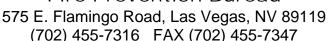


## CLARK COUNTY FIRE DEPARTMENT

## Fire Prevention Bureau





Permit Type: 105.8.p2

**Effective Date: August 1, 2010** 

**Revision Date: none** 

TITLE: PLACES OF ASSEMBLY

**SCOPE:** Provide the minimum submittal requirements for Temporary

Assembly Permits.

**PURPOSE:** To standardize plan/permit requirements required by the Fire

Department in accordance with 2005 Clark County Fire Code.

### **SUBMITTAL REQUIREMENTS:**

The Event Operator, herein referred to as the Applicant, shall process a "Places of Assembly" Permit Application. The permit application can be obtained at <a href="http://fire.co.clark.nv.us/(S(30wk54bk31q4e055kb0tu0zr)">http://fire.co.clark.nv.us/(S(30wk54bk31q4e055kb0tu0zr))</a>//Permits.aspx.

Provide the three sets of plans and three sets of fabric flame proofing certificates as described herein.

Regular submittals for Places of Assembly will be reviewed within a 10-business day turn around period. Expedited plans will have a turn around time of no greater than five (5) business days or before the date of the event.

The permit is valid for the duration of the event as specified by the Applicant.

Revisions to approved plans are required to be submitted and approved. Revisions will be assessed additional plan review fees. A copy of the previously approved plan shall accompany the revised submittal to facilitate the review. Clearly indicate all changes to the revised plans by clouding the change with a delta number to signify the date of plan change. When several changes have been made, the Plans Checker may also require a detailed list of changes.

Resubmittals of plans with corrections shall include a copy of the previously submitted plans so that the Plans Checker can determine that the required corrections have been made.

The application should be submitted at least four weeks prior to the event. Plans may be accepted inside of four weeks when CCFD staff is available to review them and expedite fees are paid if applicable.

#### The submittal must include:

- Three (3) sets of scaled floor plans on minimum 11-inch X 17-inch paper
- All drawings shall be drawn to a measurable scale. i.e. 1/8 inch = 1 foot, 1/16 inch = 1 foot, 1 inch = 10 feet.
- Hand delivered and U.S. Postal Mail are the standard methods of submittal.
- FAX submittals are **not** acceptable.
- 1. The following information is required on all plans:
  - a) Provide contact person, their telephone & fax numbers, the move in and move out dates for the event, name of property, address of property, name of specific room to be used. A detail shall be drawn to depict the location of these rooms, adjoining rooms and hallways in relation to the building they occupy. See the required information block given in Appendix A.
  - b) Type of convention/special event (Display items: Equipment, materials, vehicles, pyrotechnics, open flame devices, candles, cameras, sound booths and food service areas).
  - c) Dimensions shall be drawn for the usable square footage to be occupied and the total square footage of the room. Maximum occupant load permitted in the useable area shall be calculated and provided.
  - d) Location and dimensions of all available exits.
  - e) Width of all aisles for egress & cross aisles around all tables, booths and theater style seating shall be drawn to scale and dimensions shall be provided. No dead end aisles greater than 20 feet in length. Aisles around round or rectangular tables with chairs on both sides shall be a minimum of 6 feet from table edge to table edge. Aisles around convention booths shall be a minimum 8 feet wide. Aisles for egress around theater style seating shall be a minimum 6 feet wide.
  - f) Sizes and locations of booths shall be shown on the plans. The sizes shall be provided in square feet. The plans shall show the heights of the booths and whether the booths have multiple levels.
  - g) All tables with chairs shall be drawn to scale and dimensions shall be provided. Chairs for theater style seating in groups of three (3) or more shall be banded together.

- h) A line table shall be provided to show the differences between walls, curtains and other items in the room.
- Location of all fire extinguishers and fire hose cabinets shall be marked on plans. A symbols table shall be provided to show the differences between a fire hose cabinets, fire extinguishers, etc.
- 2. Separate permits are required for other operational permits contained within the assembly. Typical operations that require separate permits that are present in assembly spaces include:
  - Candles and Open flames
  - Flame effects
  - Fireworks/pyrotechnics
  - Hot Work Operations
  - Liquid or gas-fueled vehicles or equipment for display in assembly occupancies
  - Fire systems for covered booths exceeding 1,000 square feet

### SPECIFICATIONS AND REQUIREMENTS:

See Appendix B for definitions specific to Temporary Assemblies:

## Occupant Loads:

Occupant Loads are to be controlled by the Event Operator and reported accurately. Assembly Permits will be revoked by CCFD when the actual occupant load exceeds the reported occupant load.

Maximum occupant load shall be calculated versus the total or useable square footage of the room. Maximum occupant load shall be calculated by dividing the square footage of the room by 15 for an event utilizing tables and chairs or booths for a convention; dividing by 7 for an event utilizing fixed seating.

FUNCTION OF SPACE	OCCUPANTS LOAD PER FLOOR AREA
Exhibition Floors	15 net *
Fixed Auditorium Seating	Actual Number of Seats
General Sessions	Actual Number of Seats
General Session Standing Room (if allowed)	7 net*
Grandstand / Bleachers	one person per 18-inches bench width
Concert Seating	Actual Number of Seats
Concert Standing Room	5 net*
(if allowed)	
Stages and Platforms	15 net*
Back Stage	200 gross**
Kitchens	200 gross**
Pre-function	Non-simultaneous or per master egress plan
Registration	Non-simultaneous or per master egress plan
Business Centers	100 gross**

## **Assembly Occupancy Arrangements:**

- 1. Width of all aisles for egress & cross aisles around all tables, booths and theater style seating shall be drawn to scale and dimensions shall be provided. No dead end aisles greater than 20 feet in length. Aisles around round or rectangular tables with chairs on both sides shall be a minimum of 6 feet from table edge to table edge. Aisles around convention booths shall be a minimum 8 feet wide. Aisles for egress around theater style seating shall be a minimum 6 feet wide.
- 2. Theater style seating rows for General Sessions, Concerts and the like shall be served by minimum 44-inch aisles. Rows shall not exceed 100 seats per row when an aisle is available at both ends of the row. A minimum 12 inch clear width is required between rows. The clear width between rows shall be increased by 0.3 inches for every seat over 14, but shall not be required to exceed 22 inches.
- 3. Aisles around convention exhibition booths are to be a minimum of 8-feet wide. An allowance for a 4-foot wide aisle in a length limited to 50-feet will be acceptable.
- 4. Master Exiting Plans approved by Clark County Development Services (CCDS) (Building Department) shall supersede all of the above.

### Means of Egress:

- 1. Exits and their capacity shall be in accordance with master egress plans approved by Clark County Development Services Building Division.
- 2. The available exit capacity must be greater than or equal to the number of occupants (occupant load).
- 3. The exit capacity shall be calculated by the formulas:
  - Exit Capacity of level Exit Access and Doors. An egress factor of 0.20 inch per person shall be provided. Alternately, an egress factor of 1 foot of exit width for 60 persons shall be provided.
  - Exit Capacity of Ramps and Stairs. An egress factor of 0.30 inch per person shall be provided. Alternately, an egress factor of 1 foot of exit width for 40 persons shall be provided.
  - Where the master egress plans show alternate egress factors, the alternate egress factors shall be permitted.
- 4. Exiting shall be provided on at least 2 sides of the room being occupied. If 2 or more exits are required in assembly occupancy, they must be separated by a minimum distance equal to or greater than one half the diagonal distance of the room being used to achieve the adequate exiting separation distance

<sup>\*</sup>Net = remaining area when not including non-useable circulation space (e.g. space taken by décor, displays, props and the like)

<sup>\*\*</sup> Gross = all area including non-useable circulation space (e.g. equipment, pillars, stock items, and the like)

- 5. The exit access ways shall not be less than the combined required capacity of the converging aisles. Width of access ways need not be greater than the required width of the exit doors to which they lead.
- 6. Booths, tables, displays and the like shall not restrict the required exit capacity.
- 7. No life safety features or components (.e.g. EXIT signs, emergency lighting, fire extinguisher cabinets, hose cabinets, strobes, and horns) shall be obstructed by decorations or set up materials. Any proposed relocation of such devices shall be noted on plans. Any proposed relocation of fire alarm devices and fire suppression devices shall require submittal of permits to address the work, as required.

## Fire Extinguishers:

- 1. Fire extinguishers originally placed by the building owner as required and approved by the Fire Department at the time of original certificate of occupancy are acceptable. No additional fire extinguishers are required for:
  - a. General admission assemblies
  - b. General session assemblies
  - c. Banquets assemblies
  - d. Theater seating assemblies
- 2. Additional fire extinguishers may be required by the Fire Department for placement in an exhibition hall assembly to provide:
  - a. Access within 75 feet of travel
  - b. One extinguisher per each 11,250 square feet.
  - c. One unit of Class A rating per 11,250 square feet
  - d. Special hazards, i.e. hot works and cooking shall be provided with a fire extinguisher suitable for the hazard. A Class K fire extinguisher shall be provided for demonstration cooking.
- 3. Minimum 2A10 BC rated extinguishers shall be provided.
- 4. Fire extinguishers and fire hose cabinets shall not be obstructed.

## Cooking:

Temporary exhibition and display cooking is only permitted within the limitations given below. Production cooking operations require food preparation within permanent commercial cooking facilities with permanent commercial cooking ventilation.

Cooking operations are permitted with the following limitations:

- 1. All cooking appliances shall be listed or approved by a nationally recognized testing agency i.e. Underwriters Laboratories, Inc., Canadian Standards Association (formerly American Gas Association,) etc.
- 2. All cooking equipment is to be operated according to the manufacturers' recommendations, UL listing and operating instructions. Equipment recommended for outdoor use shall not be used indoors.
- 3. All multiple-well cooking equipment using combustible oils or solids and cooking surfaces i.e. grills that exceed 288 square inches that produces grease laden vapors shall be provided with a fire extinguishing system installed according to NFPA17A and an exhaust duct system complying with the currently adopted Mechanical Code.
- 4. All single-well cooking equipment (deep fat fryers), operations using combustible oils or solids shall meet all of the following criteria:
  - a. Metal lids sized to cover the horizontal cooking surface are to be provided.
  - b. The cooking surface is limited to 288 square inches (2 square feet).
  - c. The equipment shall be placed on a noncombustible or limited combustible surface. Examples include concrete floors and Fire Resistance Treated (FRT) plywood. The noncombustible surface must extend three (3) feet in front of the fryer.
  - d. The fryer is to be separated from all other equipment by a distance not less than 24 inches.
  - e. These cooking displays must be separated from all other combustibles by a distance not less than 10 feet.
  - f. The volume of cooking oil per appliance is not to exceed 3 gallons.
  - g. The volume of cooking oil per booth is not to exceed 6 gallons.
  - h. Deep fat fryers shall be electrically powered and have a shut-off switch.
- 5. Other appliances for exhibition cooking shall also be limited to 288 square inches in area. Examples are induction cook tops, ranges, electric warmer, single burner ranges, multiple burner ranges.

- 6. A minimum of one (1) Class-K fire extinguisher shall be provided within 30-feet of each deep-fat fryer and each grill or other appliance producing grease laden vapors.
- 7. A minimum of one (1) Class 2A-30BC fire extinguisher shall be located within each booth with additional or other display cooking such as baking, sauté, braising, stir fry, convection cooking, warming of food, and all other like applications.
- 8. Solid fuels including charcoal and woods, i.e. hickory, mesquites are prohibited within exhibit halls.
- 9. LP-gas or butane used for displays and demonstrations is limited to cylinders or canisters not exceeding the nominal 5-pound size (12 lbs water capacity), maximum 2 per booth. Additional cylinders or canisters must be located 20 feet apart.

## **Banquet Serving:**

Banquets are to follow the same guidelines as Exhibition and Display Cooking.

## **Food Warming:**

This operation at exhibitions is limited to maintaining the temperature of pre-cooked food or beverages at or below 200 °F. Flame devices utilized for food warming shall be separately permitted as open flame devices. Such devices shall be for stationary use only and shall be enclosed or installed in such a manner as to prevent the flame from contacting any combustible materials. Such flame devices utilized for food warming shall not be located in unoccupied rooms or otherwise left unattended. Chemical-heat (Sterno) is allowed in occupied rooms or halls during the permitted hours of the event. It shall be used in accordance with the manufactures' instructions. Mobile warming carts, using chemical heat may be used in accordance with the manufactures' instructions. Chemical heat may not be used in warming carts that are not manufactured for chemical heat devices.

### Decorations and Exhibit Booths:

All decorative materials including (draperies, artificial plants, etc.) used for construction or decoration shall be flame retardant and flame certificates shall be provided.

- Flame resistance certifications shall be available to the Clark County Fire Department Inspectors so that all hanging textiles perimeter or subdividing curtains can be judged as being flame resistant. Decorative textiles, drapes, curtains and the like shall be flame retardant as tested by NFPA 701.
- 2. Textiles, drapes and the like shall not obstruct fire alarm strobes, fire hose cabinets, fire extinguishers or any other fire safety equipment.
- 3. Table linens are not regulated by this guideline.
- 4. Foam plastics, other than poster boards, shall not be permitted. CCFD will consider foam plastics complying with the currently adopted Building Code. A separate Fire

Protection Report demonstrating compliance with the Building Code is required for foam plastics.

5. Fire resistant foam board signage, not greater than 1/2-inch in thickness, is acceptable.

#### **Booth Construction:**

Booths construction materials (except for foamed plastics) are not regulated.

Covered booths exceeding 1,000 square feet shall be provided with interior automatic sprinkler protection. A separate permit application shall be submitted for such structures.

#### Hot Works:

A separate submittal for Hot Works Event Permit is required for exhibition welding, demonstration oxy-acetylene welding, soldering, brazing, glass-blowing and the like. Electric spot welding, arc, TIG and MIG welding etc. may be allowed according to an issued permit. Small scale, jewelry welding may be allowed when permits are issued. Full scale oxy-acetylene welding will not be permitted in an exhibition assembly.

A blanket permit covering multiple operators is acceptable for a single exhibition space. All exhibitors and their hot works equipment and description of their demonstration must be submitted. See the Fire Department Fee Schedule for the number of exhibitors allowed in a single permit.

The hot-works permit submittal shall include a description of the operations and fire safety precautions. CCFD will determine if the operations and precautions are acceptable and either issue or deny the permit.

## **APPENDIX A**

## INFORMATION REQUIRED ON TEMPORARY ASSEMBLY PLANS

### The following information shall be in provided on submitted plans:

- Location of fire appliances, such as fire extinguishers, fire hose stations, etc.
- Exit widths of all exits shown for room.
- Widths of all aisles and cross aisles.
- Location of stages, curtains, and drapes.
- Length and width of room to be used.
- Location of each exhibit booth
- Location of stages, platforms, vehicles and other fixed obstructions
- Location of camera platforms
- Location of sound booths
- Indicate whether pyrotechnics and flame effects will be used.
- Indicate whether open flame(s) and candles will be used.
- Locations of all multi-level booths (if applicable).

The following block shall be included on a plan.

- 1. Contact person and their telephone number.
- 2. Name of the event
- 3. Type of the event.
- 4. Name of the room to be used.
- 5. Total area of the room with the dimensions in ft.
- 6. Usable square footage of the room with the dimensions.
- 7. Maximum occupant load and calculations and conversion factors used.
- 8. Required exit capacity (inches or linear feet) and calculations and factors used.
- 9. Actual exit capacity
- 10. Move-in and Move-out dates of the event.
- 11. Total number of tables, chairs and booths along with their sizes and seating arrangement.

# APPENDIX B DEFINITIONS

The following are special definitions within the context of this Guideline:

<u>Assembly:</u> For the purposes of this guideline, a gathering of 300 or more persons for a specific event.

<u>Booths, single and multi-level:</u> Assembled display structures for displaying sales literature and product demonstrations. Multi-level booths are characterized as having human occupancy above the floor or ground.

<u>Class A Fire Extinguisher:</u> Fire extinguisher used for ordinary combustibles (i.e. wood and paper); the fire extinguisher is also assigned a rating number.

<u>Class K Fire Extinguisher:</u> Fire extinguisher that has been subjected to special tests on cooking appliances using combustible cooking media.

<u>Cooking:</u> Heating food products to at least 200°F by baking, boiling, deep fat frying, sautéing, etc.

**Event Operator**: Organization or entity responsible for sponsoring the event.

<u>Exit</u>: Persons traveling through an exit are considered safely away from a hazard such as a fire. Therefore "exit" has a special definition in the context of building and fire codes as follows:

That portion of a means of egress system which is separated from other interior spaces of a building or structure by fire-resistance rated construction and opening protection as required to provide a protected path of egress travel between the exit access and exit discharge. Exits include exterior exit doors at ground level, exit enclosures, exit passageways, exterior stairs, exterior exit ramps and horizontal exits.

<u>Exit Access Travel Distance</u>: Distance from any point within a building to an exit.

<u>Grease Laden Vapors</u>: Significant cooking vapors that can collect on adjacent and over-head surfaces from deep fat frying, grilling of fatty meats and the like.

<u>Hot Works</u>: Working metal, glass, jewelry, or other materials by brazing, soldering, flames, grinding, producing sparks or welding.

<u>LP-gas:</u> Compressed liquid petroleum gas consisting mainly of propane with a lesser amount of butane and pentane.

<u>Master Egress Plan</u>: The plan approved by Clark County Development Services (the Building Department) that established the egress systems for buildings and venues. The Master Egress Plan establishes a base egress system and typically will not include all temporary use conditions.

<u>Means of Egress</u>: System used to exit from a building including the exit access, exit and exit discharge.

<u>National Fire Protection Association (NFPA)</u>: Major U.S. fire standards promulgating organization.

NFPA 701: Fire test standard for fabrics used to determine if hanging textiles and fabrics are acceptable for use in assembly occupancies. The full title is Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

<u>Permit and Service Fee Schedule</u>: Schedule of fees associated with obtaining required operational permits associated with the assembly event.

<u>Pyrotechnics</u>: Controlled exothermic chemical reaction that are timed to create the effects of heat, gas, sound, dispersion of aerosols, emission of visible electromagnetic radiation, or a combination of these effects to provide the maximum effect from the least volume.

<u>Sterno</u>: Trade name for a formulation of gelled denatured alcohol fuel commonly used to warm food and beverages.

<u>Vehicle Display</u>: Display of normally functional motor vehicles, modified for display during assembly occupancy.

Warming (food): Use of cooking media at temperatures of 200°F or less.

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