



District of Maple Ridge with Ridge Meadows Recycling Society

Waste Management Storage and Disposal Guidelines

For developments other than Single-Family Residential

Updated July 2013

DISCLAIMER

The information shown in these guidelines is compiled from various sources and IS NOT warranted as to its accuracy by the District or the Ridge Meadows Recycling Society. It is recommended that original sources should be consulted. This IS NOT a legal document and is published for information and convenience.

1.0	BUILDING CODE REQUIREMENTS	3
2.0	RECYCLING	4
3.0	WASTE DISPOSAL	7
4.0	LOCATION OF RECYCLING AND WASTE STORAGE SPACE	8
5.0	DESIGN OF RECYCLING AND WASTE STORAGE SPACE	9
6.0	TEMPORARY RECYCLING AND WASTE STORAGE AREA	9
7.0	LOADING AREA REQUIREMENTS	9
8.0	COLLECTION VEHICLES	10
9.0	COLLECTION VEHICLE ACCESS	10

LIST OF FIGURES:

- Figure 1 – RECYCLING CART SYSTEM
- Figure 2 – RECYCLING CART DIMENSIONS
- Figure 3 – PLASTIC RECYCLING TOTE BAGS
- Figure 4 – WASTE CONTAINER DIMENSIONS
- Figure 5 – COLLECTION VEHICLE DIMENSIONS

1.0 BUILDING CODE REQUIREMENTS

Adequate facilities are required for garbage and recycling container storage in all multiple-family residential and mixed-use buildings in Maple Ridge. The storage area must meet 2012 B.C. Building Code Regulations (Reference: Section – Service Rooms).

EXTRACT FROM 2012 B.C. BUILDING CODE:

3.6.2.5. *Combustible Refuse Storage*

- 1) Except as required by Sentence 3.6.3.3.(9), a room for the storage of *combustible* refuse shall be:
 - a) Separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 1 h., and
 - b) *Sprinklered*.

(see Appendix A)

Appendix A

A-3.6.2.5(1) *Combustible Refuse Storage*

Storage of refuse consisting of combustible materials including waste paper, cardboard and plastic, and noncombustible materials such as glass and metallic containers can be accumulated in these rooms for the purpose of recycling. This storage is allowed in consideration of a less stringent collection schedule when compared to that of garbage or refuse, which is collected regularly.

1.1 Official Community Plan Design Guidelines

Additional guidelines for refuse, recycling, and servicing areas are outlined in Chapter 8, Development Permit Area Guidelines of the District of Maple Ridge Official Community Plan, By-Law No. 6425 – 2006.

Refer to the following sections for the specified use:

- a) Commercial Development: Section 8.5.2 B
- b) Industrial Development: Section 8.6.2 E
- c) Multi-Family Residential Development: Section 8.7.2 E
- d) Development within the Town Centre: Section 8.11 B.5.1

2.0 RECYCLING

2.1 Collection

Building management is responsible for contacting the District's Recycling Program (telephone 604-463-5545) upon occupancy to implement the recycling system. Recycling systems will be designed to fit the needs of each building.

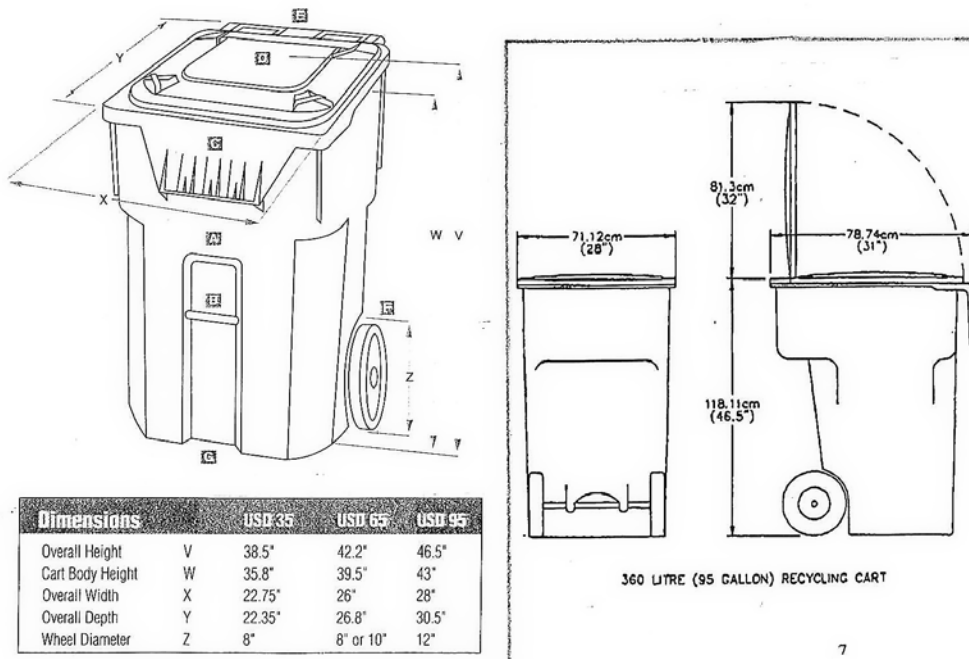
2.2 Basic Requirements

- a) Twelve units or less will require five *Recycling Carts* (Figure 1 & Figure 2)
- b) More than 12 units will require seven *Recycling Carts*
- c) More than 60 units will require nine *Recycling Carts*
- d) More than 100 units will require 10 *Recycling Carts*, with pick-up twice weekly
- e) Each residential unit is issued two *Plastic Recycling Tote Bags* (Figure 3)
- f) A minimum of one recycling station area per building serviced once or twice per week.

FIGURE 1 - RECYCLING CART SYSTEM

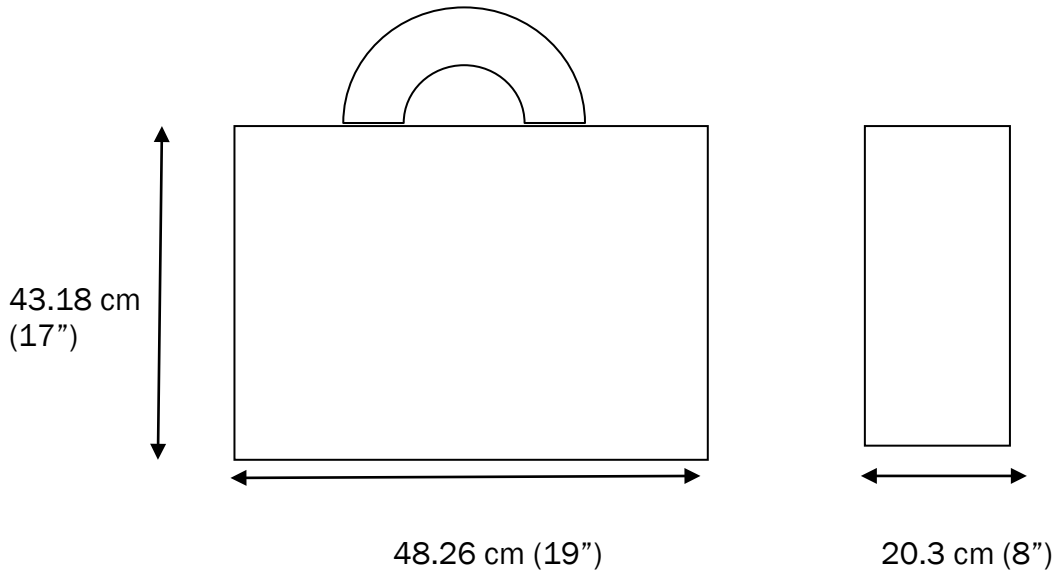


FIGURE 2 - RECYCLING CART DIMENSIONS



The resident is responsible for placing sorted recycling in containers. A minimum added clearance height of 81.3 cm (32") is required for lid opening.

FIGURE 3 – PLASTIC RECYCLING TOTE BAG



2.3 Size of Recycling Storage Areas

- a) The minimum size of the centralized recycling storage space for Multi-Family Residential buildings shall be the greater of:
 - i. 5 m²; or
 - ii. the space allocation determined by multiplying the number of dwelling units by 0.19 m².
- b) For commercial tourist accommodations (hotels/motels), requirements are the same as Multi-Family Residential buildings, with a maximum requirement of 50 m², at which point the frequency of collection must increase to greater than once per seven days.
- c) For new Multi-Family Residential buildings construction only, the centralized recycling storage space must also include a "Flex Space" for storage of other reusable or recyclable materials. The required size of this space is 50% of the space allocation for recyclable materials specified in Section 2.3 a).
- d) The minimum size of the centralized recycling storage space for commercial buildings shall be the greater of:
 - i. 4 m²; or
 - ii. the space allocation determined by multiplying the commercial Gross Floor Area by the space allocation ratios defined in the table below for the listed building development type:

Building Development Type	Space Allocation per m ² of Gross Floor Area
Retail	0.012 m ²
Office	0.004 m ²
Large Venue (for special events expecting more than 2000 visitors per day)	0.009 m ²
Restaurant	0.018 m ²

- iii. space allocation for each building development type is required up to the maximums listed below, after which increased frequency of collection may be used to provide adequate recycling and waste storage capacity:

Building Development Type	Maximum Required Space Allocation
Retail	20 m ²
Office	50 m ²
Large Venue	30 m ²
Restaurant	30 m ²

2.4 Collection Access

Building Managers are required to roll the Recycling System Containers out to curbside on collection day. Collection staff will provide curbside collection from containers. A security access code or a lock box key must be issued to Ridge Meadows Recycling Society. A location is required to put the containers off-street for pick-up.

2.5 Cost

Cost is assessed by the District to individual unit owners or building owners as a recycling levy of the annual property tax bill.

2.6 Materials collected

Containers are colour-coded as follows:

BLUE	Newspaper
YELLOW	Cardboard
GREEN	Office Paper and Magazines
ORANGE	Cans – tins and aluminum, milk cartons
WHITE	Glass – bottles and jars
PINK	Plastic containers #1, #2, #4, #5, and plastic bags #4

2.7 Materials Banned from Waste Disposal

The Greater Vancouver Regional District has banned corrugated cardboard, newspapers, office papers, plastic, tin, and glass from waste disposal.

3.0 WASTE DISPOSAL

3.1 Collection

Garbage collection facilities are required to be in place prior to occupancy.

3.2 Basic Requirements

Minimum of one leak-proof garbage container, serviced once per week. General guideline is one container for every 15 to 20 units.

3.3 Container Sizes

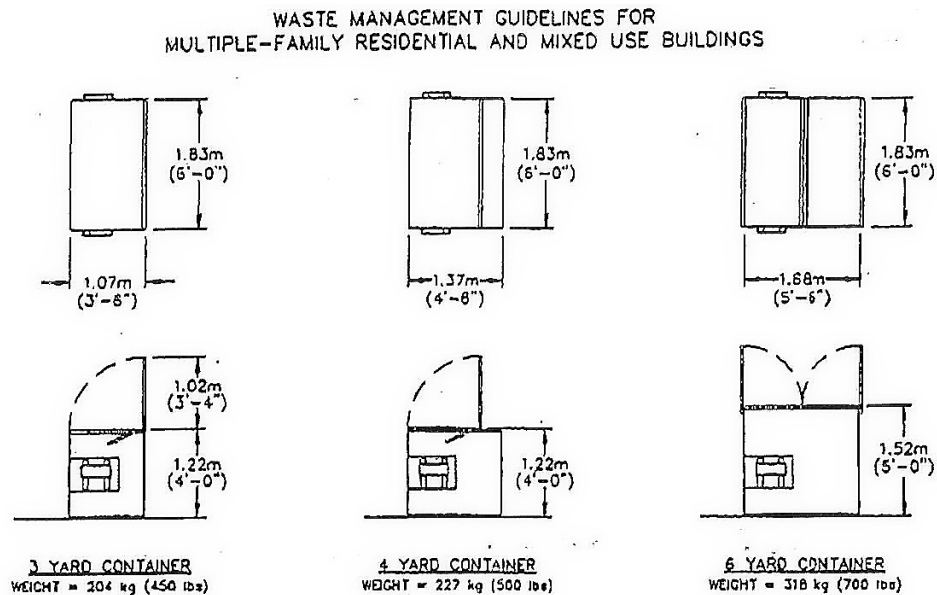
The container size and measurement are as follows:

Size: (cu yd)	Measurements		
	Height	Length	Width
3	1.22 m (4')	1.07 m (3.5')	1.83 m (6')
4	1.22 m (4')	1.37 m (4.5')	1.83 m (6')
6	1.52 m (5')	1.68 m (5.5')	1.83 m (6')

If container is on wheels, an additional height of 12.7 cm - 15.24 cm (5" - 6") is required.

Waste is loaded from the top. The resident is responsible for placing waste in the container. A minimum added clearance height of 1.02 m (3.3') is required for container lid opening (3 yard container).

FIGURE 4 - WASTE CONTAINER DIMENSIONS



3.4 Waste Weights

Weight of waste is estimated to be approximately 61.24 kg (135 lbs) per cu yd.
(exclusive of container weight)

Size (cu yd)	Weight
3	204 kg (450 lbs.)
4	227 kg (500 lbs.)
6	318 kg (700 lbs.)

3.5 Cost

Private arrangements between building management and collector.

4.0 LOCATION OF RECYCLING AND WASTE STORAGE SPACE

4.1 The location of the centralized recycling and waste storage space must be:

- a) on the lot of the structure it serves;
- b) in an area such that noise and odour impacts to building occupants, pedestrians, and neighbouring developments are minimized; and
- c) at ground level, or no more than one storey below grade.

4.2 The centralized recycling and waste storage space shall not be located in any of the following positions:

- a) in lanes or other publicly owned rights-of-way where it may disrupt traffic circulation patterns;
- b) between a street-facing façade of the structure and the street, if the area is located outdoors;
- c) in any required driveways, parking aisles, parking spaces, or loading spaces for the structure; or
- d) in any location that may block or impede fire exits, public rights-of-ways or pedestrian and vehicular access.

4.3 Notwithstanding the location requirements of sub-sections 4.1 and 4.2, the centralized recycling and waste storage space must be located so as to comply with applicable building codes, fire codes, safety requirements, or other building requirements of the District of Maple Ridge.

4.4 If the centralized recycling and waste storage space is to be located outdoors, it should meet the following criteria:

- a) be contained within roofed and walled enclosures;
- b) the enclosure should be compatible with the architecture of the building;
- c) the enclosure should be screened from public view, weather-proof, and animal-resistant;
- d) materials such as wood, masonry, wrought iron, or decorative block are encouraged, chain-link fencing is discouraged.

5.0 DESIGN OF RECYCLING AND WASTE STORAGE SPACE

- 5.1 The design of the recycling and waste storage space must:
- a) have a level and hard-surfaced floor;
 - b) be configured to allow each recycling and waste storage container to be individually accessible so as to be removed and replaced without moving other containers;
 - c) be configured such that no horizontal dimension (width or depth) is less than 2 m;
 - d) have an entry point no less than 1.5 m in width; and
 - e) if located outdoors, must be enclosed and screened from public view and incorporated into the overall design of the development.
 - f) If the building is mixed-use, separate recycling and waste storage spaces should be provided for the different types of occupants.

6.0 TEMPORARY RECYCLING AND WASTE STORAGE AREA

- 6.1 If the loading area will be located farther than 30 m (100') from the recycling and waste storage space, a temporary recycling and waste storage area for the containers must be provided for use on collection days.
- 6.2 The temporary storage area must:
- a) have a level and hard surfaced floor;
 - b) be configured such that no horizontal dimension (width or depth) is less than 1 m;
 - c) be located at ground level within 30 m (100') of the loading area to facilitate collection;
 - d) be connected to the loading area and recycling and waste storage space via a level grade or continuous slope of no more than 6%;
 - e) be equal in size to 45% of the waste and recycling storage space allocation; and
 - f) shall not be located in the positions specified in Section 4.2. a), c), or d).

7.0 LOADING AREA REQUIREMENTS

- 7.1 The loading area must meet the following minimum criteria:
- a) be located away from the fresh air intakes for the building;
 - b) be connected to the recycling and waste storage space or temporary storage space via a level grade or continuous slope of no more than 6%, to facilitate movement of wheeled recycling containers from the storage space to the loading area for servicing;
 - c) be directly accessible by a driving surface;
 - d) have an appropriate slope, as per applicable building code requirements, to facilitate drainage to the designated stormwater management system for the site, and to avoid settling of liquids within the loading area;

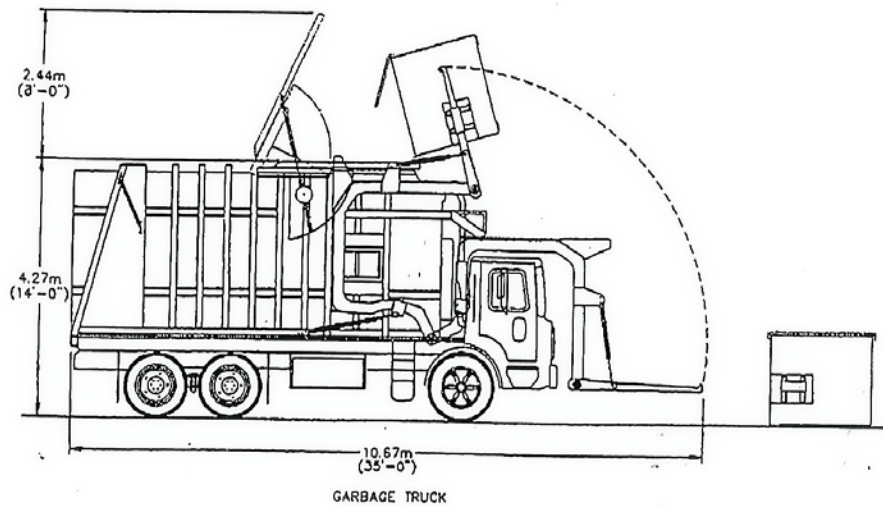
- e) be constructed to accommodate the weight of a 28-tonne collection vehicle;
- f) maintain minimum dimensions of 7.5 m high, 6.0 m wide, and 15.0 m long. All dimensions are to be unencumbered; and
- g) comply with District of Maple Ridge Off-Street Parking Bylaw No. 4350 - 1990.

8.0 COLLECTION VEHICLES

Collection vehicles access dimensions are as follows:

Measurement		
Height	Length	Width
4.27 m (14')	10.67 m (35')	2.74 m (9')
With a turning radius of 20.6 m (67.6'). A minimum added clearance height of 2.44 m (8') from front to middle of vehicle is required for emptying the container.		

FIGURE 5 – COLLECTION VEHICLE DIMENSIONS



9.0 COLLECTION VEHICLE ACCESS

- 9.1 The vehicle access area must be located such that collection vehicles are not required to reverse onto a public road.
- 9.2 The vehicle access route, whether intended to be indoors or outdoors, must:
 - a) Be configured in such a way as to allow a collection vehicle to drive up to the loading area, collect the waste/recycling, and leave the site in a forward motion, or via the use of a turnaround area allowing for a three-point turn of not less than one truck length;

- b) Be situated in a location that will minimize interface with pedestrian traffic and public vehicular access to the building's main parking area, including underground garage and visitor parking areas;
 - c) Be constructed to accommodate the weight of a 28-tonne collection vehicle;
 - d) Provide a minimum width of 4.5 m throughout the vehicle access route and access driveways with a minimum width of 6 m (7 m if there are walled ramps) at the points of entrance and exit for the site;
 - e) Maintain a minimum vertical clearance of 4.4 m throughout the entire access route;
 - f) Provide the collection vehicle a minimum turning radius of 12.5 m throughout the entire access route; and
 - g) Ensure that the slope of the access route does not exceed 6%.
- 9.3 The site plan must include a diagram illustrating the anticipated movement of the collection vehicle through the building site, including dimensions for minimum width, height and turning radii throughout.