

Introduction

1.1 Purpose of Document

1.2 Policy Context – European & National

1.3 Waste Reduction

1.4 Submitting Planning Applications

Houses or flats with 2 units

2.1 Collection Services Overview

2.2 Internal Storage

2.3 External Storage – Capacity

2.4 External Storage – Design Features

2.5 Bulky Household Items

2.6 Garden Waste

Houses of Multiple Occupancy

3.1 Collection Services Overview

3.2 Internal Storage

3.3 External Storage – Capacity

3.4 External Storage – Design Features

3.5 Bulky Household Items

Purpose-Built Flats

4.1 Collection Services Overview

4.2 Internal Storage

4.3 External Storage – Capacity

4.4 External Storage – Bins

4.5 External Storage – Location

4.6 External Storage – Dimensions

4.7 External Storage – Design Features

4.8 External Storage – Access and Pulling Distances

4.9 Designated Collection Points

4.10 Bulky Household Items

Mixed-Use & Commercial Developments

5.1 Service Provision Overview

5.2 Segregation of Commercial and Household Waste

5.3 Waste Storage Capacity

5.4 Waste Collection Frequency

5.5 Recycling

5.6 Compactors

Blocks with 3 to 4 flats

6.1 Collection Services Overview

6.2 Internal Storage

6.3 External Storage – Capacity

6.4 External Storage – Design Features

6.5 Bulky Household Items

Underground Waste Storage Systems

7.1 Basement Storage of Eurobins

Vehicle Access

8.1 Roadway Strength

8.2 Roadway Layout

8.3 Manoeuvring

8.4 Permitted Access

Appendices

A. Container Dimensions

B. Container Price List

C. Vehicle Dimensions and Specifications

D. Bin Towing Operations

Waste and Recycling in Planning Policy Document August 2015
Edited October 2018
Produced by LBC Waste Management Team
E. Bin specifications and Images

Reference

Contacts

Section 1

Introduction

1.1 Purpose of Document

This document provides guidelines for architects and developers of new residential, commercial and mixed-use units in the London Borough of Croydon, to ensure that the arrangements for storing, collecting and managing waste are appropriate.

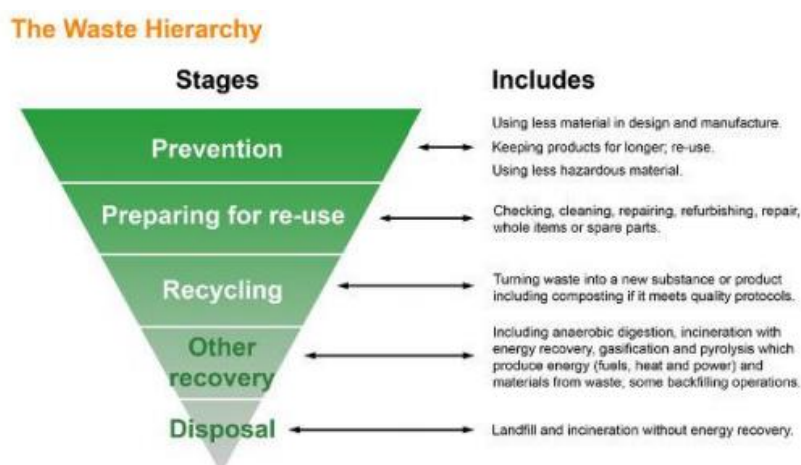
The requirements for managing waste are different according to the type and size of each development, so care should be taken to ensure the right sections of these guidelines are used.

Architects and developers should also refer to Approved Document H6 of the Building Regulations 2010, and British Standards EN BS 5906:2005. These guidelines do not cover the requirements for managing construction and industrial waste.

1.2 Policy Context – European & National

The Environmental Protection Act 1990 is the primary legislation governing waste management, and defines many of the roles and responsibilities involved. In particular, it sets out the duties of a waste collection authority (such as the London Borough of Croydon) to collect general waste and recycling produced by residents, subject to this waste being presented in an appropriate manner.

The Waste (England and Wales) Regulations 2011 have transposed the revised Waste Framework Directive from European to English law. These Regulations require local authorities, businesses and other bodies to ensure that all aspects of waste management are governed by the following hierarchy:



This means that architects and developers must make provision for waste to be reduced or reused prior to being put out for a recycling or general waste collection. There is more information on the local context in the next section.

1.3 Waste Reduction

Owing to the rising financial and environmental costs of waste disposal, it is the London Borough of Croydon's policy to require architects and developers to properly apply the waste hierarchy in new developments/conversions by taking steps to encourage a reduction in the amount of waste that is presented for collection. This is in addition to more established strategies for maximising recycling, such as making internal and external space available for segregation of recyclable items from other waste.

The following are suggested actions for reducing waste arising at new developments/conversions:

- Provide on-site composting facilities for all developments, including individual compost bins in private gardens and community composting sites on larger developments. Information on how to compost materials at home, and the benefits of doing so, should be provided in all new residents' packs.
- Engage with community and third sector organisations to collect reusable furniture items from bulk waste stores.
- Encourage reuse and sharing of items amongst neighbours by providing a physical or online noticeboard. This could include rarely-used kitchenware and cleaning appliances, as well as books, DVDs and other such products.
- Select durable, high-quality materials and fitted appliances for new homes and businesses.

1.4 Submitting Planning Applications

When a planning application is submitted, the London Borough of Croydon will expect details of the proposed storage accommodation for waste and recyclable material to be specified and agreed.

In determining planning applications, permission will not normally be granted in advance of submission of details indicating satisfactory storage arrangements for waste and recyclable material. However, in exceptional circumstances it may be considered appropriate to reserve details of the waste storage accommodation for approval prior to the commencement of construction.

In larger developments the Council may require a waste management plan to be submitted. This should indicate:

- Estimated volumes and types of waste produced by the development.
- The size and location of waste and recycling stores, and how the waste will be delivered to these facilities.

- The size and quantity of containers for waste.
- Any proposed separate collection point, and the method for transferring waste to this location.

Architects and developers are encouraged to consult with the Council's Waste Management department at the earliest opportunity in the design process to ensure that proposals for waste storage and collection meet the necessary requirements.

Developers of mixed-use or commercial sites may also need to consult with other waste collection providers to ensure that their requirements are met.

Section 2

Houses or flats with 2 units

This section of the guidance should be followed for houses and 2 flats which have a front garden or yard, where each property will have individual waste storage provision.

The London Borough of Croydon does not at present recommend the use of communal waste storage for developments of houses, and encourages developers to ensure that all street level properties have direct road access to simplify waste collection services.

2.1 Collection Services Overview

The London Borough of Croydon currently provides a fortnightly general waste, alternate weekly dry recycling and weekly food service for residents in individual houses.

Wheelie bins are used for containing and collecting general waste.

Wheelie Bins and Caddies are used for recycling, which are emptied every alternate week and food recycling emptied weekly. At present the following materials are included in the collections:

- Mixed paper and card (blue lid bin)
- Plastic bottles/plastic trays (grey lid bin)
- Food tins and drink cans (grey lid bin)
- Glass (grey lid bin)
- TetraPaks (grey lid bin)
- Textiles (plastic bag)
- Batteries (plastic bag)
- Food Waste (caddy-internal 9ltr and external 23ltr)
- Garden Recycling (Brown Bin)

Residents can opt-in for green garden recycling collection from the Council. The material being put out for collection should be placed in 240ltr or 140ltr wheelie bins. Developers should therefore ensure that there is sufficient space at the front of the premises for such material to be presented for collection so that no obstruction is caused to building access or the general waste and recycling wheelie bins.

A wide range of other items can be taken to the 3 Reuse & Recycling Centres.

2.2 Internal Storage

To enable and encourage occupants of new residential units to recycle their waste, developers should provide adequate internal storage, usually within the kitchen, for the segregation of recyclable materials from other waste.

It is recommended that developers consider methods to integrate the reusable sacks and 9ltr caddies for recycling into the design of the kitchen areas to enable and encourage residents to make full use of them.

2.3 External Storage – Capacity

Developers should ensure that there is sufficient and appropriate space within the front garden or yard for the necessary wheelie bins.

Per unit, it is recommended that space is allocated for 2x240-litre bin, 1x180ltr bin, food caddies and possibly garden recycling 240ltr or 140ltr bin. The dimensions of all standard bin sizes are included in Appendix A.

It shall be the responsibility of the developer to purchase the necessary bins for external waste storage, and ensure that these are in place before residents move into new properties. The London Borough of Croydon can provide these bins, with details of indicative prices given in Appendix B.

2.4 External Storage – Design Features

The design of the front garden or yard should enable the bins to be stored in a shaded position away from windows. The bins must not intrude on the street scene, and therefore must be contained within an appropriate front wall, fence or hedge for the garden, or alternatively within a dedicated and suitably designed structure within the boundary of the premises. Bin storage areas should be located to minimise nuisance to adjoining properties.

In all cases there must be sufficient space for the occupants to easily access both their general waste and recycling bins to deposit waste, and it must be possible for the lids of all bins to be fully opened. There should be clearance of 150mm around and between each bin to enable ease of movement. Each bin should be able to be used and moved without having to move another bin first.

All collections for individual houses take place at the front of the premises. Residents are required to present their wheelie bins for collection at the edge of their premises, but not on the pavement itself. Adequate provision must be made for the elderly, disabled and families with young children, such that the design of the front of the premises enables residents to set out all of the required containers for collection on the same day while maintaining sufficient access to the property entrance for a wheelchair or double-buggy.

Appropriate access for collection crews must also be included in the design of the outside space. This should involve solid surfaces, with no steps leading to and from the bin store. The distance from the presentation point to where the collection vehicle can safely stop should be no more than 20m. There should not be any locks on the doors or gates of bin storage chambers for individual houses.

If developments of individual houses are located on new access roads, these must be designed in accordance with Section 6 to allow safe use by waste collection vehicles.

2.5 Bulky Household Items

The Council offers a chargeable Bulky Waste Collection Service. Bulky waste is

Large and unwanted items are household items that:

- cannot be re-used or recycled
- Residents cannot transport to our waste, recycling and re-use centres.

Developers should ensure that residents are able to present large items for collection so that no obstruction is caused to building exits, nor to the general waste and recycling bins. The space that will be required to store these items on the site is 10m².

Where bulky items are dumped on a private development (or left in a bin storage area without a collection being booked), it is the responsibility of the site managers to organise a collection with the Council or a private contractor at a cost.

2.6 Garden Waste

Residents can sign up for the green garden waste collection from the Council. Once sign-up commences, the service will operate on a 12 month rolling basis. This means that you can join at any point in the year and the service will be renewed annually from your sign up date each subsequent year. The cost is currently £61.50 per annum per bin. The sizes available are 140ltr and 240ltr wheelie bins.

Developers should therefore ensure that there is sufficient space at the front of the premises for such material to be presented for collection so that no obstruction is caused to building access or the general waste and recycling wheelie bins.

Section 3

Houses of Multiple Occupants (HMOs)

This section of the guidance should be followed for houses being used as a HMO which have a front garden or yard.

The London Borough of Croydon does not at present recommend the use of communal waste storage for developments of HMOs, and encourages developers to ensure that all street level properties have direct road access to simplify waste collection services.

3.1 Collection Services Overview

The London Borough of Croydon currently provides a fortnightly general waste, alternate weekly dry recycling and weekly food service for residents in HMOs.

Wheelie bins are used for containing and collecting general waste.

Wheelie Bins and Caddies are used for recycling, which are emptied every alternate week and food recycling emptied weekly. At present the following materials are included in the collections:

- Mixed paper and card (blue lid bin)
- Plastic bottles/plastic trays (grey lid bin)
- Food tins and drink cans (grey lid bin)
- Glass (grey lid bin)
- TetraPaks (grey lid bin)
- Textiles (plastic bag)
- Batteries (plastic bag)
- Food Waste (caddy-internal 9ltr and external 23ltr)
- Garden Recycling (Brown Bin)

Developers should therefore ensure that there is sufficient space at the front of the premises for such material to be presented for collection so that no obstruction is caused to building access or the general waste and recycling wheelie bins.

A wide range of other items can be taken to the 3 Reuse & Recycling Centres.

3.2 Internal Storage

To enable and encourage occupants of new residential units to recycle their waste, developers should provide adequate internal storage, usually within the kitchen, for the segregation of recyclable materials from other waste.

It is recommended that developers consider methods to integrate the reusable sacks and 9ltr caddies for recycling into the design of the kitchen areas to enable and encourage residents to make full use of them.

3.3 External Storage – Capacity

Developers should ensure that there is sufficient and appropriate space within the front garden or yard for the necessary wheelie bins.

Depending on the development of the HMO is dependent on what capacity is required. The dimensions of all standard bin sizes are included in Appendix A.

HMO development 1:

This is for HMO properties with 5 or less rooms that have shared kitchen facilities and no kitchenette area within the bedroom. These properties are suitable for individual household bins listed in above in Section 2. Managing agents/landlords can opt in to pay for additional collections of the general waste, currently the council does not offer additional paid for collections for recycling.

HMO development 2:

This is for HMO properties with any amount of rooms that have no shared kitchen facilities and kitchenette area within the bedroom. These properties are suitable for the same refuse and recycling bins listed in Section 4. Managing agents/landlords can opt in to pay for additional collections of the general waste, currently the council does not offer additional paid for collections for recycling.

HMO development 3:

This is for HMO properties with 6 or more rooms that have shared kitchen facilities and no kitchenette area within the bedroom. These properties are suitable for the same refuse and recycling bins listed in Section 4. Managing agents/landlords can opt in to pay for additional collections of the general waste, currently the council does not offer additional paid for collections for recycling.

Depending on how many residents there are per HMO property, then Council would recommend using the following calculations for options 2 and 3:

- 1 resident = 48ltrs general waste, 96ltrs dry recycling, 4.6ltrs food recycling
(for example: **Number of residents x waste stream = size of bin**)

It shall be the responsibility of the developer to purchase the necessary bins for external waste storage, and ensure that these are in place before residents move into new properties. The London Borough of Croydon can provide these bins, with details of indicative prices given in Appendix B.

3.4 External Storage – Design Features

The design of the front garden or yard should enable the bins to be stored in a shaded position away from windows. The bins must not intrude on the street scene, and therefore must be contained within an appropriate front wall, fence or hedge for

the garden, or alternatively within a dedicated and suitably designed structure within the boundary of the premises. Bin storage areas should be located to minimise nuisance to adjoining properties.

In all cases there must be sufficient space for the occupants to easily access both their general waste and recycling bins to deposit waste, and it must be possible for the lids of all bins to be fully opened. There should be clearance of 150mm around and between each bin to enable ease of movement. Each bin should be able to be used and moved without having to move another bin first.

All collections for individual houses take place at the front of the premises. Residents are required to present their wheelie bins for collection at the edge of their premises, but not on the pavement itself. Adequate provision must be made for the elderly, disabled and families with young children, such that the design of the front of the premises enables residents to set out all of the required containers for collection on the same day while maintaining sufficient access to the property entrance for a wheelchair or double-buggy.

Appropriate access for collection crews must also be included in the design of the outside space. This should involve solid surfaces, with no steps leading to and from the bin store. The distance from the presentation point to where the collection vehicle can safely stop should be no more than 20m. There should not be any locks on the doors or gates of bin storage chambers for individual houses.

If developments of individual houses are located on new access roads, these must be designed in accordance with Section 6 to allow safe use by waste collection vehicles.

3.5 Bulky Household Items

The Council offers a chargeable Bulky Waste Collection Service. Bulky waste is Large and unwanted items are household items that:

- Cannot be re-used or recycled
- Residents cannot transport to our waste, recycling and re-use centres.

Developers should ensure that residents are able to present large items for collection so that no obstruction is caused to building exits, nor to the general waste and recycling bins. The space that will be required to store these items on the site is 10m².

Where bulky items are dumped on a private development (or left in a bin storage area without a collection being booked), it is the responsibility of the site managers to organise a collection with the Council or a private contractor at a cost.

Section 4

Flats with 5 or more units

This section provides information and guidance on waste storage and collection requirements for purpose-built blocks of flats, where residents share communal waste facilities.

It must be noted that all blocks with 5 or more units will require to hire through the Council or purchase bins via a third party. The Council will not provide landfill bins free of charge to these properties.

The guidance given in this section on the design, size and location of bin stores will be applicable for other types of facility as well, including commercial units and housing developments without individual bins.

Architects and developers should be aware that the London Borough of Croydon does offer a portable compacted waste collection service. At sites where compaction is used, waste collection and disposal will need to be arranged and paid for through the council or a private contractor that is able to offer an appropriate service. More information on compaction is available in Section 4.

4.1 Collection Services Overview

The London Borough of Croydon currently provides weekly or fortnightly general waste collection services for residents living in purpose-built flats, with separate collections of recycling undertaken on a weekly or fortnightly basis. Food recycling is collected weekly.

Separate containers are used for dry recycling. These communal Euro bin containers are sited around bin storage areas or other appropriate locations, and are clearly labelled to distinguish them from general waste and food containers.

The following items can be put comingled into the recycling bins:

- Mixed paper and card
- Plastic bottles/plastic trays
- Food tins and drink cans
- Glass
- TetraPaks

Separate containers are used for food recycling. These communal wheelie bin containers are sited around bin storage areas or other appropriate locations, and are clearly labelled to distinguish them from general waste and recycling containers.

A wide range of other items can be taken to the 3 Reuse & Recycling Centres.

The Council offers a chargeable Bulky Waste Collection Service. Bulky waste is

Large and unwanted items are household items that:

- cannot be re-used or recycled
- Residents cannot transport to our waste, recycling and re-use centres.

In these cases, a separate designated area must be provided for bulky waste, and only those items which have been booked for a collection will be cleared. The space that will be required to store these items on the site is 10m².

Where bulky items are dumped on a private development (or left in a bin storage area without a collection being booked), it is the responsibility of the site managers to organise a collection with the Council or a private contractor at a cost.

4.2 Internal Storage

To enable and encourage occupants of new residential units to recycle their waste, developers should provide adequate internal storage, usually within the kitchen, for the separation of recyclable materials from other waste.

It is recommended that developers consider methods to integrate the reusable sacks and 9ltr caddies for recycling into the design of the kitchen areas to enable and encourage residents to make full use of them.

4.3 External Storage – Capacity

The London Borough of Croydon will undertake one weekly or fortnightly collection of general waste. Recycling collections will be provided on a weekly or fortnightly basis and food recycling collected weekly, but developers should ensure there is sufficient bin storage capacity for the latter. Sufficient capacity for waste storage must be provided for each household to allow for extended gaps between collections owing to Bank Holidays, severe winter weather or other operational disruptions.

The London Borough of Croydon recommends that developers follow the guidance issued in this document. Flats with 9 units will require an 1100ltr for general waste, using this as a base the Council recommend 122.2trs per flat.

However, depending on how many bedrooms per flat/residents then Council would recommend using:

- 120ltrs – studio – 1 person
- 130ltrs – 1 bedroom – 2 persons
- 140ltrs – 2 bedroom – 3 persons
- 150ltrs – 3 bedroom – 4 persons
- 160ltrs – 3+ bedroom – 5+ persons

The London Borough of Croydon recommends that flats with 10 units will require a 1280ltr for dry recycling, using this as a base the Council recommend 128ltrs per flat.

The London Borough of Croydon recommends using 9.6ltrs of food recycling per flat. This includes the use of 140ltr for up to 15 flats and a 240ltr bin for 16 to 25 flats.

Developers should give consideration to the flexibility of the storage capacity provided, so that the Council and site managers are able respond effectively to rising levels of resident participation in recycling and/or an increased range of materials becoming accepted in the recycling bins.

4.4 External Storage – Bins

It shall be the responsibility of the developer to purchase the necessary bins for external waste storage, and ensure that these are in place before residents move into new properties. Please see Appendix E for specifications and images.

In the event that a developer/site manager wishes to acquire bins independently of the Council, the full specifications must be provided and agreed in advance with the Waste and Recycling department. The Council reserves the right to refuse to empty bins that do not meet the required standards if there is a risk of damage to the collection vehicles or to the safety of the collection staff.

For the latest indicative container price list for bin purchases from London Borough of Croydon, see Appendix B. Full terms and conditions for the supply of containers will be provided at the point of purchase, and updated prices should be sought from the Council.

It will be the responsibility of the site managers to arrange for bins to be cleaned. It is recommended that space is allocated on-site for the storage of at least one empty container, to allow cleansing of bins to be undertaken on a rotation basis without reducing the availability of general waste and recycling storage capacity.

Site managers will be responsible for the security of the bins, and the storage arrangements should therefore be designed to minimise the risk of theft, arson or other vandalism. In the event of a bin being stolen, or damaged beyond repair through vandalism, the site manager will be required to purchase a replacement container. Bins that have been purchased from other sources will be the responsibility of the site managers to repair or replace if damaged.

3.5 External Storage – Location

For purpose-built flats it is necessary to provide an appropriate storage area for general waste, dry recycling and food recycling containers. These must be an integral part of any new development, with appropriate design, capacity, layout, access and signage.

Communal bin storage areas should be clearly identified on plans, and the space allocated to them must be guaranteed for the purposes of waste storage. Communal bin storage areas must be located within the footprint of the development, and ideally be at ground level. However, if an underground storage solution is planned for standard wheeled bins (such as in a basement car park) then an appropriate collection point for the containers at ground level must be provided and clearly shown on the plans. Developers that are looking at using underground systems should refer to Section 5.

Bin storage areas should be easily accessible for the dwellings that they serve, with residents being required to walk no further than 30m from their front door (excluding vertical distances) when carrying general waste and recycling. For larger developments it may be necessary to provide several bin storage areas to ensure an adequate distribution across the site. The location of communal bin storage areas should have regard to the impact of noise and smell on the occupants of neighbouring properties, both existing and proposed.

4.6 External Storage – Dimensions

The size and layout of each bin storage area must be designed to accommodate a sufficient quantity of general waste and recycling bins for the number of dwellings that the storage area is likely to serve. Where more than one bin storage area is being provided, consideration should be given to the likely usage of each storage area so that they are sized appropriately. Developers should take into account the preference of some residents to deposit waste as part of their daily commute, which may mean they use a bin store they walk past on their way out, rather than the one closest to their home. For blocks of flats divided into cores, the size of the bin stores must correspond to the number of dwellings accessed through each entrance.

All bins must be fully accessible from the front face, to allow for easy depositing of waste. Layouts that require bins to be swapped round mid-week are permissible if it is demonstrated that there will be site management presence at the development.

There must be a minimum of 150mm clearance around and between each bin within a storage area. Where there is more than one bin within a storage area, there must be 2m clearance in front of each bin to enable it to be accessed and safely moved without needing to move any of the other containers.

All doors and alleys must be at least 2m wide to allow for safe manoeuvring of bins.

The minimum internal height for a bin storage area and any access doorways is 2m. There should be no other internal fixtures or fittings that reduce the clearance above the bins, so that their lids can be opened fully.

4.7 External Storage – Design Features

Bin storage areas should be contained within a suitable enclosure to prevent nuisance from the spread of waste, odour or noise. The walls should be constructed of materials that are non-combustible, impervious, easy to keep clean, and able to withstand impacts from fully-loaded Eurobins being moved. Where necessary, the installation of a suitable buffer can prevent contact between the bins and the inside faces of the walls. It is also recommended that any switches, plugs or other similar installations are placed above or well below the height of the rim of the bins.

The external faces of the enclosure walls should be constructed or clad in material that is in keeping with the visual style of the surroundings. It is recommended that the use of appropriate screening or soft landscaping is considered to make bin storage areas more aesthetically pleasing.

The enclosures must be suitably designed to prevent entry by vermin.

Where a roof is being placed over the bin storage area or it is located indoors, the enclosed space must be well ventilated. The roof must be constructed of non-combustible, robust, secure and impervious material.

There should be adequate lighting in the bin storage area. This lighting should involve sealed bulkhead fittings for the purpose of cleaning down with hoses. Switching should be either through a proximity detection system or on a time delay button to prevent lights being left on. This lighting should be easy to maintain by local site staff without the need for specialist parts.

The use of doors or gates can help to reduce the potentially detrimental visual impact of a bin storage area, and can also enable site manager to reduce the risk of bin theft or vandalism. Such doors must not open outward over a public footway or road, and should not cause an obstruction to other access when in an open position. They should be able to remain or be secured in the open position so that access for collection staff is unimpeded when the bins are being emptied.

The thresholds of any doors or gates must be free of rims or impediments at floor level.

There must be a water supply with standard tap fittings available to the bin storage area to enable washing down of the bins, walls and floor.

Bin storage areas must have a suitable impermeable hard standing ground covering which can be cleaned easily. The slope of the floor must enable it to drain properly and completely. The drainage system must be suitable for receiving a polluted effluent. Any gullies must not be in the track of the container wheels. See Section 3 for details on requirements for cleansing bin storage areas.

The design of bin storage areas should pay as much regard as possible to accessibility for disabled or elderly residents. Where the bin storage areas cannot be designed to meet the requirements of these residents, suitable alternative

arrangements should be put in place by the site managers to support any tenants who are unable to use the external waste storage facilities provided.

Storage areas for general waste and recycling bins should be clearly identifiable as such, through the use of appropriate signage on doors or walls.

4.8 External Storage – Access and Pulling Distances

The bin storage areas must be located within a specified minimum distance of a point where the collection vehicle can safely stop for loading. The maximum distances that operatives should be required to wheel containers, measured from the furthest point within the storage/collection area to the loading position at the back of the vehicle, which is 20 meters.

The stopping point for the vehicle should be safe, legal and designed to minimise any obstruction to traffic. Please note the requirements for vehicle access given in Section 6.

The surfacing of the route the operatives will take between the bin storage/collection area and the vehicle should have a hard, smooth and continuous finish. The pathway must be free of any ironworks, trees, drainage gullies or other features which would obstruct or impede the movement of the bins.

The pathway should be free of any steps. If access to a roadway is required along the route then a dropped kerb must be provided as close as possible to the storage area.

Slopes should be avoided wherever possible along the pathway, but where needed the gradient should fall away from the bin storage area and should be no greater than 1:12. It is not acceptable for the route between the storage area and the collection vehicle (i.e. in the direction that filled bins will be pulled) to have any uphill gradients.

Signage and, if appropriate, road/pavement markings should be used to indicate that the storage areas are not to be blocked at any time.

4.9 Designated Collection Points

In locations where it is not practicable for architects to provide full access to the bin storage areas for waste collection vehicles, or standard Eurobins are to be located in underground car parks, a separate designated collection point must be provided.

It is the responsibility of the site managers to move the waste containers to the designated collection point by 6am on the scheduled day, and then to return the containers to their storage areas after emptying.

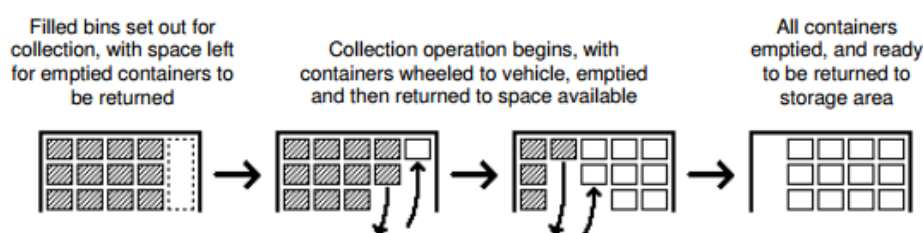
Sufficient provision should be made to ensure that all health and safety requirements are met for on-site staff to move the bins. Where bins are to be towed to the

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presentation point using a tug, there will be specific requirements for the site layout, bin design and towing operation. Further indicative information is provided in Appendix D.

To minimise the potential for delays to collections, the designated collection area should be large enough for all the general waste and recycling bins to be positioned ready for collection at the same time.

The space in the collection area must be sufficient to enable operatives to return emptied bins to a position that does not obstruct the manoeuvring of those containers that are yet to be emptied. A simple example of how this might be achieved is given in the diagram below:



Developers and site managers must make sufficient provision to prevent other vehicles parking in the collection area, or in a position that would impede access for collection operatives.

Adequate arrangements must be provided for the collection vehicle to remain at its loading point for an extended period, particularly where a significant number of bins are to be emptied at the same time. Site managers should ensure that no other access is required to or through the designated collection point on the scheduled day of collection.

In positioning and designing the collection point, architects must ensure that the distance that operatives will need to wheel bins from the furthest point within this area to reach the loading point at the back of the collection vehicle does not exceed 20m.

Developers should ensure that they adhere to the other relevant access requirements for waste collection. In particular, dropped kerbs must be provided beside the designated collection point if they are not level with the roadway.

Developers will need to give consideration as to how residents can dispose of their waste when the bins have been moved to the collection point. If the general waste bins have been moved at a separate time to the recycling bins, there must be adequate arrangements in place at all waste storage areas to ensure that residents attempting to deposit non-recyclable general waste have the opportunity to do so without contaminating a recycling container.

4.10 Bulky Household Items

The Council offers a chargeable Bulky Waste Collection Service. Bulky waste is Large and unwanted items are household items that:

- cannot be re-used or recycled
- Residents cannot transport to our waste, recycling and re-use centres.

Developers should ensure that residents are able to present large items for collection so that no obstruction is caused to building exits, nor to the general waste and recycling bins. The space that will be required to store these items on the site is 10m².

Where bulky items are dumped on a private development (or left in a bin storage area without a collection being booked), it is the responsibility of the site managers to organise a collection with the Council or a private contractor at a cost.

Section 5

Commercial & Mixed-Use Developments

This section provides information on the specific requirements for developments that include commercial units and properties with 3 to 4 flats. The information given in this section should be treated as additional to those which are set out in that section in relation to capacity, storage and access.

5.1 Service Provision Overview

The London Borough of Croydon undertakes regular collections of residential waste, details of which have been given in the previous sections. For standard general waste and recycling collections there is no charge levied by the Council, except for the purchase or hire of bins for new and existing developments/conversions. And managing agents or residents associations have opted for additional collections.

However, the arrangements for commercial waste are different, as businesses do not receive a collection service through their Business Rates. The Council does offer a commercial waste collection service, with a range of container options and collection frequencies to suit all types of premises. Businesses can also choose to take out a contract with a fully licensed private waste collection firm.

5.2 Segregation of Commercial and Household Waste

External storage areas for waste on mixed-use developments must be segregated, so that domestic and commercial waste bins are in separate secured areas.

Access to the domestic bins should only be possible for residents of the development and site management. It is also good practice to secure the commercial bin storage area to prevent residents from misusing these for disposing of household waste.

Suitable arrangements for segregating the storage of bulky household waste items will also need to be made. The space that will be required to store these items on the site is 10m².

All storage areas must be easily identifiable through the use of clear and appropriate signage. It is also recommended that residents and businesses are provided with leaflets or information sheets explaining which waste storage areas to use.

In developments where on-site businesses will be arranging individual contracts with waste collection providers, it will be necessary to ensure there is sufficient space available for each commercial unit to have its own bin or allocated area for storage.

Architects and developers should ensure that provisions for waste storage and collection are compatible with the varying container and vehicle types used by different waste contractors. If it is known that a particular provider is the intended

contractor for a site then that company should be consulted with at the earliest opportunity.

Flats above Shops

Where there is not adequate space to install bin store areas, specified in sections above. The Council offers a bag recycling system for flats above shops. Developers will need to ensure that there is adequate internal space to store relevant bags, the bags are standard 8kg bags. The bags will need to be presented on the pavement, not obstructing other pedestrians between the times of 6pm and 5am. The bags can hold:

- Mixed paper and card
- Plastic bottles/Plastic trays
- Food tins and drink cans
- Glass
- TetraPaks

5.3 Waste Storage Capacity

The guidance given in Section 4 should be followed (unless unsuitable for bin store) in relation to the required capacity for domestic general waste and recycling.

The quantity of waste generated on commercial premises can vary significantly, depending on the nature of the business occupants and the frequency of collection they secure through their waste contract. Architects and developers should identify the types of businesses intended for any units proposed on their developers, and ensure that adequate storage capacity is provided for the likely quantity of waste generated. Further guidance for some types of premises is given in British Standards BS 5906:2005.

5.4 Waste Collection Frequency

Residential general waste collections are undertaken by the London Borough of Croydon on a weekly or fortnightly basis, with recycling services carried out every week or fortnight.

Collection frequencies for commercial waste will be weekly. However, where commercial units will be producing food waste, developers should be aware of the increased likelihood of odours. A twice-weekly collection service is recommended for such businesses, and should be allowed for in the design of the waste storage and access. Premises which generate a significant quantity of waste may also benefit from a twice weekly collection to reduce the need for storage space.

5.5 Recycling

Mixed-material recycling is in operation for household and business waste, but such schemes may not be appropriate or permissible for businesses. As such, architects should consider the need for separate bins for each material for business premises.

Medium to large hotels and restaurants must be designed to include separate storage provision for waste cooking oil.

5.6 Compactors

In locations where the space available for storing waste is limited, it may be appropriate for developers to consider using compaction systems to reduce the volume of the waste being generated on site. There are various types of compactors available to suit different types and sizes of development.

Developers should note that the London Borough of Croydon does offer a portable compacted waste collection service. The intended service provider should be consulted at the earliest opportunity in the planning process to ensure that their requirements for container storage and access are met.

Compactors for residential developments only tend to be effective if the development has a managed waste system with portorage. The use of compactors in residential developments will also mean that site managers will need to pay for ongoing household waste collections operated by the council.

Compactors are recommended for all office developments larger than 5,000m². For offices over 15,000m² in size a portable compactor is preferable, for those in excess of 20,000m² a portable skip compactor or portable compactor may be used.

For major retail developments of over 5,000m² a portable compactor is recommended. Those over 10,000m² should be provided with a rotary compactor or portable skip compactor. Croydon Council does not collect static compactors.

For hotels up to and exceeding 250 bedrooms the most appropriate type of compactor is the portable compactor.

Section 6

Blocks with 3 to 4 Flats

This section of the guidance should be followed for blocks with 3 to 4 flats which have a front garden or yard, where each property will have individual waste storage provision.

The London Borough of Croydon does not at present recommend the use of communal waste storage for developments of 3 to 4 flats, and encourages developers to ensure that all street level properties have direct road access to simplify waste collection services.

6.1 Collection Services Overview

The London Borough of Croydon currently provides a fortnightly general waste, alternate weekly dry recycling and weekly food service for residents in flats with 4 or less units.

Wheelie bins are used for containing and collecting general waste.

Wheelie Bins and Caddies are used for recycling, which are emptied every alternate week and food recycling emptied weekly. At present the following materials are included in the collections:

- Mixed paper and card (blue lid bin)
- Plastic bottles/plastic trays (grey lid bin)
- Food tins and drink cans (grey lid bin)
- Glass (grey lid bin)
- TetraPaks (grey lid bin)
- Textiles (plastic bag)
- Batteries (plastic bag)
- Food Waste (caddy-internal 9ltr and external 23ltr)
- Garden Recycling (Brown Bin)

Residents in flats who have an individual garden (not communal) can opt-in for green garden recycling collection from the Council. The material being put out for collection should be placed in 240ltr or 140ltr wheelie bins. Developers should therefore ensure that there is sufficient space at the front of the premises for such material to be presented for collection so that no obstruction is caused to building access or the general waste and recycling wheelie bins.

A wide range of other items can be taken to the 3 Reuse & Recycling Centres.

6.2 Internal Storage

To enable and encourage occupants of new residential units to recycle their waste, developers should provide adequate internal storage, usually within the kitchen, for the segregation of recyclable materials from other waste.

It is recommended that developers consider methods to integrate the reusable sacks and 9ltr caddies for recycling into the design of the kitchen areas to enable and encourage residents to make full use of them.

6.3 External Storage – Capacity

Developers should ensure that there is sufficient and appropriate space within the front garden or yard for the necessary wheelie bins.

3 to 4 flats New Build:

Per unit, it is recommended that space is allocated for 2x240-litre bin, 1x180ltr bin, food caddies and possibly garden recycling 240ltr or 140ltr bin. The dimensions of all standard bin sizes are included in Appendix A.

3 to 4 flats Conversion:

The Council understands that not all conversions have the possibility to store large amount of bins. Therefore conversions will need to adopt a shared bin store area. The Council recommends the following for these properties:

- Per flat = 140ltr landfill, 120ltr comingled recycling, 120ltr paper and card recycling and 23ltr food recycling (for example: **Number of flats x waste stream = size of bin**)

It shall be the responsibility of the developer to purchase the necessary bins for external waste storage, and ensure that these are in place before residents move into new properties. The London Borough of Croydon can provide these bins, with details of indicative prices given in Appendix B.

6.4 External Storage – Design Features

The design of the front garden or yard should enable the bins to be stored in a shaded position away from windows. The bins must not intrude on the street scene, and therefore must be contained within an appropriate front wall, fence or hedge for the garden, or alternatively within a dedicated and suitably designed structure within the boundary of the premises. Bin storage areas should be located to minimise nuisance to adjoining properties.

In all cases there must be sufficient space for the occupants to easily access both their general waste and recycling bins to deposit waste, and it must be possible for the lids of all bins to be fully opened. There should be clearance of 150mm around and between each bin to enable ease of movement. Each bin should be able to be used and moved without having to move another bin first.

All collections for 3 to 4 flats take place at the front of the premises. Residents are required to present their wheelie bins for collection at the edge of their premises, but not on the pavement itself. Adequate provision must be made for the elderly, disabled and families with young children, such that the design of the front of the premises enables residents to set out all of the required containers for collection on the same day while maintaining sufficient access to the property entrance for a wheelchair or double-buggy.

Appropriate access for collection crews must also be included in the design of the outside space. This should involve solid surfaces, with no steps leading to and from the bin store. The distance from the presentation point to where the collection vehicle can safely stop should be no more than 20m. There should not be any locks on the doors or gates of bin storage chambers for 3 to 4 flats.

If developments of 3 to 4 flats are located on new access roads, these must be designed in accordance with Section 6 to allow safe use by waste collection vehicles.

6.5 Bulky Household Items

The Council offers a chargeable Bulky Waste Collection Service. Bulky waste is Large and unwanted items are household items that:

- cannot be re-used or recycled
- Residents cannot transport to our waste, recycling and re-use centres.

Developers should ensure that residents are able to present large items for collection so that no obstruction is caused to building exits, nor to the general waste and recycling bins. The space that will be required to store these items on the site is 10m².

Where bulky items are dumped on a private development (or left in a bin storage area without a collection being booked), it is the responsibility of the site managers to organise a collection with the Council or a private contractor at a cost.

6.6 Garden Waste

Residents can sign up for the green garden waste collection from the Council, providing this is not a communal garden area. Once sign-up commences, the service will operate on a 12 month rolling basis. This means that you can join at any point in the year and the service will be renewed annually from your sign up date each subsequent year. The cost is currently £61.50 per annum per bin. The sizes available are 140ltr and 240ltr wheelie bins. Developers should therefore ensure that there is sufficient space at the front of the premises for such material to be presented

Waste and Recycling in Planning Policy Document August 2015

Edited October 2018

Produced by LBC Waste Management Team

for collection so that no obstruction is caused to building access or the general waste and recycling wheelie bins.

Section 7

Underground Waste Storage Systems

7.1 Basement Storage of Eurobins

A relatively simple solution to providing underground storage of waste containers involves placing Eurobins in a basement storage room (often part of an underground car park) that is accessible by tenants for depositing waste. The bins are then brought up to ground level by the site managers through the use of service elevators or ramps.

The design and layout of the storage area should meet the appropriate requirements set out in Section 3. If access is through an underground car park, appropriate markings and parking restrictions may be required to protect access to the bin stores.

It will be the responsibility of the site manager to move the waste containers to an agreed designated collection point at ground level, and return the containers to their storage area after emptying. See Section 3 for more details about the requirements of this designated collection point.

A written statement must be provided to demonstrate how the movement of the bins to the collection point will be managed and undertaken. The plans must also show the parking location for any tractor and trailer that may be used by site staff for this purpose.

Where a goods/service elevator is intended to be used to transport the bins to ground level, it must be large enough to safely accommodate a porter and the appropriate number of containers, and the width of the doors must allow free movement of the bins.

Section 8

Vehicle Access

Vehicles used to collect waste and recycling will be amongst the largest and heaviest needing to access any development. Further information about the dimensions and other specifications of waste collection vehicles used by the London Borough of Croydon, please see Appendix C. Developers should be aware that other private contractors undertaking collections of commercial waste from developments may use larger vehicles.

In order to ensure that all general waste and recycling collections can take place unimpeded and without the risk of any damage to the vehicles, paving or other fabric of the sites, developers must ensure that access roads and driveways meet the following requirements.

8.1 Roadway Strength

Roads should have foundations and a hard-wearing surface capable of withstanding a fully laden waste collection vehicle of 38 tonnes gross vehicle weight, with a maximum axle weight of 11.5 tonnes. Any ironworks situated in the roadways should also be capable of withstanding the loads indicated.

8.2 Roadway Layout

Roads should have a minimum width of 5m. Pinch points, such as archways or gates, should give a minimum clearance of 3.7m width, and additional allowances must be given if vehicles are required to approach from an angle.

Any part of a building through which a waste collection vehicle passes must have a minimum clear height of 4.5m, to allow for overhead fixtures and fittings.

If a turning space is necessary, the road layout should permit a turning circle of 17m kerb-to-kerb, or 20.3m wall-to-wall.

Any locations where the gradient of the roadway changes must be designed to allow for the overhang of the lifting equipment at the back of waste collection vehicles.

8.3 Manoeuvring

Waste collection vehicles should not be required to reverse more than 12m, and then only in exceptional circumstances. If pedestrians also use access routes where waste collection vehicles will be required to reverse, an additional raised footpath must be provided.

Vehicles undertaking collections should be able to stop for loading in a safe and legal position where they will not obstruct other traffic, pedestrians or access.

There is a preference to drive forwards into and out of any site. Where this is not possible, a plan should be made to reverse into the site and drive out forwards. The Highway Code (200 – 203) requires that large vehicles do not reverse onto a main road.

Consideration should always be given to the swing needed to gain access onto a site. If the road is narrow and cars park on one side, it is inevitable that the vehicle truck will not be able to swing in to gain the access.

Appropriate measures must be incorporated into road layouts to control unauthorised parking of vehicles that would prevent access by the waste collection vehicles and staff. Developers should ensure that sufficient car parking is provided in order to prevent such problems.

8.4 Permitted Access

Access to storage areas should be possible from 06:00 to 22:00, Monday to Sunday.

If there is any electronic gate or barrier control into the development then 4 keys/fobs/codes need to be sent to waste management at the following address:

New Development/Conversions Waste& Recycling Officer

Public Realm Office

Stubbs Mead Depot

Factory Lane

Croydon

CR0 3RL

Appendix A

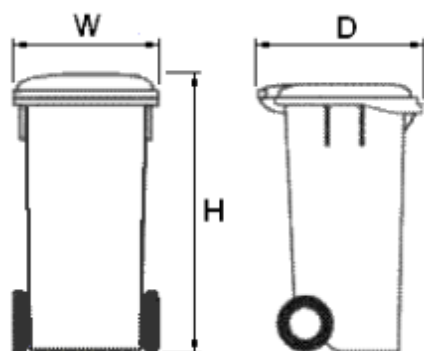
Container Dimensions

Two-Wheeled Bins

Note that recycling bins are normally available in 360- and 1280-litre sizes only.

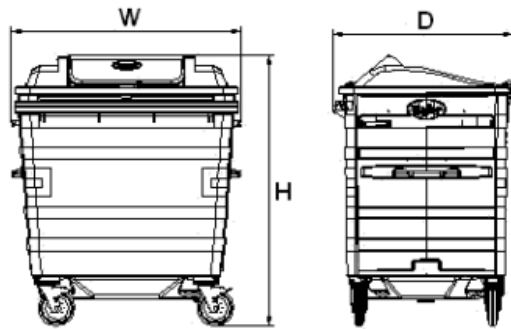
Food recycling bins are normally available in 140- and 240-litre sizes only.

bin	height	width	depth
360 landfill	110	60	88
240 landfill	107	58	74
180 landfill	106	54	65
360 dry recycling	110	60	88
240 recycling	107	58	74
240 food recycler	107	58	74
140 food recycler	106	48	54



Four-Wheeled Bins

bin	height	width	depth
1100 landfill	138	127	100
660 landfill	132	126	74
1280 dry recycling	143	126	98
chamberlain	150	102	97



Appendix B

Container Price List

This table gives indicative prices for waste containers purchased and Hired from the London Borough of Croydon. Final prices will be confirmed at the point an order is made.

Purchase

bin	Price (£)
180 general waste	40
240 dry recycling grey lid	40
240 dry recycling blue lid	40
240 food recycler	285
140 food recycler	100

Hire

bin size	cost per annum	additional collection
1100	£190.00	£25.83
660	£170.00	£22.96
360	£82.00	£14.35
chamberlain	£160.00	£22.34
paladin	£160.00	£22.34

Updated prices should be sought from the Waste and Recycling Management Department.

Appendix C

Vehicle Dimensions and Specifications

This section provides information on the standard vehicles used by the London Borough of Croydon to collect both general waste and recycling. A schematic of the vehicles is provided on the following page.

Vehicle model	OLTP-22 6x4
Compaction body type - effective volume(s)	Olympus Twin Pack-22 (21.6 m ³)
Elite chassis type	6x4 Wide Track
GVW (Gross Vehicle Weight)	26000
Front axle plated weight	8000
Rear axle/bogie plated weight	1900
Air suspension	Front: 'Air-Assist' optional, Rear: standard
Recycling box type	-
Recycling box type (capacity m ³)	-
V1 Overall wheelbase	5300
Turning circle - overall (metres)	19.1****
Vehicle unladen weight***	16620
V2 Overall length	9220
Overall length - tallgate raised	10275
V3 Front axle to front of compaction body	650
V4 Front overhang	1665
Front overhang - cab tilted	3465
V5 Rear overhang	2060
Rear overhang - tallgate raised	2940
V6 Overall height	3690
Overall height - tallgate raised	5190
V7 Height at exhaust tip - nominal	3750
V8 Cab roof height	3040
Cab roof height - cab tilted	3600
V9 Cab floor height	805
V10 First cab step height from ground	435
V11 Rave rail height	1070
V12 Ground clearance at lowest part of vehicle	250
V13 Ground clearance - tallgate	435
V14 Approach angle	15.5°
V15 Departure angle	15°

35/65 split shown (50/50 split also available)



The above vehicle dimension are subject to change and advice should be sought from the waste and recycling department for current measurements.

Architects and developers of sites where commercial units will be located should be aware that private waste contractors use a range of vehicles, which can sometimes be larger or have different manoeuvrability concerns than those specified below. In these circumstances, developers should consult with the intended private contractors to establish the specifications for other vehicles that may need to access the site. It is recommended that a 6x4 rigid vehicle is modelled in these circumstances, as it is an industry standard.

The details of the vehicle that will service underground bulk waste containers have not yet been finalised. Designers of sites where this system are to be used should consult with the Council's Waste Management department.

Skip vehicles may need to access and serve some locations. Developers should be aware that, while most of these vehicles are smaller than standard waste collection trucks, they may require more vertical clearance to operate safely, particularly in locations where skips are to be raised and lowered.

Appendix D

Bin Towing Operations

This section provides basic information on bin towing operations, to help assist architects and developers to design layouts that are appropriate.

Site managers will be responsible for all towing of bins from storage areas to agreed presentation points, and as such must ensure that these operations are compliant with health and safety guidelines.

Bin manufacturers can provide more detailed information on how to use their towable products safely, and can also provide bespoke advice, guidance and training where necessary.

Site Layout

The towing of bins should be considered a vehicular operation. As such, the surfacing, gradients, sightlines etc. on routes where bins will be towed should be appropriate for cars. There must be dropped kerbs with a gradient no steeper than 1:12 wherever bins are to be towed between a pavement and roadway.

Where bin towing is to take place along routes used by pedestrians, pathway widths must be sufficient for there to be ample clearance between a double-buggy and the tug/bins.

Bins

The Council recommends the use of galvanised steel bins with removable towing links. There are some models of bins with retractable towing attachments, but in the past these have interfered with the lifting equipment on the collection vehicle, resulting in Councils refusing to empty them, so it is recommended that such bins are not used.

Towable bins require modifications over standard Eurobins, including strengthening of the sides and bases, heavy-duty castors with directional locks, and towing attachments installed on either end. Bins should also have locks for the lids, so that they can be secured before being towed.

A regular inspection and maintenance programme should be in place for towable bins to ensure the towing links, attachments and castors remain in a safe condition.

Towing Links

The links for towing the bins are supplied separately. The bin-to-bin links are designed to fit into the 'hitch' attachment at one end and the 'eye' attachment at the other, providing a secure connection between the containers. The bin-to-tug links fit the 'hitch' attachment at one end, and then have a connection point to the tug at the

end other that is designed for a simple pin system. The pins are not supplied, so should be acquired with the tug.

It is generally recommended that site staff are issued with a maximum of three bin-to-bin links (and one bin-to-tug link) to ensure that they do not connect more than four bins at a time.

Tugs

Tugs are not supplied by the London Borough of Croydon, so need to be sourced from appropriate vehicle manufacturers. It is common practice for the developer to acquire the tug to provide to the housing company or site staff as part of the handover of the development, to ensure it is available for use as soon as the building starts to be occupied.

The tugs should have sufficient towing power for four fully-loaded 1100L steel bins, with additional power if these bins are going to have to be towed up an incline (such as from a basement car park). The braking power also needs to be sufficient to bring the train of heavy bins to a stop within an appropriate distance.

Tugs should be fitted with a towing attachment, which has its own pin for use with the bin-to-tug links.

Tugs should have a flashing beacon to warn pedestrians and other road users of a potential hazard.

Towing Guidelines

It is the responsibility of site managers to ensure that their staff engage in safe towing operations for bins. Detailed guidance and information is available from the relevant bin manufacturers on how to use their products, whilst some housing management companies may have their own policies and procedures based on experience at other sites. The following are some key points:

- All staff involved in towing should have received the appropriate training on these operations.
- No more than four bins should be towed at any time.
- Bin towing should not exceed 4 km/h.
- Additional care should be taken on curves, slopes or when passing over speed humps.
- Bins should not be towed over kerbs – dropped kerbs should be used.
- Stopping distances will be greatly increased when a train of loaded bins is being towed.

Appendix E

Bin specifications and Images

1280ltr comingled recycling bin, this need to be purchased via third party. The bins must have a 'flap' aperture with a lockable lid and black in colour, metal material.

360ltr comingled recycling bin, this need to be purchased via third party. The bins must have a 'brush' aperture with a lockable lid and black in colour, plastic material.

If the bins does not meet these specifications, then the managing agent/developer/owner of the property may be liable for the cost of sending to general waste, if the bin is found contaminated.



1280ltr comingled bin



360ltr comingled bin



1100ltr Eurobin



660ltr Eurobin



Chamberlain Eurobin



240ltr recycling bin



180ltr landfill bin



23ltr external food caddy



9ltr internal food caddy

bin	height	width	depth	Manoeuvre Measurement around bin
Landfill				
1100 landfill	138	127	100	15
660 landfill	132	126	74	15
360 landfill	110	60	88	15
240 landfill	107	58	74	15
180 landfill	106	54	65	15
Recycling				
1280 dry recycling	143	126	98	15
360 dry recycling	110	60	88	15
240 recycling	107	58	74	15
Food				
240 food recycler	107	58	74	15
140 food recycler	106	48	54	15

Reference

These waste management guidelines are based on a combination of the appropriate regulations, codes of practice and operational requirements specific to the London Borough of Croydon.

The following documents should be referred to by architects or developers, but the requirements set out in this set of guidelines should be adhered to for any new development in Croydon.

- 1) British Standards BS 5906:2005 – Waste management in buildings – Code of practice
- 2) 2010 No.2214 Building and Buildings, England and Wales – The Building Regulations 2010
- 3) The Building Regulations 2000 – Approved Document H, Drainage and Waste Disposal (2000 edition)
- 4) Code for Sustainable Homes – A step-change in sustainable home building practice – DCLG, Dec 2006

Contacts

Enquiries should be directed to the Development Control Team in the first instance:

Tel: 020 8726 6800

For specific enquiries relating to waste storage and collection, please contact the Waste Management department. Please note that it may be necessary to supply site plans and initial waste management proposals to enable your enquiry to be handled:

Tel: 020 8255 2719