

TEMPORARY HEATING

Types

Temporary heaters can be fueled by:

- electricity,
- propane,
- natural gas,
- or liquids such as Number 1 fuel oil or kerosene.

Electric

Electric heaters are not as common as fuel or gas fired heaters. They should be used where heated air must be free of combustion byproducts (like carbon monoxide and carbon dioxide). An electric heater is useful in a closed space where the supply of fresh air is limited.

Liquid fuel

Liquid fuels such as oil and kerosene are another good source of heat. They require a large storage tank on-site for a constant supply of fuel to refill the heaters.

Some liquid-fueled heaters release exhaust fumes with an oily smell, which can be irritating for workers. It's possible to vent the heater outdoors and produce a large volume of heated air free of combustion byproducts. This is sometimes done to heat the air over a new concrete placement in winter.

Propane/natural gas

Propane or natural gas heaters also provide a supply of heat. They are lightweight and easy to transport.

Both gases are highly flammable and explosive. Use the necessary precautions when handling, storing and using these gases. [Refer to *SAFETY TALK* on propane.]

Propane is heavier than air. Leaking gas will settle in low-lying areas such as basements and trenches. This can lead to asphyxiation and explosion.

Keep propane containers and tanks secured and upright at all times.

Tips with heaters

- All connections must be kept tight to prevent leakage.
- Make sure the heater functions properly before proceeding with your work.

- Compressed gas containers connected to heaters must be at a safe distance from readily ignitable substances and from all operations producing flames, sparks or molten metal (including the heater itself). If possible, container and heater should be in the same room so the compressed gas container valve can be shut down quickly if needed.
- If a heater is connected by feed lines to a centrally located bulk tank, there should be a shut-off valve in the same room as the heater, as well as on the tank.
- Make sure the heater has a supply of fresh air to operate safely and efficiently. Test heated areas for the presence of carbon monoxide.
- Heater air-fuel mixture should be checked by trained personnel.

[Instructor to inspect heaters in use on site, connections to compressed gas containers, and storage arrangements for the containers.]

In New Brunswick, the law on portable compressed gas containers can be found in *General Regulation 91-191* under the *Occupational Health and Safety Act*, sections 74 – 79.

The law on air contaminants is in *General Regulation 91-191* under the *Occupational Health and Safety Act*, sections 24 and 25.

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