### Recycling and Refuse Separation and Storage Planning Guidance

#### INTRODUCTION

This document provides design guidance for architects and developers for the separation and storage of recycling and refuse for new residential developments within the Welwyn Hatfield Borough.

Consultation with Welwyn Hatfield Borough Council (the council) regarding the design of recycling and refuse storage facilities must occur at the initial planning stage, and should be included in plans submitted to the Planning Department.

#### **RECYCLING AND REFUSE SEPARATION**

Consideration should be given to the area requirements for the separation of recycling and refuse within individual residential dwellings. For example, in-built kitchen units should be designed to accommodate an area for organic waste, dry mixed recyclables and refuse.

In line with the Council's planning obligations SPD, developers will need to meet the costs for the provision of recycling and refuse containers for both houses and flats with individual storage space and those with communal/shared space.<sup>1</sup>



#### Households

Houses should have adequate outdoor space for the storage of wheelie bins.

<sup>&</sup>lt;sup>1</sup> Wheelie bins will be provided by the council free of charge for houses which received planning approval prior to 7 February 2012.



Table 1: Recycling and Refus	se Container Requirements
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Applies to:	Bins to be provided:	Size of bins:
a) House or Household waste wheelie flat ( with bin		180 litre
storage space for individual	Food Waste Bin	23 litres
bins)	Compost wheelie bin (if subscribed to service)	240 litre
	Recycling wheelie bin	240 litre (with 40 litre inner paper box)
b) Flats/ dwellings with shared bins stores	Refuse bins/containers dependent on the total number of dwellings. To calculate the bin requirements, use the following:	Either 180, 240, 360 or 1100 litre bins.

The council require a combination of the following:	1 bed flat – 100l per week 2 bed flat – 170l per week 3 bed flat – 240l per week Plus 70l for any additional bedrooms.	
	Food Waste Bins	140 litre (one per 10 dwellings)
	Recycling bin dependent on the total number of dwellings.	Either 360 litre bins on secure frame (mini-bank*), or standard 240 litre bins.
	Compost bins may be provided depending on residents' willingness to take responsibility for the bin(s), the size and nature of the development.	240 litre

# **Table 2: Container Capacity and Dimensions**

Container type	Capacity	Dimensions at widest in cm	Price
Wheelie bin	180 litre	48 cm W, 75cmD, 107cm H	Refer to
	240 litre	56cm W, 74cm D, 107cm H	Planning obligations
	360 litre	75 cm W, 81cm D, 107cm H	SPD:
	23 litre caddy	29cm W, 38cm D, 40.5cm H	
	140l food bin	48cm W, 55cm D, 105cm H	www.welhat.go
Container	1100 litre	125cm W, 98cm D, 137cm H	v.uk/index.aspx ?articleid=1652
Mini-bank	360 litre x 2, on frame	160 cm W, 90 cm D, 120 cm H	

# Mini Banks

It is assumed that one mini-recycling bank will serve between 10 to 30 dwellings per fortnight.

## Larger Bins

Larger wheelie bins can be provided for households<sup>2</sup>:

- I. containing six or more people;
- II. where there are two or more children in nappies; and
- III. where residents produce healthcare waste.

Larger bins can also be provided to houses of multiple occupation (HMOs)<sup>3</sup> if there are four or more unrelated people living in the property.

### Waste Rooms

Sufficient space must be provided within the facility with regards to the type and number of containers used, location and design requirements.

It is recommended to provide a dedicated area for the temporary storage of bulky waste within communal waste rooms.



### a) Location

- The storage facility should be positioned within 30 metres of the entrance to the households. It should be accessible by disabled persons where possible.
- For the purpose of transporting refuse and recycling containers, the servicing vehicle must be able to load in a sensible, dedicated location, within 15 metres of the storage facility.
- The storage point for the bins should minimise the need of the user to negotiate obstacles, meandering paths, or narrow access. There should be no

<sup>&</sup>lt;sup>2</sup> Please note that the Council will, from time to time contact the householder to see if larger wheelie bins are still required due to a change in circumstance from those listed above.

<sup>&</sup>lt;sup>3</sup> WHBC's Houses in Multiple Occupation Supplementary Planning Document (February 2012).

steps or lifting required, nor should collectors have to go through a building to get access to the bins.

- Vehicular and pedestrian access should not be impeded by the location of the facility.
- If positioned in a visible location, screening of the facility is appropriate. The storage should hide the view of the bins from the public highway.
- Bin stores should not be located in the vicinity of dwellings that they are not designed for.

## <u>b) Size</u>

- The ceiling height of bin storage chambers must be at a minimum, 2 metres.
- The entrance should be suitably wide for the largest bin within the store to be easily removed.
- Access doors should be double doors opening outwards and be able to be latched open during collections.
- Space within the chamber must be provided for all containers. Additional clear space must be provided between and around containers in order to access and remove them for collection. A walkway space should be included, to allow for the largest container to be removed without having to remove other containers.
- It is recommended that a maximum of eight 1100 litre containers should be enclosed within a single storage area. Additional storage areas should be constructed if more containers are required.

### c) Surfaces

• Containers should stand on a hard, paved, impervious, continuous and level surface. The store should not require stairs to access or transport containers for collection. The interior of the chamber should be washable.

### d) Ventilation

• Permanent ventilation must be installed at both the top and bottom of the chamber in order to encourage air movement. Ventilators must be fly and vermin proof.

### e) Drainage

• Suitable drainage must be provided for washing and draining into a suitable waste system.

### <u>f) Lighting</u>

• Enclosed storage areas must be artificially lighted for safety, as collections may often occur in minimal light conditions.

### g) Security

• The entrance to the storage area must be secured shut when not in use. Waste collection crews are not expected to carry storage specific keys. If required, combination locks can be used but it should be noted that any codes will be shared between the Council and their contractors.

### h) Signage and labeling

• Recycling and refuse storage areas must be clearly designated and be clear as to which households can use the facility.

### i) Chutes and Serviced Apartments

- If chutes are to be used within high-rise developments, it is recommended that a minimum of two chutes are installed for the separation of recyclables and residual waste.
- Where large residential buildings are serviced by private internal waste management systems, it is recommended that a waste storage room is provided on each floor.

### **RECYCLING AND REFUSE COLLECTION**

The Council operates an alternate weekly collection of refuse one week, with recycling and compost the alternate week. The specific collection day will be determined by the council and may change according to operational demands.

It is recommended that developers contact the council's Environment Services Department at least one month before a new development is occupied to arrange collection services.



### a) Collection vehicle dimensions:

Refuse and recycling collections are serviced by specific vehicles. Accommodating these vehicles and providing sufficient room for collections should be provided as part of the design and access considerations. The vehicle specification is as follows:

Specification	Dimensions
Length	10.5m
Height	4m
Width	3m
Turning circle	25m
Approach angle	15.5°
Length when loading	14.5m
Ground clearance at lowest part of vehicle	250mm
Weight (fully laden)	28 tonnes

Additional space will be required in the loading area to the rear of the vehicle. This should be sufficient for the largest bin to be wheeled to the loading area, and be lifted. A further 2 metres is required for the collectors to stand clear of containers whilst being lifted.

### b) <u>Access</u>

- Should the intention be that access and estate roads will not be adopted (become public highway), or up until adoption takes place, roads must be produced and maintained to adoptable standards in order to satisfactorily accommodate refuse vehicles. The council nor its contractors will accept liability for damage caused by wear and tear etc, unless negligent, in carrying out the authority's duty.
- Should the developer/management company not accept this, bins will need to be presented at a location agreed with the council, on the boundary of the private land where it meets the public highway. Bin storage points would need to be accessible from the public highway to service vehicles.
- Access and estate roads up to the facility should be tracked to ensure the 10.5 metre long collection vehicles (specification above) can be accommodated safely.
- The servicing vehicle should not be expected to mount the kerb to access the storage facility. Kerb edges must however allow the vehicle to swing whist cornering without scraping the kerb.
- Additional space of 1 metre should be accommodated for on all sides of the vehicle, providing for sufficient maneuvering room.

- Clear and unobstructed lines of sight are required if the vehicle needs to reverse. The need to reverse to should be kept to an absolute minimum.
- Parking restrictions should be considered if additional vehicles would otherwise impinge on the required space to access the facility.
- No overhanging wires or cables should obstruct the route of collection vehicles.
- Vegetation should be maintained to ensure clear access and to avoid contact with the vehicle.
- Street furniture should not prevent access to the storage facility.
- Security gates should not restrict collections.
- Access should not be restricted by any other obstacles. If crews are in any doubt they will be able to access the storage facility, a collection will not be carried out.
- If necessary, an authorised person should prepare for scheduled collections by ensuring access will be possible on collection day.

### c) <u>Surfaces</u>

- Consideration should be given to the surfacing of collection routes to assist refuse vehicles and collection operatives in the wheeling of the bins.
- The servicing vehicle should load on a flat surface, and should not have to access the facility up a gradient exceeding 1:12.
- Excessive gradients should be reduced wherever possible to assist collection operatives.
- Any surfaces the servicing vehicle will come into contact with must be able to withstand the maximum weight of the vehicle.
- Manhole covers, gully gratings and other points of weakness should be restricted, and where present must be of a heavy duty construction.
- Dropped kerbs should be used leading from the storage facility to the loading area of the servicing vehicle.
- Pathways must accommodate the widest container likely to be wheeled along the path. Additional space should be accommodated for on both sides. Minimum 2m wide.

### CHECKLIST for Officers

Item	Description
Recycling and Refuse Separation:	
Consideration of space for separation and storage of recycling and refuse in dwellings:	
Adequate space provided outside for correct types and sizes of bin:	
Waste Rooms:	

Location and size of waste room suitability:		
Adequate surfaces, ventilation, drainage, lighting and security provided in waste room:		
Recycling and Refuse Collection:		
Development can accommodate vehicle dimensions:		
Access is not restricted:		
Consideration given to surfacing:		