

1. Introduction

The following are based on the requirements of the Ontario Building and Fire Codes. Assistance in using these guidelines and meeting the requirements of the provincial codes is available from the Department of Environmental Health & Safety

2. Scope

The following standard operating procedure will govern the set-up and use of all tents on Queen's University property/properties.

3. Applicable Legislation

Ontario Building Code Ontario Fire Code NFPA 1, Fire Prevention Code NFPA 101, Life Safety Code NFPA 102, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations

4. Building Code Requirements

Tents must conform to the requirements of the Ontario Building Code. Prior to erecting a tent, a building permit must be obtained (unless subject to the exclusion below). It is recommended that the company supplying the tent be responsible for obtaining the building permit.

A copy of the building permit must be on site.

A tent or group of tents is exempt from the requirements of the Building Code if the tent, or group of tents, are:

- Not more than 60m² in aggregate ground area
- Not attached to a building
- Constructed more than 3 m from other structures.

	Date Issued:	Page No.:	Document No.:	
	August 2010	2	SOP-Fire-05	
Queen's	Revision:	Subject:	Subject:	
	1.0	Guio	Guidelines for the Use of Tents	

5. Occupant Load and Exits for Tents

Tents that have sides attached or rolled up are capable of being enclosed and must meet these requirements even if it is intended for the tent to remain unenclosed during the event.

The maximum number of occupants, called the occupant load, is based on the floor area of the tent and the type of event being held in the tent.

Prior to the event, organizers must contact the Department of Environmental Health & Safety in order to receive the official occupant load for the tent. To facilitate calculation of the occupant load, event organizers must submit a detailed, to scale layout of the tent and a summary of the event being held in the tent.

The number of separate exits required for enclosed tents is based on the floor area of the tent.

Occupant Load	Number of Exits(minimum)		
60 or less	1		
between 60 and 499	2		
between 500 and 999	3		
1000 or more	4 (more exits may be needed)		

The required width of each of the exits will be determined based on the occupant load of the tent(s) and be supplied to the event organizers along with the occupant load.

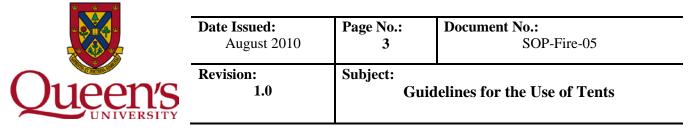
6. Exit Requirements for All Tents

Each exit must be provided with an exit sign. The word "EXIT" must be plainly legible in letters at least 6 inches high and with strokes not less than ³/₄ inch wide. If the tent is to be occupied after sunset, emergency lighting must be provided. In most cases, the tent company can provide exit signs and emergency lighting.

Guy wires or guy ropes must not cross an exit at a height of less than 7 feet.

Where tents are placed near fences or other obstructions, a clear exit path must be maintained to an area sufficiently away from the tent.

Tent stakes must be railed off, capped, or covered.



Event staff must make periodic inspections of the exits to ensure that they are kept clear of obstructions.

7. Flame Resistance and Structure

All tent fabric must be flame resistant.

The company/agent supplying the tent(s) shall provide upon request a certificate or other proof that the tent(s) meet all requirements for "flame resistance" in accordance CAN/ULC S-109-M, "Standard for Flame Tests of Flame-Resistant Fabrics or Films" or NFPA 701 "Standard Method of Fire Tests for Flame-Resistant Textiles and Films".

The company/agent supplying the tent(s) must be able to certify that tents have been erected in accordance with manufacturer recommendations, industry standards, and code requirements.

8. Floor Coverings

Prior to erecting the tent, the area to be enclosed by any tent and not less than 10 feet outside of such tent, must be cleared of all flammable or combustible material or vegetation that will carry fire. The premises must be kept free from such flammable or combustible materials during the period for which the area is used.

No hay, straw, shavings, or similar combustible materials are permitted within any tent unless they have been treated to make them flame retardant. A certificate or other proof of approval by a testing laboratory indicating that the material has been properly treated is acceptable as evidence. A copy of certificates must be provided to the Department of Environmental Health & Safety prior to placing the material within a tent. These certificates are available from the material manufacturer or supplier.

9. Fire Protection

One portable fire extinguisher (dry chemical ABC type) must be furnished at each exit of an enclosed tent. The University sponsor for the event using the tent is responsible for ensuring that fire extinguishers are provided. If necessary, arrangements for portable fire extinguishers may be made by contacting the Department of Environmental Health & Safety at ext. 32999.

Smoking is prohibited in any tent.

	Date Issued:	Page No.:	Document No.:
	August 2010	4	SOP-Fire-05
Queen's	Revision: 1.0	Subject: Guidelines for the Use of Tents	

Pyrotechnics, open flames (including use of sterno and other food warming devices), and cooking equipment must be approved in advance by the Department of Environmental Health & Safety.

Commercial cooking equipment such as grills and broilers, when used within a tent, must meet the same requirements for indoor commercial kitchens (i.e., proper ventilation, fire suppression systems). Commercial cooking operations must be protected by an approved kitchen fire suppression system.

10. Electrical

The electrical system and equipment must be isolated from the public by proper elevation or guarding.

All electrical fuses and switches must be enclosed in approved enclosures. Cables on the ground in areas travel by the public must be placed in trenches or protected by approved covers (yellow jacket etc.).

All electrical systems must be properly grounded.

Generators must be placed so that exhaust fumes do not enter tents and be at least 15 feet from tents.

Electrical Installations must comply with the Ontario Electrical code.

11. Propane Heating Systems

Tanks shall be no closer than 10 feet to the tent.

All propane tanks shall be labeled.

All propane tanks shall be stored in the upright position.

The heating system shall be installed in accordance with its listing.

Queen's	Date Issued: August 2010	Page No.: 5	Document No.: SOP-Fire-05
	Revision: 1.0	Subject: Guid	Subject: Guidelines for the Use of Tents

12. Emergency Plans

An Emergency Plan must be developed and in place for all tents. The plan shall include the procedures to be followed for each potential emergency that might arise during the event.

Emergency Plans must be submitted to the Department of Environmental Health & Safety for approval prior to the event.

All event staff must be familiar with the emergency plans and there defined roles under the plan.

A copy of the emergency plan must be kept on site.

13. Inspection

The Department of Environmental Health & Safety may inspect any tent to determine compliance with these procedures or provincial building or fire code. Any violations must be corrected prior to the use of the tent, or immediately if discovered during the event.

Revision History

1.0: Initial Release