



BOROUGH OF POOLE

Waste Collection Authority Guidance Document:

Storage and Collection of Waste in New Developments

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Waste Collection Authority Guidance Document:

Storage and Collection of Waste in New Developments

Introduction

To achieve statutory recycling and waste minimisation targets set by Government and to improve the environment in Poole, the Council adopted a Waste Strategy designed to increase household recycling and composting whilst minimising residual waste. For this to be effective, consideration needs to be given at planning stage to the separate storage of residual household waste, recyclables and compostable materials.

The recommendations in this document are intended as guidelines on design in relation to the statutory requirements of Borough of Poole acting as the Waste Collection Authority. This supplements the detailed guidance on waste storage outlined in Building Regulations Approved Doc H (2002) Part H6 and British Standard BS5906:2005: Waste management in Buildings: A Code of Practice.

Under Section 46 of the Environmental Protection Act 1990, the local authority can specify the type and number of receptacles required. The local authority may also specify where the receptacles should be placed to facilitate emptying.

Each individual scheme will need to be submitted to the Council for approval.

Storage and collection of waste should be taken into account at the outset of development and unsatisfactory provision could lead to refusal of an application.

This document addresses:

- Arrangements for separation and storage of refuse, recycling and garden waste for residential developments.
- Appropriate ways of locating, enclosing and screening storage areas, making them an integral part of design.
- Access requirements for collection operatives and vehicles.

It does not cover specialist materials e.g. healthcare, food, hazardous waste and other forms of waste which are taken to the household waste recycling centre or dealt with by means of a skip or private/commercial contractor.

Why is guidance needed?

It is essential that appropriate waste management facilities are provided in new developments to ensure adequate storage for waste and recyclables and to ensure collections can be made. Well designed bin storage:

- Is located in a position that provides easy and safe access for both waste producers and collectors.
- Takes into consideration ease of use for older persons or persons with disabilities.
- Appears attractive in the street scene and to site users.



i The refuse store is hidden behind the front wall, accessible to residents and refuse collectors.



ii The bins are easily accessible yet not intrusive on the streetscape.

The examples in the photos show how functional bin storage can be incorporated into developments without compromising the quality of the design.

Waste Collection Methods

Collected waste streams & collection frequency

The Borough of Poole currently collects three separate waste streams at the kerbside. Refuse and recycling are collected on an alternate weekly basis; recycling is collected on one week and non-recyclable waste the next. In addition the Borough of Poole operates a subscription based garden waste recycling scheme which is available to all properties within the Borough including flats. Garden waste is collected fortnightly.

Waste Storage & Collection Requirements for Individual Residential Properties

Bin Provision

All bins provided to new properties in Poole are subject to a payment for their long term hire. Details of charges are available on poole.gov.uk.

Non-recyclable waste is collected in a black, 180 litre wheeled bin. Comingled recycling (incorporating paper, cardboard, plastic bottles, plastic containers, glass, tetrapaks, foil, aluminium and steel cans) is collected in a blue, 240 litre wheeled bin.

Properties who register for the garden waste recycling scheme will also be provided with a green, 240 litre bin, therefore developers should be aware that an additional 240 litre bin may need to be accommodated.

For the purpose of bin provision, Houses of Multiple Occupation are treated as a single household except where the house is divided into separate dwellings for the purpose of Council Tax, in which case they are treated as flats.

For developments of 25 houses or more, underground bins should be considered as a viable collection method (see pages 9 and 10). For housing developments where underground bins are installed, the developer should still allow space at each property for a 240 litre green bin should residents wish to register for the garden waste recycling scheme.

Waste Storage & Collection



Proposals for detached, semi-detached and terrace houses must include unobtrusive areas suitable for accommodating 2 x 240 litre and 1x 180 litre wheeled bins.

iii These modern cluster houses have a bin storage area adjacent to the front door

Such areas must be readily accessible to residents with easy access to the roadside. Developers should be aware that bins stored inappropriately (i.e. on public land) could be removed by the Council.

Poole only offers a kerbside collection service for non-communal properties, therefore residents will be expected to present their bins at the nearest appropriate highway on collection days. For this reason, the developer must consider the distance between the storage areas and the nearest highway (Building Regulations advises a maximum distance of 30 metres).

Where the bin storage area will be in a prominent view from the road, a footpath or other public vantage point, suitable screening will be required to ensure bin storage appears attractive in public views.

Waste Storage and Collection Requirements for Communal Residential Properties

Bin Provision

For developments of up to 3 flats individual bins should be used. Provision needs to be made for 1x 180 litre refuse bin and 1 x 240 litre recycling bin per flat. For developments of 4 or more flats communal bins will be used (except where prior agreement has been obtained from the Council as Waste Collection Authority).

All developments of 4 or more units should consider underground bins as a viable collection method (see pages 9 and 10). Where underground bins are used at developments of less than 25 units, the Waste Collection Authority would decide on a suitable collection frequency based on the number of units and total bin capacity. For developments of 25 or more flats underground bins should be used. However, where an alternative arrangement is more suitable this must be agreed with the Local Planning and Waste Authority.

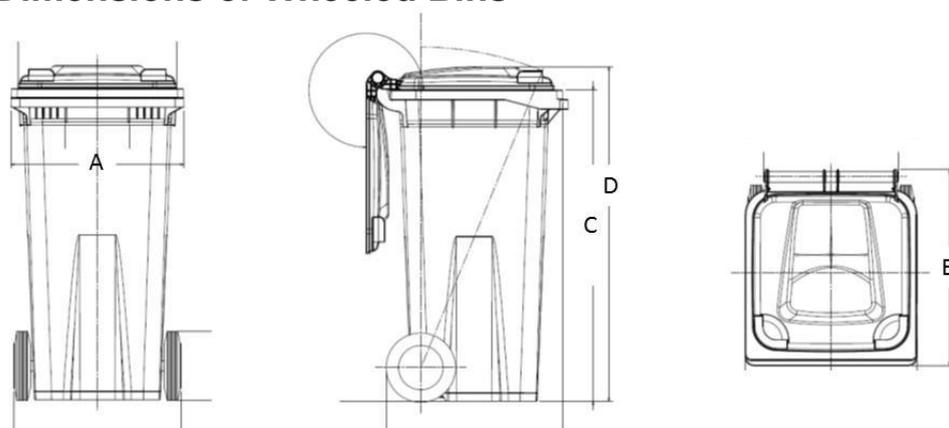
The number of communal bins that will be provided reflects the need to control contamination of recycling in communal bins, so capacity is provided on a 50:50 split between refuse and recycling. The overall combined capacity given to flats is equal to that of individual dwellings; this equates to a total capacity of 420 litres (refuse and recycling combined) per flat. See examples below:

Development Size	Total Capacity Required	Bin Provision
10 flats	10 x 420L = 4200L	4x 1100L wheeled bins (2x recycling & 2x refuse)
8 flats	8x 420L = 3360L	2x 1100L (1x recycling & 1x refuse) & 2x 660L wheeled bins (1x recycling & 1x refuse)

The wheeled communal bins are available in 660 litres and 1100 litres. A combination of these sizes is acceptable but, wherever possible, the largest sized bins, normally an 1100 litre, will be used. Underground bins are available in 5000 litres.

Garden waste bins provided to flats are the standard green, 240 litre wheeled bins. Unlike larger communal bins, garden waste bins for flats must be presented at the kerbside for collection.

Dimensions of Wheeled Bins



Capacity (litres)	Container type	(mm) Height (D)	(mm) Width (A)	(mm) Depth (B)
180	2 wheeled	1020	485	725
240	2 wheeled	1020	580	725
360	2 wheeled	1052	620	845
660	4 wheeled	1213	1373	780
1100	4 wheeled	1354	1373	1073

Design of Communal Wheeled Bin Storage

- Proposals for communal properties must include either underground bins (see pages 9 and 10) or bin stores suitable for accommodating the number of wheeled bins required for the development (see page 6).
- Bin storage areas should be planned as an integral part of the design of the development.
- The area provided should incorporate drainage to assist cleaning.
- Bin storage areas should be easily accessible to residents and within 10m of the nearest kerbside or stopping point of the collection vehicle.
- The siting and design of bin storage areas should have regard to the impact of noise and smells on existing and proposed occupiers.
- Bin stores must be designed and positioned to integrate with the character and appearance of the streetscene, ensuring they do not result in an adverse impact on the public realm.

- Bin stores must allow room for filling and emptying and provide a clear space of 150mm between and around the containers with a minimum of 1m clearance if the bins are located facing each other.
- Bin stores must be of an adequate height to permit container lids to be fully opened without the need to remove the container.
- Compound doors should be wide enough to allow easy manoeuvring of bins when being emptied and returned.
- Bin stores should be well lit and ventilated to promote responsible use of the bin store and ensure a clean environment is maintained.
- External bin stores will need to be secure and of durable construction.

Collection of Communal Bins

- Residents are not expected to move communal wheeled bins to the highway on collection days due to their size and potential weight.
- The Council's waste collection operatives will move communal wheeled bins from their permanent storage space for collection providing that the distance is no greater than 10m, therefore bin storage areas must be within 10m of the nearest kerbside or stopping point of the collection vehicle.
- Paths between the collection point and a wheeled bin storage area should be free from kerbs with dropped kerbs being used at all points that a bin may need to be moved over, including the footpath kerb adjacent to the roadway.
- The collectors should not be required to move wheeled storage containers over surfaces that may hinder the smooth passage of the container, such as grass and gravel.
- There should be no steps or inclines with a gradient of more than 1:12.
- Paths should be non-slip and wide enough to comfortably accommodate the size of the bins. They should have foundations and a hardwearing surface that will withstand the loading imposed by wheeled containers.
- Access to the entrance of the bin compound should be clear from obstructions such as parking spaces, including visitor spaces and vehicle turning points. Access roads should be clearly marked to prevent unauthorised parking.



iv The gradient here is in excess of 1:12 and falls toward the bin store so that full bins must be pulled up an incline

Underground Bin Systems (UBS)

Underground bins should be used at developments of 25 dwellings or more unless an alternative arrangement is agreed with the Waste Collection Authority.

The benefits of UBS include:

- improved aesthetics and hygiene
- sustainable alternate weekly collections
- better health and safety for residents and visitors
- less caretaker involvement
- limited pest issues and fly-tipping

For flatted developments, UBS can also free up valuable space that can otherwise be used for additional site amenities, dwellings or commercial space.

UBS enables a large volume of waste to be stored in a single container whilst keeping it out of sight below ground. The basic system comprises a concrete bunker set in the ground. A bin-liner or container held in the bunker holds the waste. Above ground level the container has a platform or raised ridge with an input receptacle.

There are two types of underground bin: fully underground and semi underground. Fully underground bins are entirely submerged (3m) with a small receptacle visible. Semi underground bins are approximately 1.7 metres below ground with the remainder above ground.



v Fully underground bins with small visible receptacle



vi Semi underground bin with larger visible receptacle (Bournemouth)

The storage volumes considered by the Borough of Poole for collection are typically 5000 litres which is approximately the equivalent to five 1100 litre bins (please refer to manufacturer for specific dimensions).

Additional, optional features are also available with underground bins such as key fob access which helps to prevent misuse of the bins.

The type of container installed by the developer must use the correct lifting hook to fit the crane locking mechanism of the Borough's collection vehicle.

Underground bins are not provided by the Council; it is the responsibility of the developer to purchase and install the bins. Please contact the Waste Collection Authority for advice on container types and manufacturers.



vii Underground bin being collected by crane operated vehicle

Underground bins should be located within 7 metres of the collection vehicle and not obstruct public highways. The waste will be collected by a crane operated vehicle which would lift the bin casing out of the bunker. Waste is then released from the bottom of the receptacle into the vehicle. Usual emptying time per bin is between 3 to 5 minutes.

The developer will be responsible for purchase and installation of these units. It will then be the responsibility of the managing agents or controlling body for the development to maintain the bins and replace when necessary. Bins with regular maintenance typically last for 15 years.

Many systems exist and we can advise on the suitability of an underground system on a case by case basis.

Alternative Systems of Waste Storage and Handling

The Council does not consider the use of waste disposal chutes to be an acceptable alternative to the use of wheeled bins or underground bins because they do not enable the separation of recyclable materials which is a legal requirement. The use of internal waste chutes in flats has been shown to have a detrimental effect on recycling behaviour of residents (Waste and Resources Action Plan, "Recycling Collections for Flats") and can cause some safety issues if the chutes become blocked.

Vehicular Access Considerations

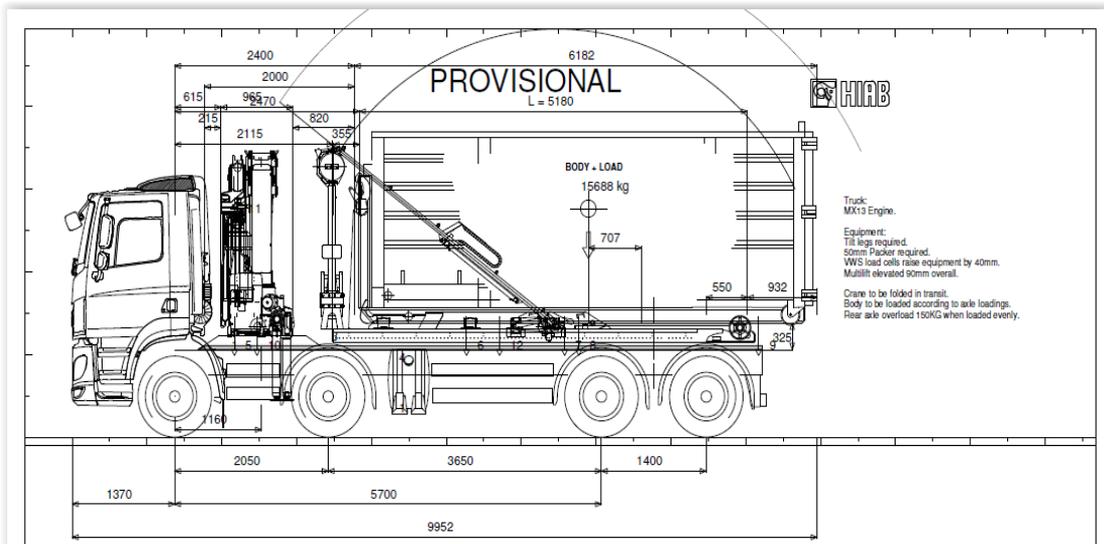
Where the collection vehicle is to access a site off the public highway the access drive must have a radius sufficient to turn into and out of the new roadway and be capable of safely accommodating a vehicle of the specification used by Poole Borough Council (see specifications on page 11).



For the collection of wheeled bins, the site layout must allow for refuse collection vehicles of the size and turning capability listed next.

Vehicle Model	Dennis Eagle Euro 6 OL-19N 6x2ML
GVW (Gross Vehicle Weight) (kg)	26000
Turning circle - overall (m)	22.0
V2 Overall length (mm)	9190
V6 Overall height (mm)	3450
Overall Width (mm)	2250

For the collection of underground bins, the site layout must allow for collection vehicles of the size and turning capability listed below:



Vehicle Model	DAF CF410FAX Hiab X192E-2 HiPro
GVW (Gross Vehicle Weight) (kg)	32000
Turning Circle – overall (m)	22.0
Overall length (mm)	9952
Overall height (mm)	4900
Overall width of vehicle (m)	2590
Crane swing (degrees)	415
Crane Legs length from vehicle (m)	1.0
Crane Length (m)	7

- Roads should be of an adequate width to accommodate the size of the appropriate collection vehicle and be arranged so that the vehicle can enter and exit the site in a forward direction. If reversing is unavoidable (i.e. a turning manoeuvre cannot be accommodated), then the distance should not exceed 12m and have clear visibility all the way down the access route.
- Developers should also ensure that man-hole covers are strong enough to withstand the full laden weight of the vehicle. If a surface is not built to an adoptable standard that will withstand the weight of a fully laden collection vehicle then it will not access the site, which could prevent residents' bins from being emptied.
- The collection vehicles are unable to enter a building, e.g. under-croft or underground parking to collect bins because the height restriction would prevent the vehicle from carrying out an ejection of waste material in the event of an emergency.
- Any trees planned to go by the side of the access pathway should give consideration that future growth will not prohibit access or cause damage to the collection vehicle (due to vehicle size and vehicle hydraulics being located on the roof).
- For underground bins, the area between the collection vehicle and bins must be built to highway standards and should be free of any parking spaces or equipment that will hinder the movement of the container and crane arm. When in use, the crane arm requires a minimum overhead working clearance of 18m.

Private Roads and Driveways

Un-adopted roads/drives/car parks, which have shared private ownership by residents, cannot be accessed by a collection vehicle if they are not constructed to an adoptable standard. In order to access an un-adopted road/driveway/car park, the Council would require current written permission from or on behalf of all residents with shared ownership. Where necessary, details should be provided of indemnity insurance in case of damage. For further details on road adoption contact Transportation Services.

A suitable bin collection point (BCP) may be required with due consideration to the distance from residents' properties (Building Regulations advises a maximum distance of 30 metres) and the main highway. The BCP can be a simple paved area, but it must be sufficient to accommodate 2x240 litre bins and 1x180 litre bin for every property served by the private drive. It must be designed to prevent its use as an extra car parking space. Furthermore, the BCP must be adjacent to the highway to ensure an efficient refuse/recycling operation takes place.

Mixed Commercial and Residential Developments

Although domestic units may share a communal bin, domestic and commercial units may not.

Where a development comprises of both commercial and residential units the different containers will need to be clearly identifiable. These containers should ideally be in separate storage areas.

Industrial and Commercial Developments/ Retail Developments

Business rates do not cover waste collection or disposal for businesses who therefore have a responsibility to negotiate a contract with the Council or a commercial waste contractor to suit their needs.

Following the introduction of Waste Acceptance Criteria 30th October 2007, producers of waste have a responsibility to show that their waste is treated. Source separation of waste by using separate waste and recycling bins fulfils the criteria.

Different waste management companies may have alternative types of collection methods or bin sizes, so the Council can only advise on what procedure it would use if awarded the waste collection contract for commercial or industrial premises, but this should not be viewed as a definitive guide and any guidance will have to take account of collection frequency.

The Council are keen to operate Underground Bin Systems (UBS) for commercial and industrial developments due to the benefits listed on page 9. Therefore commercial developments should seriously consider underground bins as a suitable collection method. UBS can improve both the storage and collection of waste while also reducing the impact of bin collections on neighbouring properties. UBS often require less space to store waste, therefore freeing up valuable space for commercial use. Fewer vehicle movements are required to collect the waste due to the larger volumes the underground bins can hold.

Further Advice

To discuss arrangements for the collection of domestic waste and recycling please contact:

Environmental Services
Unit 1, New Fields Business Park
Stinsford Road
Poole
Dorset
BH17 0NF

01202 261700

environment@poole.gov.uk

For advice on planning and/or road layouts and adoptable highway standards please contact Growth & Infrastructure

Civic Centre,
Poole,
BH15 2RU

For planning & regeneration:

01202 633321

planning@poole.gov.uk

For highways:

01202 262000

transportation@poole.gov.uk