

Purpose & Scope

- Provides **minimum safety requirements** for temporary heat on construction sites.
- References governing codes:
 - **Natural Gas & Propane Installation Code (CSA B149.1-25)**
 - **Propane Storage & Handling Code (CSA B149.2-25)**
 - Questions Please Contact – plumbinggas.codes@cochrane.ca

Permits and Inspections are required for:

- Installing, alter or add to a gas system, including:
 - Installation of construction heaters: piping and tubing, hose and fittings from the gas supply; and
 - Propane containers with a capacity of greater than 454 litres; or when containers are manifolded together, creating a combined capacity of over 454 litres.
 - Inspection (One (1) final inspection at substantial completion of work described on the permit within two(2) years of permit issuance)

Construction Heaters (Must be approved for use in Canada)

- Must sit on **solid, level, non-combustible** base or suspended according to the manufacturer's instructions.
- Must not be used in **inhabited parts of buildings**.
- Combustible materials must be cleared according to **heater instruction plate distances**.
- Ensure the area around heaters and hose – Both above and below – is clear of all debris.

Cylinders – Usage & Storage

- Must be on a **firm, level base** (e.g., composite stabilizing base / concrete base). Be sure to clear away snow and debris before placing the base.
- Inside buildings: **cannot be placed near exits, stairs, or evacuation routes**.
- Must not be used if **damaged, dented, rusted, or past re-examination date**.
- All cylinders require **collars** protecting the valve.
- Unconnected cylinders (even empty) must be:
 - **Stored upright outdoors**, well-ventilated.
 - **Protected from vehicles** with approved barriers.
 - **Propane cylinders** with more than **10 years** of service must be **removed and replaced**. The **stamped manufacturer/service date** can be found on the **tanks collar**.

Cylinder Clearances (Outdoor Storage) Under 2000 lbs

- **3 ft (1 m)** from any building opening below the level of the relief valve;
- **10 ft (3 m)** from the air intake of any appliance; and.
- **25 ft (7.5 m)** from inhabited buildings and property lines.

Manifolds & Indoor Use

- Indoors: max total manifold capacity **300 lb (135 kg)**.
- Manifolds in the same floor area must be **50 ft (15 m)** apart.
- **Ignition sources must be 10 ft (3 m)** from cylinder connection points.
- Apply for a **variance** if clearances cannot be met.

Hoses & Temporary Piping

- Hoses must be **certified** and in good condition.
- Length: **15 ft–75 ft (4.5–22.5 m)**; longer distances require rigid temporary piping.
- Hoses must be protected from traffic using:
 - Bridging the hose with lumber; (on both sides of hose/s)
 - Running the hose through a pipe that is covered by sand or gravel; or
 - Running the hose through a pipe that is staked down.
- Best practice is to remove any hoses that are no longer connected to a heater from the building.

Tanks & Clearances

- Tanks must be stored **outside**, protected from traffic. (e.g. Jersey barrier)
- Tanks with signs of **damage or deterioration must not be used**.
- Clearance requirements vary by tank capacity.
- If clearances to property lines cannot be achieved, a **variance** from AHJ is required.

Total Aggregate Water Capacity USWG (L)	Between Tank and: - Property Line - Source Ignition - Adjacent concrete or masonry wall with no openings within the clearance	Between tank and building wall not of concrete or masonry construction	Between tank and building opening	Between tank and adjacent tank
Up to 125 (475)	None 10' (3m) from any source of ignition	None	3' (1m)	None
Over 125 (475)	10' (3m)	10' (3m)	10' (3m)	3' (1m)
Over 1000 (3800)	10' (3m)	25' (7.5m)	25' (7.5m)	3' (1m)
Over 2000 (7800)	15' (5m)	25' (7.5m)	25' (7.5m)	3' (1m)
Over 5000 (19,000)	25' (7.5m)	25' (7.5m)	25' (7.5m)	3' (1m)
Over 10,000	At the discretion of AHJ	At the discretion of AHJ	At the discretion of AHJ	At the discretion of AHJ

If you cannot meet property line clearances on your site, apply to the authority having jurisdiction (AHJ) for a variance.

Direct-Fired Vaporizers

- **Not allowed inside buildings**—they are ignition sources.
- It should be placed in a **protective cage** with stable base.
- They require **vehicle impact protection** similar to tanks if located near traffic areas. (e.g. Jersey barrier)

Safe Handling & Lifting

- Tank lugs are only for lifting tanks with **≤5% fill**.
- Never throw/drop cylinders; always keep upright to keep relief valve in vapour space.
- Lift cylinders only in a **secure hoisting cage**.
- Use **strapping, not chains** for tank lifting.

Connections & Leak Testing

- All new connections must be made by a **licensed gas fitter**.
- Connections must be made in **well-ventilated areas, ≥10 ft (3 m)** from ignition sources.
- Every connection must be tested with **approved leak test solution or a handheld detector**.
- Smell-checking or soapy water is **NOT acceptable**.
- Unused outlets must be **capped by a gas fitter** (closing cylinder valve alone is insufficient).
- After every disconnection, ensure the transportation plug or cap is securely installed.

