

# DESIGN FOR WASTE

PLANNING FOR THE COLLECTION  
AND STORAGE OF WHEELIE BINS



**Hamilton  
City Council**  
Te kaunihera o Kirikiriroa



# CONTENTS

<b>OVERVIEW</b>	<b>1</b>
<b>VISION</b>	<b>2</b>
<b>1. STORAGE OPTIONS</b>	<b>3</b>
1.0 Individual waste containers stored on individual sites	3
1.0 Individual waste containers stored communally	3
1.0 Shared waste containers (non-standard or private service)	3
1.1 Short-term waste storage	3
1.2 Individual waste containers stored on individual sites	4
1.3 Individual waste containers stored communally	4
1.4 Communal waste containers	5
1.5 Getting it right	7
<b>2. WASTE COLLECTION</b>	<b>8</b>
2.0 Overview	8
2.1 Kerbside waste collection	8
2.2 Onsite waste collection	9
<b>3. GUIDELINES FOR SUBMITTING SOLID WASTE PLANS (RESOURCE CONSENT INFORMATION)</b>	<b>9</b>
<b>4. WASTE CONTAINER DIMENSIONS</b>	<b>10</b>

**DESIGN FOR WASTE**

Planning for the collection and storage of wheelie bins

**YOUR  
HANDY  
DESIGN  
GUIDE**

# OVERVIEW

**The appropriate storage and removal of domestic rubbish, recycling, glass and food scraps is an essential consideration for multi-unit residential developments (generally three or more dwellings).**

Failing to provide for the easy storage and removal of waste can create a major source of inconvenience and annoyance for residents, as well as increase the ongoing running costs of a development.

This design guide is a non-statutory document created to assist developers, designers and planners achieve policy outcomes under the Hamilton City Council Operational District Plan (ODP).

## REGULATORY CONTEXT

**The following regulations should also be considered in relation to the storage and removal of solid waste:**

Hamilton City Waste Management and Minimisation Bylaw (2019)

Hamilton City's statutory requirements for the separated storage, collection and disposal of rubbish, recycling, glass and food scraps, and the provision of *waste management plans*.

New Zealand Building Code (2004)

Clause G15 Solid Waste Building Code compliance requirements for the storage and disposal of waste.

Hamilton City Waste Management and Minimisation Plan (2018-2024)



# VISION

**Hamilton: where waste minimisation and resource recovery are an integral part of our lifestyle and economy.**

Our waste vision for Hamilton is noted above. We want to work collaboratively with our community - both residential and business - to change the way we manage our waste.

## ONSITE WASTE STORAGE

When designing for waste storage, there are two main types of waste containers to consider:

1. The 120L rubbish and 240L recycling bins, the 45L glass crate and 23L food scrap bins used for the Council standard waste service.
2. Any waste bins that may be provided by a private service (where applicable).

2X  
OPTIONS  
YOU NEED TO  
CONSIDER

### OPTION 1

#### COUNCIL STANDARD WASTE SERVICE



### OPTION 2

#### PRIVATE WASTE SERVICE



# 1. STORAGE OPTIONS

All dwellings are required to be provided with an area for the storage of main rubbish, recycling and food scrap containers (as per the Hamilton City Waste Management and Minimisation Bylaw 2019). This area must be large enough to store all waste produced onsite.

## 1.1 DEFINITIONS

Three waste storage options are available, as defined below:



### INDIVIDUAL WASTE CONTAINERS STORED ON INDIVIDUAL SITES

Each dwelling has an onsite area allocated to the storage of its rubbish, recycling, glass and food scrap containers.

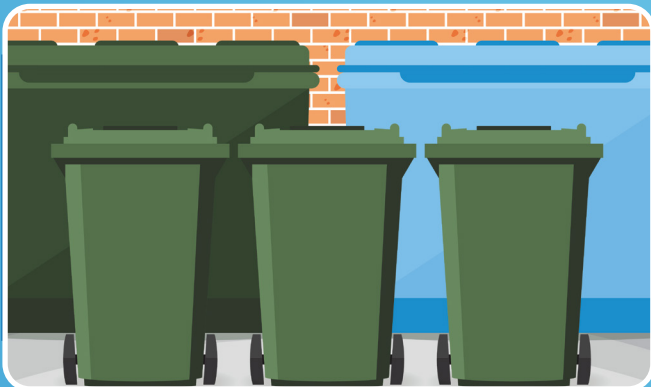
### INDIVIDUAL WASTE CONTAINERS STORED COMMUNALLY

Each dwelling stores its individual rubbish, recycling, glass and food scrap containers in a communal container storage area (together with the containers from other dwellings).



### SHARED WASTE CONTAINERS (NON-STANDARD OR PRIVATE SERVICE)

Dwellings do not have individual waste containers, instead they share rubbish, recycling, glass and food scrap containers, which are stored in a communal area.



Each container storage option requires different design considerations. The development type, site characteristics and waste collection methods available will all play an important role in deciding which storage option is used.

## 1.2 REQUIREMENTS

Four waste storage options are available, as defined below:

### 1.2.A SHORT-TERM WASTE STORAGE

Every residential dwelling's kitchen should be designed with sufficient container space for the short-term storage of separated rubbish, recycling, glass and food scraps.

### 1.2.B INDIVIDUAL WASTE CONTAINERS STORED ON INDIVIDUAL SITES

#### A. Size

Approximately 1.4m<sup>2</sup> of space should be allocated per residential dwelling for the joint onsite storage of rubbish, recycling, glass and food scrap containers.

Attractive waste container screening hides containers from view and contributes to an attractive front yard and streetscape. The provision of continuous paving would make moving containers to collection points easier.

#### B. Location and access

- i. Containers must be stored together in an onsite location that is easily accessible, allowing for the convenient transferral of waste from within the home. Optimal waste container storage locations include within the garage, or in back and side yards.
- ii. Access to waste containers should not require the crossing of unpaved or unsealed areas.
- iii. Waste container storage should be on a flat and paved or sealed surface.
- iv. Waste container storage areas should be located and designed to allow

containers to be moved to waste collection points as conveniently and efficiently as possible. This should not require containers to be transported through dwellings or over unpaved surfaces, stairs or steep gradients.

- v. The location of waste containers should consider the impact of odours. Avoid locating containers in areas where odours may enter habitable areas of buildings or outdoor living areas. Ensure container storage areas can be well ventilated.

#### C. Design

- i. Outdoor waste container storage areas should be of a durable construction and integrate into and complement the overall design of the development.
- ii. Waste containers should be screened from the view of any surrounding dwellings, outlook areas, outdoor living spaces, communal areas, accessways, roads and parks.
- iii. Any waste storage screening should be designed to allow waste to be easily inserted into containers.

### 1.2.C INDIVIDUAL WASTE CONTAINERS STORED COMMUNALLY

#### A. Size

Approximately 1.5m<sup>2</sup> of space should be allocated per residential dwelling for the joint storage of rubbish, recycling, glass and food scrap containers. Additional space may be required to ensure residents are able to easily access their individual containers. Consult the [Solid Waste Calculator](#) to calculate development specific waste storage space requirements.

REFER TO  
PAGE 10 FOR  
CONTAINER SIZE  
SPECIFICATIONS

## DESIGN FOR WASTE

### Planning for the collection and storage of wheelie bins

#### B. Location and access

- i. Waste containers must be stored in an easily accessible location, allowing for the convenient transferral of waste from within the dwelling.

The New Zealand Building Code (G15/AS1 (2.0.1)) specifies a maximum carry distance of 30m for occupants transferring waste from dwellings to waste containers. For larger developments, this may mean that multiple waste storage areas are required.

- ii. Access to waste containers should not require the crossing of unpaved or unsealed surfaces.
- iii. Waste container storage should be on a flat and paved or sealed surface.
- iv. Waste container storage areas should be located and designed to allow containers to be moved to waste collection points as conveniently and efficiently as possible. This should not require containers to be transported through dwellings or across unpaved surfaces, stairs or steep gradients.
- v. The location of waste containers should consider the impact of odours. Avoid locating containers in areas where odours may enter habitable parts of buildings or outdoor living areas. Ensure container storage areas can be well ventilated.

#### C. Design

- i. Outdoor waste container storage areas should be of a durable design and integrate into and complement the overall design of the development.
- ii. Waste containers should be screened from the view of any surrounding dwellings, outlook areas, outdoor living spaces, communal areas, accessways, roads and parks.
- iii. Any waste storage screening should be designed to allow waste to be easily inserted into containers.
- iv. Storage areas should be well lit to ensure easy access and safety for users at night.
- v. Waste container storage areas and associated screening should use durable materials and include an easily accessible tap (with appropriate drainage to the wastewater network) for easy cleaning and maintenance.

#### D. Management

Consider how waste storage areas will be managed and maintained. Communal waste container storage areas can be subject to vermin, neglect and rubbish dumping. Appropriate management systems (such as a body corporate or residents' society) must be established to address these potential issues.

### 1.2.D COMMUNAL WASTE CONTAINERS

#### A. Size

An area must be provided for the storage of communal rubbish, recycling, glass and food scrap containers. This area must be large enough to store all waste produced onsite.

Use Hamilton City Council's [Solid Waste Calculator](#) to generate development specific waste storage requirements.



**CHECK OUT  
OUR ONLINE  
WASTE  
CALCULATOR  
HERE**

**REFER TO  
PAGE 10 FOR  
CONTAINER SIZE  
SPECIFICATIONS**

## DESIGN FOR WASTE

### Planning for the collection and storage of wheelie bins

#### B. Location and access

- i. Waste containers must be stored in an easily accessible location, allowing for the convenient transferral of waste from within dwellings.

The New Zealand Building Code (G15/AS1 (2.0.1)) specifies a maximum carry distance of 30m when transferring waste from dwellings to waste containers. For larger developments, this may mean that multiple waste storage areas are required.

- ii. Waste container storage may be provided for in a suitable outdoor area, or within the building (generally within the basement or a dedicated waste room).
- iii. Waste container storage should be on a flat and paved or sealed surface.
- iv. Waste container storage areas should be located and designed to allow containers to be moved to waste collection points as conveniently and efficiently as possible. This should not require containers to be transported through dwellings or across unpaved surfaces, stairs or steep gradients.
- v. The location of waste containers should consider the impact of waste container odours. Avoid locating containers in areas where odours may enter habitable parts of buildings or outdoor living areas.

#### C. Design

- i. Outdoor waste container storage areas should be of a durable design and integrate into and complement the overall design of the development.
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## 1.3 GETTING IT RIGHT



## EXAMPLE 1

Storage areas for waste bins have not been provided, forcing residents to store bins where they can, detracting from the look and feel of the neighbourhood.

## EXAMPLE 2

The height of waste bin screening is too short, failing to screen bins from view. Moving waste bins for collection also requires bins to be dragged over garden and pebbled area.



## EXAMPLE 3

Screened waste bin storage is provided at the rear of this terraced housing block, however the storage area is an inconvenient distance from the waste collection point. Residents instead opt to store bins in the front yard, where they detract from the look and feel of the street.

LET'S  
MAKE  
SURE WE  
GET IT  
RIGHT!

## 2. WASTE COLLECTION

### OVERVIEW

**Waste can be collected from a (multi-unit) development through either Council's kerbside collection (waste containers are wheeled onto the street berm for public collection by Hamilton City Council's contractors) or onsite waste collection services (waste is collected by waste trucks from within the site).**

Kerbside waste collection is only possible if there is enough space on the street berm for the placement of containers. If kerbside collection is not possible or preferable, then sufficient space must be provided to allow for waste to be collected onsite.

#### 1.2.B INDIVIDUAL WASTE CONTAINERS STORED ON INDIVIDUAL SITES

##### A. Collection requirements

Kerbside waste collection requires the use of individual waste containers for each dwelling and is only possible if there is a space on the street berm that:

- i. is preferably located directly in front of the site being serviced
- ii. has a clear area of approximately 1.5m<sup>2</sup> per residential dwelling being served (to allow for the placement of containers on collection days)
- iii. has a slope of less than 10 degrees (to avoid the likelihood of containers tipping)
- iv. does not result in containers obstructing driveways or being located on the footpath
- v. is not located under the canopy of street trees
- vi. is not located on raingardens.

##### B. Resource consent requirements

Where a resource consent application proposes kerbside waste collection, a scale plan must be provided demonstrating compliance with 2.1.A (above).

## 2.2 ONSITE WASTE COLLECTION

### A. Container placement

Onsite waste collection requires the provision of designated onsite areas for the storage, access, manoeuvring and loading of waste containers onto waste collection vehicles.

### B. Waste collection vehicle access

Access and manoeuvring for waste collection vehicles must be provided for. Waste vehicle access considerations include:

- i. the width of the accessway
- ii. truck turning requirements (a 15m kerb-to-kerb turning circle is generally a minimum for an eight-metre truck, while larger trucks can require up to 22.4m).
- iii. gradients (rubbish trucks have a high centre of gravity and are susceptible to tipping) Maximum gradients are generally no more than 42.2% for an eight-metre truck and 33.8% for a 10m truck.
- iv. ensuring onsite parking and vegetation will not impact truck access, manoeuvring or the loading of waste.
- v. the weight of waste removal vehicles, as driveways need to be engineered to accommodate a 20-tonne truck.
- vi. the direction from which waste will need to be loaded into vehicles (i.e. left side, right side or rear loading).

# 3. GUIDELINES FOR SUBMITTING SOLID WASTE PLANS (RESOURCE CONSENT INFORMATION)

The following solid waste information should be submitted with resource consent applications proposing three or more dwellings:

## ACCESS

### You will need to:

- i. show in the plan the access routes between dwellings and waste storage facilities (maximum carry distance to be 30m - as per the New Zealand Building Code)
- ii. describe access arrangements if the development has a private road.

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OUR ONLINE  
WASTE  
CALCULATOR  
HERE

# 4. WASTE CONTAINER DIMENSIONS

The following container size specifications are for Hamilton City Council’s standard service waste containers. These are recommended for all dwellings using Council’s public kerbside waste collection.

Private waste collection container size requirements will depend on the frequency of collection. Refer to the [handy Solid Waste Calculator](#) to determine development-specific waste container requirements (sizes, volumes, dimensions).

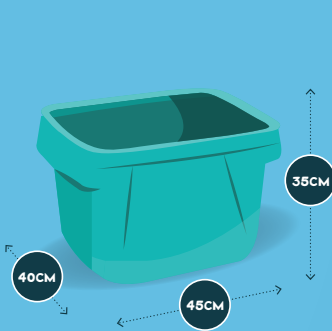
YELLOW RECYCLING BIN



RED RUBBISH BIN



TEAL GLASS CRATE



GREEN FOOD WASTE BIN



TOTAL WASTE BIN STORAGE AREA!

