooms (Chair, Table and Aisle Requirements)



## Dining and Ball Rooms (Chair, Table and Aisle Requirements)



## Appendix VIII

### Fire Lane Signage Requirements

# “NO PARKING FIRE LANE” SIGN SPECIFICATIONS

The “NO PARKING FIRE LANE” sign shall be 12 inches by 18 inches, red lettering on white background. There shall be a minimum clearance of two feet from the edge of the sign to the street curb. The fire lane sign shall be placed at the beginning of restriction, at the end of restriction, and at least every 200 feet within the restricted area. **Appropriate arrows will indicate the direction of the restrictions.**

