

### THE FIRE RISK OF SHIPPING CONTAINERS (SEA CANS)

Shipping containers may seem like the ideal storage solution — they're large, durable, easy to source and made of non-combustible materials. However, they are not designed to withstand wildfire conditions and can pose serious safety risks when exposed to direct flame or radiant heat.

### FireSmart Canada does not recommend the use of shipping containers for storage in wildfire-prone areas.

Instead, consider safer alternatives that are both fire-resistant and properly ventilated to improve overall safety.

### SAFER ALTERNATIVES TO SHIPPING CONTAINERS

For safer outdoor storage in wildfire-prone areas, we recommend use of a shed that conforms to the principles of FireSmart and the Home Ignition Zone. It should be designed with good ventilation to allow flammable vapours (whether heavier or lighter than air) to safely disperse and be built with non-combustible construction materials.

### IMPORTANT SAFETY PRACTICES:

- **Do not store fuels in sheds.** All fuel products should be stored in containers that are CSA or ULC certified and designed specifically for fuel storage.
- **Avoid using shipping containers for storage.** While they may seem secure, they pose significant fire risks. Use of shipping containers is regulated with bylaws and regulations in municipalities, First Nations, and regional districts. Check with them before taking action.



### KEY ISSUES:

- **Lack of ventilation:** Heat from nearby fires can cause a buildup of flammable vapours, creating an explosive atmosphere inside the container.
- **Heat conduction:** Steel walls absorb and conduct heat, potentially igniting contents inside even without direct flame — essentially turning the container into an oven.
- **Flammable contents:** Storing items like vehicles, power tools, or fuel cans increases the risk, as containers of flammable liquids can melt and ignite.
- **Proven fatalities:** Shipping containers have been fatal when there has been direct flame impingement - most notably, a firefighter tragically lost their life in 2011 when a container exploded.

The technical content presented in this fact sheet was provided by member agencies of the BC FireSmart Committee, with specific contributions from the Office of the Fire Commissioner, the Fire Chiefs' Association of British Columbia, and First Nations' Emergency Services Society.