

Calgary Fire Department Indoor Special Event Requirements

August 2011







Table of Contents

Definitions	1
Indoor Special Events	2
Special Event Approval	2
Event Information Sheet	2
Floor Plans	3
Fire Department Approval of Plans	3
Structures and Exhibit Booth Requirements	3
Special Circumstances	4
Cooking/Warming	5
Demonstration Cooking	5
Display of Motorized & Non-Motorized Vehicles	6
Inspection of the Event	6
Onsite Fire Safety Codes Officer	6
Storage	7
Event Interruption/Shutdown	7
Appendix: Event Information Sheet	8

CALGARY FIRE DEPARTMENT INDOOR SPECIAL EVENTS REQUIREMENTS

The purpose of this document is to provide the Calgary Fire Department's (CFD) minimum requirements necessary to establish a reasonable level of fire and life safety and building protection during indoor special events in Calgary from hazards created by fire, explosion and dangerous conditions.

Definitions

Assembly Occupancy:	The occupancy or the use of a building, or part thereof, by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes, or for the consumption of food or drink.
Canopy:	A structure, enclosure or shelter constructed of fabric or pliable material supported by any manner other than air or the contents it protects and is open without sidewalls or drops on at least three sides of the structure.
Cooking Appliances:	Electric or gas powered equipment used in the process of preparing food. Examples of cooking appliances include but are not limited to deep-fat fryers, ranges, griddles, broilers, woks, tilting skillets, braising pans, and ovens.
Cookware:	Utensils used for cooking e.g. pots and pans.
Cooking Booths:	Booths where food is prepared by a heating or cooking process such as but not limited to grilling, frying, barbecuing, flambé, deep fat frying, baking, warming, and boiling.
Demonstration Cooking:	Cooking for the demonstration of cooking products, cooking processes for a specific food or showcasing of specific cooking skills. In all cases, food cannot be for sale.
Flame Retardant:	A listed chemical, chemical compound, or mixture which when applied in an approved manner to any fabric or other material, will render such fabric or material incapable of supporting combustion.
Labelled:	Equipment or materials to which has been attached a label, symbol or other identifying mark indicating that is has been manufactured under a certification programme administered by an accredited Certification Organization or Standards Writing Organization under the National Standards System of Canada.
Listed:	Equipment or materials included in a list published by an accredited Certification Organization or Standards Writing Organization under the National Standards System of Canada.
Shall:	Indicates a mandatory requirement.
Tent:	A structure, enclosure or shelter constructed of fabric or pliable material supported by any manner except air or the contents it protects.
Vendor Booths:	Includes all booths other than cooking booths.

Indoor Special Events

The types of events that must meet the CFD's Indoor Special Event Requirements include, but are not limited to, home shows, auto shows, boat shows, trade shows, ice shows, music concerts, circuses, monster truck shows, rodeos, wrestling events, religious gatherings, and any other special event of public assemblage. In addition, events with one or more of the following circumstances will require approval and/or a permit prior to the event:

- 1. Use of candles or open flames.
- 2. Pyrotechnics or fireworks display.
- 3. Tent or air-supported Temporary Membrane Structure over 27.9m2 (300sq.ft.).
- 4. Liquid or gas-fuelled vehicles or equipment in assembly buildings (see "Display of Motorized and Nonmotorized Vehicles" section).
- 5. Special amusement (includes haunted houses).
- 6. Indoor cooking (see "Cooking" and "Demonstration Cooking" sections).

Special Event Approval

The CFD must receive an information package for review and approval at least thirty (30) days prior to the event. The information package shall include payment if required and will include the following:

- Event information sheet.
- Floor plans.
- Special circumstances.

Event Information Sheet

A sample form can be found in Appendix or if one is provided, the Event Information Sheet shall include the following:

- 1. Event name.
- 2. Venue name and address
- 3. Event date(s) and time(s).
- 4. Set-up and move-out date(s).
- 5. Description of event.
- 6. Maximum Estimated number of persons to be in attendance.
- 7. Event coordinator contact information (i.e. name, address, and phone number(s).

NOTE: This should include contacts for individual(s) that can provide detailed information about set-up and operation of the event.

Floor Plans

Floor plans shall include the following information:

- 1. Detailed physical layout of the event to include exhibit/booth floor plans.
- 2. All measurements must be in metric.
- 3. Floor plans must specify:

 - Access to exits and exit locations.Booth layout (to scale) of the entire show.
 - Location and dimensions of all aisles and cross aisles.
 - **NOTE:** Aisles shall be a minimum of 2.5m wide with 3.5m for the main aisles at front and rear of exhibit hall.
 - Size and location of stages or other performing areas.
 - Location and accessibility of all required fire alarm "pull stations', fire extinguishers and fire department standpipe connections and cabinets.

NOTE: The Calgary Fire Department maintains a file of pre-approved event floor plans. Applicants shall identify whether a pre-approved plan or another plan will be used for the specific event. Modifications to pre-approved plans shall be detailed and will require review by the Calgary Fire Department prior to utilization of the changed plan. If pre-approved plans are not used, detailed accurate floor plans shall be submitted to the Calgary Fire Department Fire Prevention Bureau.

Fire Department Approval of Plans

Plans must be approved by the Fire Department prior to any event set-up unless the set-up is a standard arrangement pre-approved by the CFD Fire Prevention Bureau. Copies of the approved plans will be stamped and returned to the event coordinator prior to set-up. Approvals are subject to final inspection by an authorized CFD Fire Safety Codes Officer (Fire SCO). A copy of approved plans will be kept on file with CFD Fire Prevention Bureau and with the event coordinator. No modification of the set-up shall occur once the approved plan has been established without prior written approval on the plans from the CFD Fire Prevention Bureau. Inspections will be conducted according to the approved plans.

Structures and Exhibit Booth Requirements

- 1. Decorative material, such as, but not limited to, drapes, theatre curtains, signs, banners, acoustical material, hay/straw, split bamboo, plastic cloth, plastic displays, canvas, cardboard, etc. shall be of non-flammable material, shall conform to CAN/ULC¹-S109, "Flame Tests of Flame-Resistant Fabrics and Films", or shall be treated and maintained in a flame retardant condition by means of a flame retardant solution to ensure that the material will pass the match flame test in NFPA² 705, "Field Flame Test for Textiles and Films." Plastic cloth and certain other plastic materials, tar-paper, nylon, oilcloth, etc. cannot be rendered flame retardant and are prohibited. Any decorative material may be subject to testing. Materials in violation shall be immediately removed from the building.
- 2. Combustible materials that are 10mm (3/8 inch) or more in thickness or glass may be used without flame retardant treatment. Exception: Paper, cardboard or foam products.

¹ Underwriters Laboratories of Canada

² National Fire Protection Association

- 3. All electrical fixtures and appliances must be approved and carry the appropriate ULC or CSA³ listing:
 - a) Three wire (grounded) cords shall not be plugged into two (2) wire extension cords.
 - b) Extension cords shall not run under carpets/rugs unless designed to be used in these locations.

c) There shall be a sufficient clearance from lights or other heat sources to any combustible or display materials to prevent any possible ignition or heat damage (melting).

d) All electrical plugs, cords shall be free from defects. Only listed electrical devices and cords shall be allowed.

- 4. Booths that include tents, canopies and/or other structures inside a building shall not be constructed with any roof, ceiling or other obstruction larger than 27.9m2 (300sq.ft.) without written approval of the Calgary Fire Department.
- Booths that include tents, canopies and/or other structures inside a building having between 9.3m2 (100sq. ft.) and 27.9m2 (300sq.ft.) of roof, ceiling or other obstruction shall be provided with a listed single station smoke alarm.
- Booths that include tents, canopies and/or other structures inside a building having between 9.3m2 and 27.9m2 of roof, ceiling and/or other obstruction with a source of ignition shall be provided with a listed single station smoke alarm plus a 2A-10BC fire extinguisher within.
- 7. Tents and canopies must be approved for indoor use and have a permanently attached label indicating conformance to CAN/ULC–S109, "Flame Tests of Flame-Resistant Fabrics and Films".
- 8. Minimum of 3m separation is required between each 27.9m2 aggregate of tents, canopies and/or other structures on all sides. An aggregate area exceeding 27.9m2 shall not be permitted.
- All required "EXIT" signs shall be visible from any location in the room. Drapes, curtains or displays shall not obstruct view of "EXIT" signs. Temporary directional "EXIT" signs may be required to clearly indicate the direction of egress.
- 10. Exits and aisles shall be clear and free of obstructions. Front of hall and back of hall main aisles shall be 3.5m wide and all other aisles shall be a minimum of 2.5m wide.
- 11. Fire extinguishers, hose cabinets, fire hose standpipe connections and other fire appliances shall be maintained, clearly visible and accessible at all times. A minimum of 1m clearance shall be provided with full frontal access to firefighting equipment.
- 12. The number of persons allowed within any event shall not exceed the occupant load permitted for the facility.
- 13. Pressurized tanks and other similar hazards shall be properly secured to prevent tipping over or damage (i.e., helium tanks). Portable holders will be allowed.
- 14. Any additional requirements shall be determined by the Calgary Fire Department for each event.

Special Circumstances

If the following situations and/or circumstances are to occur during an event, then detailed plans of use shall be included in the information package:

- 1. Displays and operation/use of any open flame, candles, lamps, torches, cooking, etc.
- 2. Use of Liquefied Petroleum Gas (LPG)/Liquefied Natural Gas (LNG).
- 3. Use, handling or storage of any pyrotechnic materials or devices.
- 4. Temporary membrane structures, tents, canopies, or covered exhibit booths.
- 5. Display of any motorized or non-motorized vehicles.
- 6. Use of special fuel blends for motor vehicle events indoors.
- 7. Use of vehicle for indoor event.

Cooking/Warming

- 1. Cooking and/or warming appliances shall be listed and labelled for commercial use (not residential) by a recognized testing laboratory (e.g. CSA or ULC).
- 2. Cooking and/or warming appliances shall be electric. Exception: approved commercial cooking appliances that use no more than (2) 10-ounce non-refillable LPG/butane containers or one 5lb propane cylinder connected directly to the appliance at any time, shall be allowed. Containers shall not be used with a manifold.
- 3. Sterno may be used for warming trays; other open flame devices are prohibited without appropriate permits from the Calgary Fire Department.
- 4. Cooking/warming appliances shall be isolated from the public having a minimum of 1 metre separation on all sides, or by providing a sturdy, mounted separation shield between the appliance and the public.
- 5. Individual cookware and warming devices shall not exceed .5mX1m (18inX39in.).
- 6. The surfaces, on which cooking/warming appliances are located, shall be constructed and arranged such that their proximity to combustibles will not pose a fire danger. When cooking equipment generates high temperature heat, the surface will be provided with adequate protection.
- 7. All extinguishers must be listed, labelled and tagged.
- 8. Fire protection shall be provided for any booth utilizing cooking/warming appliances. Each booth shall have the following fire protection equipment:
 - a) a mounted 2A-10BC extinguisher.
 - b) a portable "K" class extinguisher.
 - c) a smothering lid for each individual piece of cookware.
- 9. Cooking or warming appliances that produce grease laden vapours must meet NFPA 96 requirements. "Standard For Ventilation Control and Fire Protection of Commercial Cooking Operations".
- 10. Any additional requirements will be determined by the Calgary Fire Department for each event.

Demonstration Cooking

- 1. Cooking and/or warming appliances shall be listed and labelled for commercial use (not residential) by a recognized testing laboratory (e.g. CSA or ULC). Residential appliances shall only be permitted if they are part of the demonstration and approved by the Calgary Fire Department.
- 2. Cooking and/or warming appliances shall be electric. Exception: approved commercial cooking appliances that use no more than (2) 10-ounce non-refillable LPG/butane containers or one 5lb propane cylinder connected directly to the appliance at any time, shall be allowed. Containers shall not be used with a manifold.
- 3. Fire protection shall be provided with any booth utilizing cooking appliances that use or produce insignificant amounts of oils and/or fats. Each cooking booth will require:
 - a) a "K" Class fire extinguisher.
 - b) a mounted 2A-10BC extinguisher.
 - c) a smothering lid for each individual piece of cookware.
- 4. A maximum of two pieces of cookware may be used at any time per booth.
- 5. Demonstrations may include cooking appliances, cookware or food.
- 6. Food being cooked may be served for tasting purposes only and cannot be for sale.
- 7. Cooking time must not exceed a maximum of 30 minutes of each hour.
- 8. A non-combustible, closable container must be used to dispose of used oil and labelled as such.
- Cooking/warming appliances shall be isolated from the public having a minimum of 1 metre separation on all sides, or by providing a sturdy, mounted separation shield between the device and the public.

Display of Motorized & Non-Motorized Vehicles

When motorized vehicles are to be displayed during an event, the Calgary Fire Department shall be notified in advance. Events with displayed motorized vehicles shall comply with the following:

- 1. Vehicles shall not be started or operated within any assembly building during show hours.
- All fuel tank openings shall be locked or sealed in an approved manner. Where it is not feasible to lock or seal the opening, the fuel tank shall be empty. Draining of the tank shall not occur in a building.
- 3. Adding or removing fuel on site is prohibited (must be done outdoors).
- 4. Vehicle fuel shall not exceed one quarter (25%) of the tank capacity or 20L whichever is less.
- 5. Vehicles, boats, RV's, trailers and similar exhibited products having over 9.3m2 of roofed area shall have a listed single station smoke alarm installed.
- 6. Vehicles, boats, RV's, trailers and similar exhibited products between 9.3m2 and 27.9m2 of roof area, with a source of ignition, external power or vehicle batteries still connected, shall have a listed single station smoke alarm installed and a 2A-10BC fire extinguisher.
- 7. Vehicles fuelled by LPG/LNG are not permitted in assembly occupancies.

Inspection of the Event

In order to maintain compliance with Fire and Life Safety requirements, periodic inspections may be conducted by a CFD Fire SCO. These inspections may include:

- A walk-through inspection with the event coordinator and a CFD Fire SCO during the move-in/set-up period and any deficiencies noted shall be corrected immediately or within the time frame agreed upon.
- Once the event has opened, daily visits by a CFD Fire SCO may be conducted.
- Cooking and motor vehicle displays may be spot checked by a CFD Fire SCO and requirements will be strictly enforced.
- During the closing (move-out) and removal of materials used in the event, a CFD Fire SCO may inspect for emergency access and exiting.

Onsite Fire Safety Codes Officer

At the discretion of the Calgary Fire Department, one or more CFD Fire SCO(s) may be required to be present at the event. If a Fire SCO is used, the event will be billed at the current CFD fee rates.

Storage

Storage of packing materials and surplus literature shall be confined to areas that must be coordinated with the Facility Staff and approved by the CFD.

Event Interruption/Shutdown

Upon finding any unsafe act or condition or any act or condition that constitutes imminent danger, the Calgary Fire Department has the authority to stop the event until such condition is corrected.

Event Information Sheet

Event Name: Venue Name:				
				Venue Address:
Event Date(s):				
Event Time(s):				
	Move Out Date:			
Description of Event:				
Maximum Estimated Number of Attendees	8:			
Event Coordinator Contact Information:				
Name:				
Address:				
Contact Information:				
Phone:				
E-mail:				

Fax Completed Information Sheet to:

Special Events Team Calgary Fire Department 403-243-9947