



A greenhouse on the rooftop of Santropol Roulant, a community food hub in Montreal, QC. The greenhouse is mostly used to grow seedlings for their rooftop garden. Photo by Alex Tran.

## Building a Rooftop Greenhouse

Rooftop greenhouses can enable year-round local food production within dense urban environments. They can also provide business, educational and other community opportunities. If you want to build a greenhouse on a rooftop, City staff will work with you to ensure your greenhouse complies with City bylaws, the BC Building Code, and health and safety standards. Here's what you need to know to get started.

### What is a greenhouse?

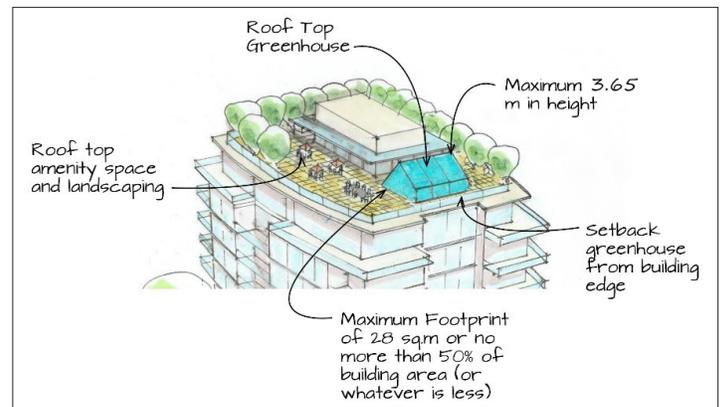
Greenhouses are glass or other translucent structures used for the cultivation or protection of plants. Greenhouses must be used for growing plants for either personal, community, educational or business purposes.

### Finding a rooftop

Rooftop greenhouses are permitted on multi-unit developments such as apartment buildings with at least four units. They are not permitted in low-density residential zones or on smaller multi-unit developments with fewer than four units.

The *Zoning Regulation Bylaw* sets specific requirements for buildings, including height, floor area and number of storeys. Rooftop greenhouses are excluded from the calculation of these building requirements if they:

- Measure less than 3.65 metres in height. How height is measured will vary depending on the shape of the roof. Refer to the definition of "Height" in the *Zoning Regulation Bylaw, Schedule A* for more information.
- Measure 28 square metres or cover no more than 50% of the building's roof area, whichever is less.



You can build more than one rooftop greenhouse. However, collectively the total surface area of the greenhouses must not exceed the dimensions described above.

If your greenhouse is bigger than those dimensions, or if zoning does not permit a rooftop greenhouse, you may need to apply for a rezoning or a variance. For more information, consult the *Zoning Regulation Bylaw* or contact zoning staff at [zoning@victoria.ca](mailto:zoning@victoria.ca) or 250.361.0382.

### Permits

All rooftop greenhouses require a building permit to ensure the building is structurally capable of supporting additional roof loads, and other dynamic loads such as wind. You will need to submit detailed plans. As stated in the provincial building code, obtaining a building permit requires retaining the services of an engineer or architect to complete the design and review of the project. Building permit applications for this type of work are usually processed in the targeted time frame of 20 business days.

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### CITY CONTACTS:

**Business Hub**  
T 250.361.0629  
E [bizhub@victoria.ca](mailto:bizhub@victoria.ca)  
[victoria.ca/foodproduction](http://victoria.ca/foodproduction)

**Permits and Inspections**  
E [permits@victoria.ca](mailto:permits@victoria.ca)  
[victoria.ca/permit](http://victoria.ca/permit)

**Zoning**  
E [zoning@victoria.ca](mailto:zoning@victoria.ca)  
T 250.361.038



## Permits, continued

Depending on the greenhouse features, you might also need to apply for a development permit, heritage alteration permit, plumbing permit, electrical permit, or a gas permit. For example, where a greenhouse is intended to be heated, permits will be required for the installation of the heating and ventilation equipment. This may be an electrical permit or a gas permit, or both.

If your project requires rezoning or obtaining a variance, the rezoning or variance application must be approved by Council before other permit application(s) will be considered.

For more information, contact Permits and Inspections at [permits@victoria.ca](mailto:permits@victoria.ca) or consult [victoria.ca/permits](http://victoria.ca/permits).

## Tips

Consider the following tips to help ensure your greenhouse:

- Is productive and meets your goals
- Complements the style and use of the building
- Minimizes visual impacts on neighbours and views from the street
- Is a safe and functional space

Design your greenhouse with a clear vision in mind. Do you have ambitious production goals and want to maximize growing space? Or will the greenhouse be an accessible gardening space used by multiple community members?

## Placement

- Solar exposure is key. Maximize south facing exposure and be aware of future plans for changes on neighbouring properties. Please keep in mind that ongoing solar exposure cannot be guaranteed as neighbouring properties may be developed, or nearby trees may grow to eventually shade the greenhouse.
- Setback from the building edge is recommended. If space is available, consider setting the greenhouse at least 2 metres from the edge of the building.
- Provide safe and easy access to stairs or elevators.
- Safety requirements for railings may apply.

## Design

- Carefully design your greenhouse with longevity and aesthetics in mind. Select quality materials that are durable and easy to repair.
- Translucent greenhouse materials can become less transparent overtime. Look for materials that are ultraviolet resistant.
- Ability to control temperature, humidity and airflow is crucial to plant health. Venting capacity will need to meet cooling and airflow needs. Consider automated venting systems.
- Gardening tools should be safely stowed and easily accessible.

## Maintenance

- Secure the greenhouse to help minimize theft or break-ins.
- If the greenhouse is stewarded by a group, create a user agreement to maintain a well-organized and inviting green space.
- Provide information about the greenhouse (e.g. a sign or notice board) if the rooftop is accessible to other building users. Leave an emergency contact number in a visible spot.
- Create a greenhouse environment that is welcoming to beneficial insects by minimizing pesticide use and growing pollinator-friendly plants.
- Compost the organic waste generated by cultivating plants in a contained compost bin. The Compost Education Centre can help you explore composting options. Consult their website at [compost.bc.ca](http://compost.bc.ca) or call 250.386.WORM (9676)

## Frequently Asked Questions

### Can I apply pesticides or fungicides?

Greenhouses create ideal environments for pests and harmful fungi. Under the *Pesticide Use Reduction Bylaw*, only pesticides on the list of reduced risk permitted pesticides can be used, unless a permit is obtained. Applying for a permit should be the last resort when alternate methods of pest management have failed.

- Gardening tips to prevent garden pests without pesticides and encourage beneficial insects are available at [victoria.ca/pesticide\\_reduction](http://victoria.ca/pesticide_reduction).
- The list of reduced risk permitted pesticides is available at [victoria.ca/pesticide\\_reduction](http://victoria.ca/pesticide_reduction). A permit from the City is not required to use the products on this list.

- If pesticide alternatives have not worked or are not available, and the pest infestation poses a serious environmental or economic loss, a permit to use a pesticide may be issued by the City.
- Permit applications are available online at [victoria.ca/pesticide\\_reduction](http://victoria.ca/pesticide_reduction), or at the Bylaw and Licensing Services office and the Public Service Centre at City Hall. The application fee is \$25.

### Can I sell plants or crops grown in my rooftop greenhouse?

Yes. Small rooftop greenhouses can be used for commercial purposes, for example by growing tomatoes for sale, or to start tomato plants that will be sold or transplanted elsewhere.

You will need to obtain a business licence for small-scale commercial urban food production. Consult the “Small-Scale Commercial Urban Food Production Handbook” available at [victoria.ca/foodproduction](http://victoria.ca/foodproduction) or contact the Business Hub at [bizhub@victoria.ca](mailto:bizhub@victoria.ca) or 250.361.0629.

### Can I use hydroponics and aquaponics production systems in my rooftop greenhouse?

Yes. Both are permitted in rooftop greenhouses, provided these systems are described, reviewed and approved as part of the building permit application process.

In hydroponics and aquaponics, plants do not grow in soil. Instead they grow in an inert and solid medium like coconut coir, mineral wool, or clay pebbles. In hydroponics, plants grow in a water solvent to which mineral nutrients are added. In aquaponics, plants derive their nutrients from water in which fish or other small aquatic animals are raised.

More information on the City's food system programs and opportunities is available at [victoria.ca/growinginthecity](http://victoria.ca/growinginthecity).