

Calgary



**Calgary Fire Department**

# Indoor Special Event Requirements



January 2016

# Table of contents

- 1 | Definitions**
- 2 | Indoor special events**
- 2 | Special event approval**
  - 2 | Event information sheet**
  - 3 | Floor plans**
- 3 | Fire Department approval of plans**
- 3 | Structures and exhibit booth requirements**
- 4 | Special circumstances**
  - 5 | Seating requirements**
  - 5 | Cooking/warming**
  - 6 | Demonstration cooking**
  - 7 | Display of motorized and non-motorized vehicles**
- 7 | Inspection of the event**
- 7 | Onsite Fire Safety Codes Officer**
- 7 | Storage**
- 7 | Event interruption or shutdown**
- 8 | Appendix: Event Information Sheet**

# Calgary Fire Department indoor special event requirements

This document provides event planners with the Calgary Fire Department's (CFD) minimum safety code standards and requirements necessary to establish a reasonable level of fire safety and building protection during indoor special events in Calgary.

## Definitions

<b>Assembly occupancy</b>	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.
<b>Canopy</b>	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.
<b>Cooking appliances</b>	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.
<b>Cookware</b>	Utensils used for cooking (e.g. pots and pans).
<b>Cooking booths</b>	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.
<b>Demonstration cooking</b>	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.
<b>Flame retardant</b>	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.
<b>Labelled</b>	Equipment or materials to which has been attached a label, symbol or other identifying mark indicating that it has been manufactured under a certification programme administered by an accredited Certification Organization or Standards Writing Organization under the National Standards System of Canada.
<b>Listed</b>	Equipment or materials included in a list published by an accredited Certification Organization or Standards Writing Organization under the National Standards System of Canada.
<b>Shall</b>	Indicates a mandatory requirement.
<b>Tent</b>	A structure, enclosure or shelter constructed of fabric or pliable material supported by any manner except air or the contents it protects.
<b>Vendor booths</b>	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 structure over 27.9 m<sup>2</sup> (300 ft.<sup>2</sup>).
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 an event. The information package must include payment if required and should include the following:

- Event information sheet
- Floor plans
- Special circumstances

## Event Information Sheet

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

- Event name
- Venue name and address
- Event date(s) and time(s)
- Set-up and move-out date(s)
- Description of event
- Estimated number of persons to be in attendance at any one time
- 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 must 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 2.5 m wide with 3.5 m 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 CFD maintains a file of pre-approved event floor plans. Applicants must identify whether a preapproved plan or another plan will be used for a specific event. Modifications to preapproved plans must be detailed and will require review by the CFD prior to utilization of the changed plan. If preapproved plans are not used, detailed accurate floor plans shall be submitted to the CFD.

## Calgary Fire Department approval of plans

Plans must be approved by the CFD prior to any event set-up unless the set-up is a standard arrangement preapproved by the CFD. 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 (SCO). A copy of approved plans will be kept on file with CFD and with the event coordinator. Once the approved plan has been established, no modification of the set-up shall occur without written approval on the plans from the CFD. 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/ULC-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 NFPA 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 10 mm (3/8 in.) or more in thickness or glass may be used without flame retardant treatment. Exception: paper, cardboard or foam products.
3. All electrical fixtures and appliances must be approved and carry the appropriate ULC or CSA 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 and 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 27.9 m<sup>2</sup> (300 ft.<sup>2</sup>) without written approval of the CFD.
5. Booths that include tents, canopies and/or other structures inside a building having between 9.3 m<sup>2</sup> (100 ft.<sup>2</sup>) and 27.9 m<sup>2</sup> (300 ft.<sup>2</sup>) of roof, ceiling or other obstruction shall be provided with a listed single station smoke alarm.
6. Booths that include tents, canopies and/or other structures inside a building having between 9.3 m<sup>2</sup> and 27.9 m<sup>2</sup> of roof, ceiling and/or other obstruction with a source of ignition shall be provided with a listed single 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 3 m separation is required between each 27.9 m<sup>2</sup> aggregate of tents, canopies and/or other structures on all sides. An aggregate area exceeding 27.9 m<sup>2</sup> shall not be permitted.
9. 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.
11. If there are over 1,000 people in attendance then the front of hall and back of hall main aisles shall be 3.5 m wide and all other aisles shall be a minimum of 2.5 m wide.
12. If under 1,000 people in attendance then front of hall and back of hall main aisles should be 2.5 m wide and all other aisles shall be a minimum of 1.1 m wide.
13. 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 1 m clearance shall be provided with full frontal access to firefighting equipment.
14. The number of persons allowed within any event shall not exceed the occupant load permitted for the facility.
15. 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.
16. Any additional requirements shall be determined by the CFD for each event.

## Special circumstances

If the following situations and/or circumstances are to occur during an event, then detailed plans of use must 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.

# Seating requirements

If any indoor special event requires seating arrangements the following information from the AFC 2014 shall be adhered to:

## 2.7.1.5. Nonfixed Seating

1. When nonfixed seats are provided in assembly occupancies,
  - a) except as provided in Sentence (3), the seats shall be arranged in rows having an unobstructed passage of not less than 400 mm between rows measured horizontally between plumb lines from the backs of the seats in one row and the edges of the furthest forward projection of the seats in the next row behind in the unoccupied position,
  - b) except as provided in Sentence (2), aisles shall be located so that there are not more than 7 seats, or 12 seats without backs, between every seat and the nearest aisle,
  - c) except as provided in Sentence (2), the clear width of an aisle in millimetres shall be not less than the greater of 1,100 or the product of the number of seats served by that aisle and 6.1,
  - d) the width of an aisle is permitted to be reduced to not less than 750 mm when serving 60 seats or fewer,
  - e) dead-end aisles shall not be longer than 6 m, and
  - f) except as provided in Sentence (3), when the occupant load exceeds 200 persons,
    - i) the seats in a row shall be fastened together in units of no fewer than 8 seats, or
    - ii) where there are 7 seats or fewer in a row, all the seats in the row shall be fastened together.
  - g) the distance to an exit door by means of any aisle shall be not more than
    - i) 30 m in the case of an assembly occupancy that is not sprinklered, or
    - ii) 45 m in the case of an assembly occupancy that is sprinklered, and
  - h) every aisle shall terminate in a cross aisle, foyer or exit and the width of the cross aisle, foyer or exit shall be at least the required width of the widest aisle that it serves, plus 50% of the total required width of the remaining aisles that it serves.
2. When nonfixed seats are provided in outdoor places of public assembly,
  - a) aisles shall be located so that there are not more than 15 seats between every seat and the nearest aisle, and
  - b) the clear width of an aisle in millimetres shall be not less than the greater of 1,200 or the product of the number of seats served by that aisle and 1.8.
3. When nonfixed seats are provided at tables arranged in rows, the spacing between the nearest edges of tables in 2 successive rows shall be not less than
  - a) 1,400 mm where seating is arranged on both sides of tables (back to back), or
  - b) 1,000 mm where seating is on one side only.
4. The arrangement of nonfixed tables and chairs shall conform to NFPA 101®, "Life Safety Code®."

# Cooking or 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 5 lb propane cylinder connected directly to the appliance at any time, shall be allowed. Containers shall not be used with a manifold.)
3. Sterno fuel may be used for warming trays; other open flame devices are prohibited without appropriate permits from the CFD.

4. Cooking and/or warming appliances shall be isolated from the public having a minimum of 1 m separation on all sides, or by providing a sturdy, mounted separation shield between the appliance and the public.
5. Individual cookware, except electric or sterno fuel chafing dishes and warming devices, shall not exceed 0.5 m x 1 m or 18 in. x 39 in.
6. The surfaces, on which cooking and/or 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. Fire protection shall be provided for any booth utilizing cooking and/or warming appliances. Each booth shall have the following fire protection equipment:
  - a) a mounted 2A-10BC extinguisher.
  - b) a smothering lid for each individual piece of cookware.
8. All extinguishers must be listed, labelled and tagged.
9. Cooking and/or warming appliances that cook food for sale and produce grease laden vapours must meet NFPA 96 requirements, "Ventilation Control and Fire Protection of Commercial Cooking Operations."
10. All cooking vendors will require final approval from the CFD.

## 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 CFD.
2. Cooking and/or warming appliances shall be electric, except for approved commercial cooking appliances that use no more than 2 10-ounce non-refillable LPG/butane containers or one 5 lb. 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 and/or warming appliances. Appliances that use small amounts of oils and/or fats or produce grease laden vapours will require:
  - a) a "K" Class fire extinguisher.
  - b) a 2A-10BC extinguisher.
  - c) a smothering lid for each individual piece of cookware.

**NOTE:** A "K" Class fire extinguisher is not required if oil and/ or fats are not being used or if grease laden vapours are not produced.
4. A maximum of 2 pieces of cookware may be used at any time per booth.
5. Demonstrations may include cooking appliances, cookware or food but not including chafing dishes.
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.
9. Cooking and/or warming appliances, except for electric or sterno fuel chafing dishes, shall be isolated from the public having a minimum of 1 m separation on all sides, or by providing a sturdy, mounted separation shield between the device and the public.
10. All cooking vendors will require final approval from the CFD.



## Display of motorized and non-motorized vehicles

When motorized vehicles are to be displayed during an event, the CFD 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.
2. 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 or indoors is prohibited.
4. Vehicle fuel shall not exceed one quarter (25%) of the tank capacity or 20 L whichever is less.
5. Vehicles, boats, RV's, trailers and similar exhibited products having over 9.3 m<sup>2</sup> of roofed area shall have a listed smoke alarm installed.
6. Vehicles, boats, RV's, trailers and similar exhibited products between 9.3 m<sup>2</sup> and 27.9 m<sup>2</sup> of roof area, with a source of ignition, external power or vehicle batteries still connected, shall have a listed smoke alarm installed and a 2A-10BC fire extinguisher.
7. Vehicles fuelled by LPG/LNG are not permitted in assembly occupancies unless tanks are new or purged.

## Inspection of the event

In order to maintain compliance with fire and life safety requirements, periodic inspections may be conducted by a CFD Fire Safety Codes Officer (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 out or 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 CFD, one or more CFD Fire SCOs 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 must be confined to areas that must be coordinated with the Facility Staff and approved by the CFD.

## Event interruption or shutdown

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

# Event information sheet

**Event name:**

**Venue name:**

**Venue address:**

**Event date(s):**

**Event time(s):**

**Setup date: move out date:**

**Description of event:**

**Maximum estimated number of attendees:**

**Event coordinator contact information:**

**Name:**

**Address:**

**Contact Information:**

**Phone:**

**Cell:**

**Fax:**

**E-mail:**