



GUIDE TO SHIPPING CONTAINERS

Shipping containers are often used for storage in the City of Pitt Meadows. They are considered to be accessory buildings when used for this purpose. Shipping containers do not require a permit, however please follow the guidelines in this handout to ensure they are being used safely, and effectively.

What is a Shipping Container?

A shipping container is a container with strength suitable to withstand shipment, storage, and handling. Shipping containers range from large reusable steel boxes used for intermodal shipments to the ubiquitous corrugated boxes. In the context of this guide, the shipping containers are being used for storage on properties in Pitt Meadows.

What are the Zoning Requirements for Shipping Containers?

Accessory residential and accessory farm residential buildings and structures include shipping containers, and shall comply with the following regulations:

- This section applies to all all A, RR, R, RS and RD and Residential CD and RM Zones, unless otherwise specified.
- Accessory residential and accessory farm residential buildings and structures are limited to two per lot, unless otherwise specified in the zone.
- Accessory buildings and structures must not exceed a height of 4 m in residential zones, except in the A and RR zones where they must not exceed a height of 9 m.
- Shipping containers 10 sq m or more must be located in the rear yard, with the following setbacks:
 - 3.0 m from a road;
 - 1.2 m from the rear and side lot lines.
- Detached accessory buildings on lots greater than 1 ha and 30 metres or more in width within the A and RR zones may be

This guide is not a bylaw. It is a guide prepared to assist you in understanding the process of using shipping containers at accessory buildings/ storage units in the City of Pitt Meadows.

Planning & Development Services

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Hours: 8:30 a.m. - 4:30 p.m.
(Monday to Friday)

located within areas other than the rear yard, provided that they are located no closer than 7.5 metres from the front lot line and 3.0 metres from a road and 1.2 metres from the rear or side lot lines.

- Shipping containers must have a 2 m separation, unless they are touching one another to form one larger container.

If the shipping container is being used on agricultural land as an accessory agricultural building or structure, then the following regulations apply:

- Maximum lot coverage of 35%, which includes all buildings on site.
- The maximum height for agricultural buildings and structures is 15.0 m.
- All shipping containers and other agricultural buildings and structures must comply with the following setbacks:
 - 9 m from front, rear, and exterior lot lines;
 - 15.0 m from watercourses and key ditches;
 - 6 m from constructed ditches.
- Shipping containers must have a 2 m separation, unless they are touching one another to form one larger container.

Fire & Rescue Service

Shipping containers are designed for overseas storage and shipping of material, equipment and hazardous material. These containers are normally poorly vented and are therefore able to build internal pressure. The containers easily behave like a closed vessel.

In Pitt Meadows, shipping containers located within/on properties subject to fire inspections will be inspected for compliance. Shipping Containers used for storage of any flammable or combustible liquids, or combustible materials and other long term uses, will be considered as permanent buildings and therefore must meet the requirements of the BC Building and Fire Codes as well as City of Pitt Meadows Bylaws.

Code Compliance

The container must meet, or exceed as indicated, all relevant requirements of BC Safety Codes such as, but not limited to:

- Division B – Part 3 & Division B – Part 4 of the BC Fire Code will apply in all cases
- There will be no electrical service to the container unless it exceeds all requirements of the BC Building, Fire and Electrical Codes for explosive/moist/wet environments. It must be fully explosion proof and tested regularly to ensure compliance.
- The Dangerous Goods storage shall be restricted to materials that are declared at the permit stages. Any changes to the types of dangerous goods must be approved by the Pitt Meadows Fire & Rescue.
- No smoking shall be allowed in shipping containers.

- Where flammable liquids and combustible liquids are stored in the container combustible construction shall be removed, provisions for spill containment installed and the container shall be grounded. The dispensing of flammable liquids shall be prohibited in the shipping container.
- Compressed gases shall not be stored in the shipping containers. Limited amounts of aerosols shall be stored in the shipping containers and only when stored in metal cabinets.
- Shipping containers shall not be installed under power lines.

Location

- There is a minimum separation of 1.5 m – 3 m between any non-combustible structure and the container.
- The shipping container must be located at least 6 m from exits, windows or unprotected openings in the exposed building.
- Greater separation distances will be required based upon exposure to any combustible materials or structure.
- The container doors are positioned such that they face away from any other structure.
- The container doors must be positioned such that they face away from any means of road access to the container for fire personnel.
- No combustible materials may be placed near the container.

Identification

The container must be identified such that:

- UN Placards for all stored dangerous goods must be visible on the two container sides most visible to emergency responders.
- The name of the company/person responsible for the storage and an emergency telephone contact number must be marked on the container in lettering visible from 10 m.
- The container and contents must be identified in the Fire Safety Plan.

Safety Features to be Added

The containers must have the following safety features in place prior to any use for storage:

- One ventilation opening must be added within 150 mm of the floor in the container door primarily used for opening.
- The high ventilation opening cannot be directly venting toward a structure.
- Neither ventilation opening can be obstructed by stored materials at any time and must be kept clean of internal and external debris.
- The additional ventilation openings must be constructed based upon the following minimums:
 - Two – 0.3 m X 0.3 m openings for containers 6 m or less;
 - Two – 0.5 m X 0.5 m openings for containers over 6 m;
 - Both openings will be covered by open grate wire mesh with greater than 50% free area;
 - Higher opening will also have a wind vent device, designed to generate a venturi effect during low wind speeds



- Where heavier than air flammable and combustible liquids are stored in the container a ventilation opening at low level should also be installed at the opposite end from the doors.
- Alternate engineered solutions will be considered.

Note: Standard existing environmental vents normally built into shipping containers are NOT ACCEPTABLE as ventilation openings for land-based storage applications. These were designed for air movement based upon atmospheric weather changes only and do not provide adequate air flow.

Required lower ventilation in container door:



Suggested upper ventilation opening and wind vent:



More information?

Development Services

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Fire Department

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<https://www.pittmeadows.ca/city-services/fire-rescue>