

This Guide is to provide information regarding the use and placement of shipping containers and outlines the City's requirements for property owners, suppliers, designers and contractors. It applies to shipping containers used for storage purposes as well as those being converted into a dwelling unit.

If a shipping container is not being used for transporting goods and it is used to support an occupancy (i.e., storage of goods/materials) then it is considered to be a building or structure, and a building permit is required. The requirements of [Maple Ridge Zoning Bylaw No. 7600-2019](#) and the *BC Building Code* must be followed. The shipping container may need alterations involving an architect and other registered professionals to meet *BC Building Code* requirements.

The Zoning Bylaw regulates the use of shipping containers on private property. The following are excerpts of the definitions and Part 4, Section 402.25 of the Zoning Bylaw:

SHIPPING CONTAINER means the use of an enclosed unit used for or intended to be used for storing and transporting goods via ship, rail or truck, whether or not it is actually being used for such a purpose.

402.25 Shipping Containers

1. A Shipping Container, when not used for or intended to be used for shipping purposes, shall be permitted subject to the following provisions:
 - a. on a lot where a current and valid Building Permit has been issued by the City of Maple Ridge for construction on the lot, a Shipping Container shall be permitted on the same lot for a temporary building or structure for Office Use, a Sales Office, or equipment storage. *Subject to Section 402.26;*
 - b. as an accessory building or structure to an Industrial Use and located behind a continuous landscape screen. *Subject to Section 405.3;*
 - c. as an accessory building or structure to an Institutional Use and located behind a continuous landscape screen. *Subject to Section 405.3; and*
 - d. as an accessory building or structure to an Agricultural Use. Demonstration of need is required on a lot classified as "Farm" under the *British Columbia Assessment Act*.
2. Where permitted, a Shipping Container, when not used for shipping purposes, shall:
 - a. only be used for, placed, stored, repaired, cleaned, upgraded, or modified to comply with the requirements of the Zone as if it were a building or structure;
 - b. be ventilated in compliance with the [Maple Ridge Fire Department Bulletin - Intermodal Container Storage](#);
 - c. not exceed a maximum Height of 3.5 metres as measured from the natural grade.
3. Refer to Section 401.3(l) (Prohibited Uses of Land, Buildings and Structures) for materials that shall not be stored in a Shipping Container.

Prohibited Uses of Land, Buildings and Structures

The following shall be prohibited in all Zones:

- I. storage of the following in any Shipping Container:
 - (i) gasoline, propane, or any flammable, combustible liquid or compressed gas; and
 - (ii) explosives, as defined in [*Maple Ridge Fire Prevention Bylaw No. 4111-1988*](#).

Shipping Containers are only permitted on properties in the following Zones:

- Institutional zones (P-1 thru P-6)
- Industrial zones (M-1 thru M-5)
- Agricultural zones (A-1 thru A-5)
- R zones that permit agriculture as a primary use on the property (RS-1, RS-2 and RS-3) for support of an agricultural operation, but only on lots classified with “Farm Status” under the *British Columbia Assessment Act*

No other zoned properties are permitted to have shipping containers installed for either permanent or temporary uses except in compliance with Section 402.25 above. The only case where a Shipping Container may be permitted on a site is for the loading or offloading of goods and materials and where it is used for shipping purposes.

The Zoning Bylaw only permits Shipping Containers as accessory to an underlying permitted land use. If there is no primary industrial or agricultural use on the property, then a Shipping Container is not permitted.

Building Permit Requirements:

- [Accessory Building Permit Application](#)
- A Site plan showing the location of container, setbacks from property lines and required landscape screening
- The surface treatment below the Shipping Container
- Layout of the Shipping Container’s interior (i.e., benches, shelving, racking, etc.)
- Should the Shipping Container be planned as office use then a secondary door (man door) will be required to be installed
- List of materials to be stored in the container plus vents installed per the Fire Department Bulletin - [Intermodal Container Storage](#)
- A separate electrical permit(s) is required if it is to be energized. Where a Shipping Container is to be energized, electrical connections, even if only supplied through extension cords (if permitted under the *Electrical Safety Act*) the Shipping Container must be grounded, which will require an electrical permit(s)

Note: As a part of the Building Permitting process, Fire department staff will review the proposal.

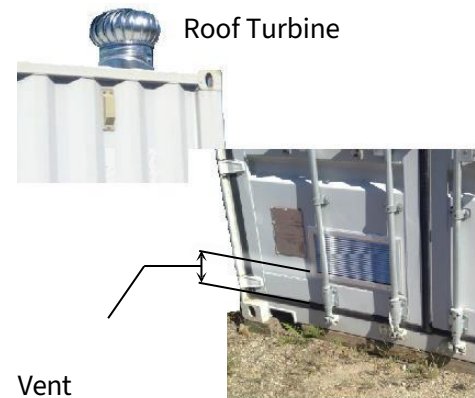
Shipping Container Guide

Criteria for the Use and Location of Shipping Containers

Ventilation Requirements:

- One vent within 150 mm of the floor in the container door.
- One vent within 150 mm of the top of the container on the opposite end from the door for cross ventilation.
- Minimum size of vents to be 300 mm x 300 mm for containers 6 m or less in length. Vents to be minimum 500 mm x 500 mm for containers greater than 6 m in length.
- A higher opening to have a wind vent device (i.e., turbine) cannot be directed towards a structure.
- See the Fire Department Bulletin - Intermodal Container Storage for more information.

[Intermodal Container Storage MRFD](#)



Vent

150 mm Max. Above Floor

Shipping Container used as a Dwelling Unit:

To convert a Shipping Container into a dwelling unit, Registered Professionals (i.e., an Architect or Engineer) are required to verify that the construction complies with the requirements of the *BC Building Code*. The Building Permit application must be submitted as an alternative solution in compliance with Division C of the *BC Building Code* with sealed drawings and applicable Schedule Bs from the required disciplines. Alternatively, the conversion to a dwelling unit shall occur in a factory certified to the CSA A277 Standard with the building being certified to the same standard.

Documents required with Building Permit to create a Shipping Container Dwelling Unit:

- [Building Permit Application New Residential](#)
- [Letter of Authorization](#) and [Owner Acknowledgement of Responsibility Letter](#).
- [Permit Application Checklist - Residential](#)
- A site plan showing all buildings on site.
- A floor plan showing the size and use of all spaces.
- Schematic drawings of plumbing, electrical and HVAC systems.
- Details of wall, floor and roof assemblies.
- Elevations showing the size and locations of all doors and windows (for spatial calculations).
- Letters of assurance from an architect, mechanical, electrical, fire suppression and geotechnical engineers may be required depending on the size, use and complexity of the project.
- Structural drawings for the building including the foundation / anchorage, structural supports and design criteria signed and sealed by a structural engineer with letters of assurance.