



Office of the
Fire Commissioner

INFORMATION BULLETIN



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Gas Fired Heaters Used Indoors

This Bulletin provides guidance in assessing proper use of gas fired heaters when used indoors or under covered areas, such as tents and awnings.

The British Columbia Fire Code does not permit the use of open flame devices in tents or air supported structures occupied by the public unless approved by the local authority having jurisdiction.

Gas fired heaters are appliances that generate radiant, infrared, and/or convection heat. Heating appliances must be certified, by an accredited certification agency, to a Standard indicative of their intended use, such as indoors and/or outdoors.

The Standard to which **outdoor** units are certified, defines “outdoor” as a shelter no more inclusive than:

1. walls on all sides, but with no overhead cover,
2. a partial enclosure which includes an overhead cover and no more than two side walls which may be paralleled, as in a breezeway, or at right angles to each other, or
3. a partial enclosure which includes overhead cover and three side walls, as long as 30% or more of the horizontal periphery of the enclosure is permanently open.

Note; a screened wall (bug screen) does constitute a wall as air flow through screen is very poor.

Gas fired appliances generate products of combustion when in use, which must be vented to the out doors. Manufacturers may require the heaters used indoors to be electrically interlocked to an exhaust fan with an air-proving switch. The exhaust fan must provide the exhaust flow rate required by the manufacturer or the British Columbia Building Code. Some manufacturers require 300 c.f.m. for every 100,000 BTU's of input.

Propane cylinders are not permitted in a confined space, which includes enclosed tents.

A proper tent heater uses a forced air system to transfer heated air into the tent via ducting from an exterior combustion chamber, which exhausts combustion products to open air.

The installation of gas fired appliances including gas supply and electrical supply must adhere to all applicable Codes. Electrical equipment must be certified for the intended purpose. The

manufacturer's installation and usage instructions are a condition of that certification. Any limitations should accompany the product in the form of warnings on a nameplate or within the instructions provided. If in doubt, contact the manufacturer or the certification organization.

Only those individuals licensed by the BC Safety Authority (BCSA) and qualified in the installation of gas fired heating appliances should be engaged to install this appliance. All gas fired appliances require an installation permit from the BCSA.

Heaters certified for indoor installations are permitted, and when the heater is installed near a combustible wall or under a combustible ceiling, the minimum clearances to combustibles, as required by the manufacturer, must be adhered to.

Combustible materials are considered to be wood, compressed paper, plant fibers, or other materials capable of being ignited and burned. Such materials shall be considered combustible even if flame proofed, fire retardant treated or plastered.

Additional clearances may be required for glass, painted surfaces, plastics, vinyls and other materials which may be damaged or melted by radiant or convection heat. **The manufacturer must be consulted.**

The contents of this Information Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice.

Information Bulletins are distributed to British Columbia Fire Departments, Local Assistants to the Fire Commissioner and where applicable, other related agencies and authorities, in order to provide general information on fire-related issues.

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