Technical Specifications for Recycling and Garbage Amenities in Multi-family and Commercial Developments - June 2015 Update

TECHNICAL SPECIFICATIONS FOR THE PURPOSE OF ALLOCATING SUFFICIENT AND ACCESSIBLE RECYCLING AND GARBAGE STORAGE SPACE IN MULTI-FAMILY AND COMMERCIAL BUILDINGS AND COMPLEXES

The following technical specifications are provided for consideration as an addition to a municipal bylaw or guideline affecting the development permit process. Municipalities can tailor and implement them according to their needs. The text requires modification to suit each municipality’s bylaw structure and definitions.

1. Definitions

The following terms have the meaning presented below.

**Approving Authority** means the Planning Director, Chief Building Inspector, or any other official authorized by <Municipality Name> to approve applications for zoning, development and/or building permits.

**Commercial Buildings** refers to the following types of establishments:

- **Hospitality Lodging** means a building containing more than six sleeping units wherein accommodation is provided for transient lodgers, and having a public reception or dining area. Accommodations can be without private cooking facilities or with minor ones that do not exceed the following, namely, a two-burner cook top, a microwave oven, a sink and a small refrigerator.

- **Large Venue** means a facility dedicated to cultural and recreational uses, conferences, or conventions that can accommodate 2000 or more visitors per day.

- **Office Building** means a building where the majority of the space is dedicated to conducting business, clerical, or professional activities, excluding retail and industrial activities, and is generally not open to the public.

- **Restaurant** means an eating establishment where food is sold or given to the public for immediate consumption on the premises, but where no provision is made for the consumption of food in motor vehicles that are parked on site.

- **Retail Building** means a building or warehouse where goods, wares, merchandise, substances, articles or things are sold for purposes of consumption, use, or resale, and any retail outlet otherwise classified or defined in the City’s zoning bylaw no. _____.

**Curbside Pickup** means the municipal or private regularly scheduled collection of recyclable material or garbage from a residential dwelling or unit fronting the public or private street.

**Development Proponent** means a developer, architect, builder, engineer or other professional or agency applying for a development or building permit for a new construction or building alteration project subject to these technical specifications.

**Garbage** means refuse.

**Garbage Storage Space** means the centralized physical space allocated within a property for communal deposit and collection of garbage between collection days.

**Garbage and Recycling Storage Space** means the centralized physical space allocated within a property for communal deposit and collection of garbage and targeted recyclable materials between collection days.
**Mixed Use Building** means any building consisting of commercial space, plus <insert municipality’s minimum multi-family threshold> or more dwelling units, each of which is occupied, or intended to be occupied, as the home or residence of one household only.

**Multi-Family Residential Building** means any building consisting of <insert municipality’s minimum multi-family threshold> or more dwelling units, each of which is occupied, or intended to be occupied, as the home or residence of one household only.

**Recycling Storage Space** means the centralized physical space allocated within a property for communal deposit and collection of recyclable material between collection days.

**Recyclable Material** means a product or substance that has been diverted from disposal, and satisfies at least one of the following criteria:

- a) is organic material and is capable of being composted or digested, or is being composted or digested, at a site
- b) is managed as a marketable commodity with an established market by the owner or operator of a site
- c) is being used in the manufacture of a new product that has an established market or is being processed as an intermediate stage of an existing manufacturing process

The targeted recyclable materials are listed in the technical specifications, as provided by <Municipality Name> upon application for a building permit.

**Refuse** means discarded or abandoned materials, substances or objects, not including hazardous materials.

**Temporary Storage Area** means a space that is used for the storage of garbage and recycling containers on collection days.

## 2. Applicability

2.1 All construction involving the erection of a building, which requires either a change to the zoning bylaw to allow for multi-unit housing, commercial or mixed use development or a development permit on any lot zoned for multi-unit housing, commercial or mixed use development should provide suitable amenities for the deposit and collection of recyclable material, as listed in the following technical specifications, in addition to amenities for the deposit and collection of garbage.

2.2 Building alteration projects as listed in the table below, or as defined by the municipal building permit requirements for the alteration of existing buildings, shall provide space for the shared deposit and collection of recyclable material and garbage that meets the technical specifications pertaining to the garbage and recycling storage space size, location, and design as well as vehicle access and occupant access for recycling space for multi-family residential buildings, commercial buildings, and mixed use buildings, as outlined in the table below.

<table>
<thead>
<tr>
<th>Table 1 – Technical Specifications applicable to various types of construction and building alteration projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Project</strong></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>New Multi-Family or Commercial Construction means All construction involving the erection of a building, which requires a building permit on any lot zoned multi-unit housing or commercial development</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Major horizontal additions are horizontal additions which increase the total aggregate floor area by more than the smaller of 25% or 500 m².</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
### Type of Project | Applicable Sections
--- | ---
**Minor horizontal additions** are horizontal additions that increase the total aggregate floor area by less than the smaller of 25% or 500 m². | • Occupant Access ([Section 12])
• Location ([Section 7]) – where practical

**Reconstruction** means any project where extensive renovations are being carried out throughout the building, which involve substantial reconstruction of the interior floor space that exposes the building’s structure. Reconstruction may include repair, renovation, alteration or combination thereof.

**Change in Major Occupancy Classification**-type projects are limited to a change of use within a building or portion thereof such that the proposed use is outside of the existing major occupancy classification.

**Major renovations** are limited to work within multiple occupied spaces. Major renovations may include re-configuration of the interior space, interconnected floor spaces, and exterior alterations that affect a building’s recycling or garbage storage space. However, new mezzanines may not be considered as a major renovation, and are considered to be vertical additions.

**Major vertical additions** are additions that add an additional floor level (mezzanine or storey) to a building that increases the total aggregate floor area by more than the smaller of 25% or 500 m².

**Minor vertical additions** are additions that add an additional floor level (mezzanine or storey) to a building that increases the total aggregate floor area by less than the smaller of 25% or 500 m².

* Municipal planners will work with permit applicants to ensure that the recycling space meets as many of the location specifications as practical.

### 2.3 The technical specifications in this document do not apply to the following:

a) Any project that demonstrates, to the satisfaction of the Approving Authority, that it will qualify for and receive municipally-provided curb side pickup of recyclable materials from individual residential units on public streets after occupancy

b) Any project so designated by the approving authority of <Municipality Name>

### 3. Alternative Approaches

A Development Proponent may propose an alternative approach to the technical specifications listed in this document - as long as the proposal meets the intent of the recycling amenity specifications.

### 4. Use of Recycling Facilities

All recycling storage space identified on the plans upon issuance of the building permit shall be used only for the purpose of depositing and collecting recyclable material generated by occupants, visitors, and users of the principal building. The recycling space must not be used for storage of garbage. Any temporary recycling storage area identified on the plans upon issuance of the building permit shall be available for storing recycling containers on collection days.

### 5. Verification

A checklist of recycling space and access specifications is included in this document. This checklist must be completed and submitted with development permit and re-development permit plans.
6. Size of Garbage and Recycling Storage Space

6.1 The minimum size of the centralized garbage and recycling storage space for multi-family residential buildings and hospitality lodgings shall be:
   a) 9.5 m² for developments of up to 20 housing units, or
   b) the space allocation determined through this formula: \((0.31 \times \text{number of housing units}) + 8 \text{ m}^2\)
   c) In the case of hospitality lodgings, including those with food service establishments on the premises, the garbage and recycling storage space shall be the same as for multi-family residential buildings, up to a maximum of 101 m², at which point the frequency of collection can be increased beyond once per seven days or compactors for some recyclable material and for garbage can be introduced.

6.2 Within the garbage and recycling storage space, the minimum size of the centralized recycling storage space for multi-family residential buildings and hospitality lodgings shall be:
   a) 5 m² for developments of up to 20 housing units, or
   b) the space allocation determined through this formula: \((0.16 \times \text{number of housing units}) + 5 \text{ m}^2\)
   c) In the case of hospitality lodgings, including those with food service establishments on the premises, the recycling storage space shall be the same as for multi-family residential buildings, up to a maximum of 60 m², at which point the frequency of collection can be increased beyond once per seven days or a compactor for some recyclable material can be introduced.

6.3 For new multi-family building construction only, the centralized recycling storage space shall also include a “Flex Space” for storage of other reusable or recyclable materials that may be added to collection services over time, in addition to the garbage and recycling storage space. The required size of this space is equivalent to an additional 50% of the recycling storage space specified in Section 6.2.

6.4 The minimum size of the centralized recycling storage space for commercial buildings shall be the greater of:
   a) 5 m² for Retail, Office, and Large Venue developments,
   b) 9 m² for Restaurant developments, or
   c) the space allocation determined by the formula in the table below for the listed building type:

<table>
<thead>
<tr>
<th>Building Development Type</th>
<th>Recycling Storage Space Allocation (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>0.014 x Building floor space (m²) + 3</td>
</tr>
<tr>
<td>Office</td>
<td>0.007 x Building floor space (m²) + 3</td>
</tr>
<tr>
<td>Large Venue</td>
<td>0.019 x Building floor space (m²) + 4</td>
</tr>
<tr>
<td>Restaurant</td>
<td>0.030 x Building floor space (m²) + 7</td>
</tr>
</tbody>
</table>

Recycling Storage Space for each building type is required up to the maximum size listed below, after which increased frequency of collection may be used to provide adequate recycling capacity:

<table>
<thead>
<tr>
<th>Building Development Type</th>
<th>Development Size Threshold</th>
<th>Maximum Required Recycling Storage Space For Developments below Threshold</th>
<th>Maximum Required Recycling Space Allocation For Developments above Threshold*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>7,000 m²</td>
<td>25 m²</td>
<td>60 m²</td>
</tr>
<tr>
<td>Office</td>
<td>29,000 m²</td>
<td>50 m²</td>
<td>60 m²</td>
</tr>
<tr>
<td>Large Venue</td>
<td>10,500 m²</td>
<td>50 m²</td>
<td>60 m²</td>
</tr>
<tr>
<td>Restaurant</td>
<td>5,100 m²</td>
<td>40 m²</td>
<td>60 m²</td>
</tr>
</tbody>
</table>

*Developments larger than the threshold size should have enough space to set up compactors for paper and cardboard (41 m²) and storage for other recyclables, in order to store a greater volume on a smaller footprint than several bins would occupy and to enable a collection frequency equal to or below four (4) times per week.
Development Size Threshold

\[= \text{(Maximum Space below Threshold x 4 pick-ups per week)} – \text{Y-intercept of Recycling Storage Space Allocation}\]
\[\text{Slope of Recycling Storage Space Allocation}\]

6.5 The minimum size of the centralized garbage and recycling storage space for commercial buildings, which includes the recycling storage space from Section 6.4, shall be the greater of:

a) \(10 \text{ m}^2\) for Retail, Office and Large Venue and \(14 \text{ m}^2\) for Restaurant; or

b) the space allocation determined by the formula in the table below for the listed building type:

<table>
<thead>
<tr>
<th>Building Development Type</th>
<th>Garbage and Recycling Storage Space Allocation per m(^2) of building floor space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>0.0182 x Building Floor Space ((\text{m}^2)) + 3.7</td>
</tr>
<tr>
<td>Office</td>
<td>0.0089 x Building Floor Space ((\text{m}^2)) + 3.3</td>
</tr>
<tr>
<td>Large Venue</td>
<td>0.0244 x Building Floor Space ((\text{m}^2)) + 6</td>
</tr>
<tr>
<td>Restaurant</td>
<td>0.0331 x Building Floor Space ((\text{m}^2)) + 6.8</td>
</tr>
</tbody>
</table>

6.6 The maximum size of the centralized garbage and recycling storage space for commercial buildings shall be:

(a) the maximum required space shown in the table below for the corresponding building development type, when the development size is smaller than the development size threshold in the table below, or

(b) \(101 \text{ m}^2\), when the development size exceeds the development size threshold shown below.

<table>
<thead>
<tr>
<th>Building Development Type</th>
<th>Development Size Threshold</th>
<th>Maximum Required Garbage And Recycling Storage Space For Developments below Threshold</th>
<th>Maximum Required Garbage and Recycling Space Allocation For Developments above Threshold*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>14,000 \text{ m}^2</td>
<td>41 \text{ m}^2</td>
<td>101 \text{ m}^2</td>
</tr>
<tr>
<td>Office</td>
<td>46,000 \text{ m}^2</td>
<td>66 \text{ m}^2</td>
<td>101 \text{ m}^2</td>
</tr>
<tr>
<td>Large Venue</td>
<td>8,900 \text{ m}^2</td>
<td>66 \text{ m}^2</td>
<td>101 \text{ m}^2</td>
</tr>
<tr>
<td>Restaurant</td>
<td>20,200 \text{ m}^2</td>
<td>56 \text{ m}^2</td>
<td>101 \text{ m}^2</td>
</tr>
</tbody>
</table>

*Developments larger than the threshold size should have enough space to set up compactors for garbage (41m\(^2\)), in order to store a greater volume on a smaller footprint than several bins would occupy and to enable a collection frequency equal to or below four (4) times per week.

Development Size Threshold

\[= \text{(Maximum Space below Threshold x 4 pick-ups per week)} – \text{Y-intercept of Garbage Storage Space Allocation}\]
\[\text{Slope of Garbage Storage Space Allocation}\]

6.7 For mixed use buildings, the minimum size of the centralized garbage and recycling storage space shall be equivalent to the garbage and recycling storage space required for each anticipated use. When the exact future commercial use in not known, the recycling storage space for the commercial use shall be equal to the space needed for the potential commercial use with the highest storage needs.

7. Location of Recycling Storage Space

7.1 The location of any centralized recycling storage space must be:

a) on the lot of the structure served;
b) in an area such that noise and odour impacts to building occupants and neighbouring developments are minimized;

c) at ground level, or no more than one storey below grade; and

d) adjacent to each of the designated garbage storage areas for each type of use in the development.

7.2 Every garbage storage area must be located beside a **recycling storage space**.

7.3 A centralized **recycling storage space** shall not be located in any of the following positions:

a) in alleys or other publicly owned rights-of-way where it may disrupt traffic circulation patterns;

b) between a street-facing facade of the structure and the street if the area is located outdoors;

c) in any required driveways, parking aisles, or parking 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.

7.4 Notwithstanding the location specifications of sub-sections 2.1 and 2.2, any centralized **recycling storage space** must be located so as to comply with applicable building codes, fire codes, safety requirements, or other building requirements of <Municipality Name>.

8. **Design of Garbage and Recycling Storage Space**

8.1 The **garbage and recycling storage space** must:

a) have a level and hard-surfaced floor;

b) be configured to allow each garbage and recycling storage container to be individually accessible so as to be removed and replaced without having to take out other containers;

c) be configured such that no horizontal dimension (width or depth) is less than 2 m;

b) have an entry point no less than 1.5 m in width for multi-family buildings over 25 units and for all commercial developments;

e) ensure adequate ventilation to the exterior of the building, in compliance with applicable building code requirements for the storage of garbage;

f) be sufficiently secure to minimize pest and wildlife access through the use of roofs, fencing, and wheels under gate doors;

g) be protected from unlawful entry through the use of strike-plates, locks, and astragals to close clearance gaps between doors and frames, if the storage area is located indoors;

h) be well lit, both as a security measure and for ease of access;

i) have windows, as well as white or pale-coloured interior walls, to enhance lighting and safety, if the storage area is enclosed; and

j) have access to a covered washing area with a sanitary sewer drain and water supply.

9. **Temporary Storage Area**

9.1 If the loading area will be located farther than 50 metres from the **garbage and recycling storage space**, a **temporary storage area** for garbage and recycling containers must be provided for use on collection days.

9.2 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 50 metres of the loading area to facilitate collection;

d) be connected to the loading area and garbage and recycling storage space via a level grade or continuous slope of no more than 6%;

e) have a footprint equal to at least 50% of the garbage and recycling storage space allocation; and

f) be available for garbage and recycling container storage on the day of collection, but may be used for other purposes at other times.
10. **Loading Area**

10.1 The loading area for the collection vehicle to service one refuse or recycling storage containers at a time must meet the following minimum design criteria:

a) be located away from the fresh air intakes for the building;

b) be connected to the garbage and recycling storage space or temporary storage area via a level grade or continuous slope of no more than 6%, to facilitate movement of wheeled containers from the garbage and recycling storage space or temporary storage area to the loading area for servicing.

10.2 If the loading area is to be located on the building site, it must also meet the following minimum design criteria:

a) be directly accessible by a driving surface meeting the Vehicle Access Route specifications;

b) 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;

c) be constructed to accommodate the weight of a 28-tonne collection vehicle; and

d) maintain minimum dimensions of 7.5 m high, 6.0 m wide, and 15.0 m long. All dimensions are to be unencumbered (i.e., unrestricted by fixtures such as sprinkler systems, meters, surveillance cameras, mirrors, landscaping, etc.).

11. **Vehicle Access Route to Loading Area**

11.1 Vehicle access route specifications are triggered for developments expecting collection vehicles to access a loading area within the building site.

11.2 The vehicle access area must be located such that collection vehicles are not required to reverse onto a public road.

11.3 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 garbage or 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 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%.

11.4 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.

11.5 Where the Official Community Plan (OCP) or other regulatory instruments used by <Municipality Name> indicate a preference for particular access configurations, the development proponent should indicate how any additional configuration requirements stemming from these technical specifications will be met.

12. **Occupant Access**

12.1 The garbage and recycling storage space must be accessible to all occupants of the development, including those with restricted mobility.

12.2 The occupant access provisions of the garbage and recycling storage space must be shown on the site plan.
12.3 The distance that occupants must travel to reach the recycling storage space must be similar to the distance travelled to reach the garbage containers.
### Garbage and Recycling Storage Space and Access in Multi-Family Residential and Commercial Buildings
#### Technical Specifications Checklist

Checklist for NEW CONSTRUCTION PROJECTS

#### 1.0 Size of Recycling Storage Space

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select all Development Types that apply</td>
<td>Building Size</td>
<td>Recycling Storage Space (m²) = Column A x Factor</td>
<td>Flex space for bulky item storage = 0.5 x Column B</td>
<td>Maximum space requirement (circle the space that applies based on Development Type and Building Size)</td>
<td>Total Storage Space required (m²) = smaller of Columns B + C or Column D</td>
<td>Storage Space Provided (m²)</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>units</td>
<td>x 0.160 + 5 =</td>
<td>60 m² for hospitality lodging</td>
<td>25 m² (or 60 m² if Column A is over 5500 m²)</td>
<td>&gt; 5.0 m²</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>m²</td>
<td>x 0.014 + 3 =</td>
<td>not applicable</td>
<td>50 m² (or 60 m² if Column A is over 40,000 m²)</td>
<td>&gt; 5.0 m²</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>m²</td>
<td>x 0.007 + 3 =</td>
<td>not applicable</td>
<td>50 m² (or 60 m² if Column A is over 11,000 m²)</td>
<td>&gt; 5.0 m²</td>
<td></td>
</tr>
<tr>
<td>Large Venue</td>
<td>m²</td>
<td>x 0.019 + 4 =</td>
<td>not applicable</td>
<td>40 m² (or 60 m² if Column A is over 5500 m²)</td>
<td>&gt; 9.0 m²</td>
<td></td>
</tr>
<tr>
<td>Restaurant</td>
<td>m²</td>
<td>x 0.030 + 7 =</td>
<td>not applicable</td>
<td>40 m² (or 60 m² if Column A is over 5500 m²)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 2.0 Size of Combined Garbage and Recycling Storage Space

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select all Development Types that apply</td>
<td>Building Size</td>
<td>Garbage and Recycling Storage Space (m²) = Column A x Factor</td>
<td>Flex space for bulky item storage = 0.5 x Column B in Table 1.0</td>
<td>Maximum space requirement (circle the space that applies based on Development Type and Building Size)</td>
<td>Total Storage Space required (m²) = smaller of Columns B + C or Column D</td>
<td>Storage Space Provided (m²)</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>units</td>
<td>x 0.310 + 8 =</td>
<td>101 m² for hospitality lodging</td>
<td>41 m² (or 101 m² if Column A is over 5500 m²)</td>
<td>&gt; 9.5 m²</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>m²</td>
<td>x 0.0182 + 3.7 =</td>
<td>not applicable</td>
<td>66 m² (or 101 m² if Column A is over 40,000 m²)</td>
<td>&gt; 10.0 m²</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>m²</td>
<td>x 0.0089 + 3.3 =</td>
<td>not applicable</td>
<td>66 m² (or 101 m² if Column A is over 40,000 m²)</td>
<td>&gt; 10.0 m²</td>
<td></td>
</tr>
</tbody>
</table>

Flex space for bulky item storage = 0.5 x Column B in Table 1.0

Total Storage Space required (m²) = smaller of Columns B + C or Column D

Circle below if Storage Space Provided (Column F) is greater than Minimum required

Compliant?

Yes | No
### 3.0 Location of Recycling Storage Space

2.1 The location of the centralized recycling storage space(s) must be:
   a) on the lot of the structure served;
   b) in an area such that noise and odour impacts to building occupants and neighbouring developments are minimized;
   c) at ground level, or no more than one storey below grade; and
   d) adjacent to each of the designated garbage storage areas for each type of use in the development.

2.2 A centralized recycling storage space shall not be located in any of the following positions:
   a) alleys or 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, or parking spaces for the structure; and
   d) in any location that may block or impede fire exits, public rights-of-ways, or pedestrian and vehicular access.

### 4.0 Design of Garbage and Recycling Storage Space

3.1 The garbage and recycling storage space must:
   a) have a level and hard surfaced floor;
   b) be configured to allow each garbage and recycling storage container to be individually accessible so as to be removed and replaced without having to take out 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;
   e) ensure adequate ventilation to the exterior of the building, in compliance with applicable building code requirements for the storage of garbage;
   f) be sufficiently secure to minimize pest and wildlife access through the use of roofs, fencing, and wheels under gate doors;
   g) be protected from unlawful entry through the use of strike-plates, locks, and astragals to close clearance gaps between doors and frames;
   h) be well lit, both as a security measure and for ease of access;
   i) have windows, as well as white or pale-coloured interior walls, to enhance lighting and safety, if the storage area is enclosed; and
   j) have access to a covered washing area with a sanitary sewer drain and water supply.

### 5.0 Temporary Storage Area
4.1 Is your garbage and recycling storage space more than 50 m from the recycling loading area?
- yes □ → a Temporary Storage Area with the properties listed in Section 4.1 a) to f) is required for use on collection days
- no □ → Check compliance with Loading Area (Section 5.0) and Vehicle Access Route to Loading Area (Section 6.0).
  - If not compliant, then a Temporary Recycling Storage Area could be used to provide access to a different, compliant loading area.
  - If compliant, skip Section 4.1 a) - f)

   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 50 metres of the loading area to facilitate collection;
   d) be connected to the loading area and garbage and recycling storage space via a level grade or continuous slope of no more than 6%;
   e) have a footprint equal to at least 50% of the garbage and recycling storage space allocation; and
   f) be available for garbage and recycling container storage on the day of collection, but may be used for other purposes at other times.

5.0 Loading Area

5.1 The loading area for the collection vehicle to service one refuse or recycling storage containers at a time must meet the following minimum design criteria:
   a) be located away from the fresh air intakes for the building; and
   b) be connected to the garbage and recycling storage space or temporary storage area via a level grade or continuous slope of no more than 6%, to facilitate movement of wheeled containers from the garbage and recycling storage space or temporary storage area to the loading area for servicing.

5.2 Is your loading area located on the building site?
- yes □ → must meet 5.2 a) to d) below
- no □ → The Municipality of _____________ does / does not allow loading on publicly-owned land on collection day. [The Municipality must specify whether it allows the Loading Area to be on publicly-owned land on collection day.]

   Note: The Municipality of _____________ does / does not allow use of publicly-owned land for temporary storage of totes and bins on collection day. If the Loading Area is on a public right-of-way, but temporary storage on publicly-owned land is not allowed, the use of a Temporary Recycling Storage Area closer to the right-of-way could be considered (Section 4.0). [The Municipality must specify whether it allows bins and totes to be placed on publicly-owned land on collection day.]

   a) a) be directly accessible by a driving surface meeting the Vehicle Access Route specifications;
   b) b) 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;
   c) c) be constructed to accommodate the weight of a 28-tonne collection vehicle;
   d) d) maintain minimum dimensions of 7.5 m high, 6.0 m wide, and 15.0 m long. All dimensions are to be unencumbered (i.e., unrestricted by fixtures such as sprinkler systems, meters, surveillance cameras, mirrors, landscaping, etc.).

6.0 Vehicle Access Route to Loading Area

6.1 Is your loading area located on the building site?
- yes □ → must meet all requirements of Sections 6.2 and 6.3

   Note: These specifications are intended for collection from centralized loading areas. Check with the Municipality of _____________ for vehicle access route requirements applicable to collection from individual units.

- no □ → The Municipality of _____________ does / does not allow loading on publicly-owned land on collection day. If allowed and if the Loading Area complies with Section 6.2, then skip Section 6.3. [The Municipality must specify whether it allows the Loading Area to be on publicly-owned land on collection day.]

6.2 The vehicle access route must be located such that collection vehicles are not required to reverse onto a public road.

6.3 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 garbage or 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;
   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;
d2) provide access driveways with a minimum width of 6 m 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%.

6.4 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.

6.5 Where the Official Community Plan (OCP) or other regulatory instruments used by <Municipality Name> indicate a preference for particular access configurations, the development proponent should indicate how any additional configuration requirements stemming from these technical specifications will be met.

8.0 Occupant Access

7.1 The garbage and recycling storage space must be accessible to all occupants of the development, including those with restricted mobility.

7.2 The occupant access provisions of the garbage and recycling storage space must be shown on the site plan.

7.3 The distance that occupants must travel to reach the recycling storage space must be similar to the distance travelled to reach the garbage containers.