Waste management guidance notes for residential developments

August 2014 **www.southwark.gov.uk**

Aimed at architects, developers and managers of housing, this document provides guidance on the waste storage and collection requirements that should be considered for residential developments in the London Borough of Southwark, where the council will be servicing the waste requirements of the development.

Following this guidance is integral to satisfying the requirements for waste facilities in the Sustainable Design and Construction supplementary planning guidance (SPG) section 6.2. If this guidance is not followed, the council may be unable to provide a household waste collection service, or may need to apply additional conditions on the collection process.

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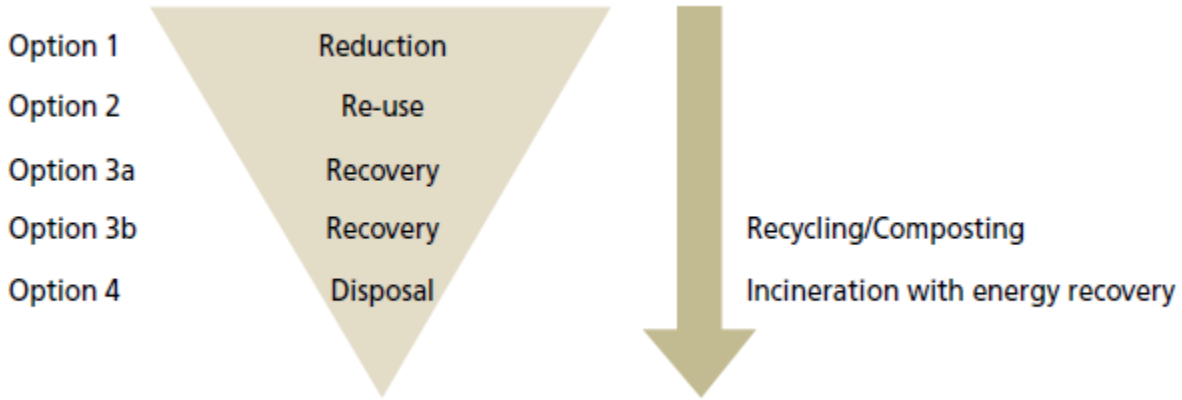
1. USING THIS GUIDE

This guide is for architects and others concerned with providing refuse and/or recycling storage facilities for premises within the London Borough of Southwark. When a planning application is submitted, the council will expect details of the proposed storage accommodation for waste and recyclable material for residents of the properties once occupied, as well as a site waste management plan, to be provided.

Southwark handles municipal waste in line with the waste hierarchy wherever possible, and expects developers to design waste facilities for residents in support of this:



60% of normal household waste is either recyclable or compostable (Mayor's Municipal Waste Strategy, November 2011). Achievement of this can be facilitated by (for example):

- Including a covered facility for the storage of re-usable bulky waste
- Making recycling facilities easy and pleasant to use
- Including provision of communal food waste recycling facilities
- Ensuring that ongoing maintenance and cleaning of facilities is included in future servicing plans
- Including communal composting facilities for communal gardens

Section 2 of this guide contains information on the likely waste arising per week for a range of different types of development. Using the bin sizes information in section 6, this can be used to estimate the number and type of bins which will be required to accommodate refuse / recycling:

$$\text{Number of bins required} = \frac{\text{volume of refuse or recycling (L)}}{\text{capacity of the bin}}$$

From this, and details of bin dimensions also in section 6, the area needed to house the requisite bins can be calculated.

Section 4 contains important information about where refuse and recycling storage should be sited and considerations for access which should be used in determining where to site the refuse and recycling facilities and access arrangements.

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2. RESIDENTIAL

Two categories are used to specify storage capacity requirements for recyclable and non-recyclable (residual) waste within residential properties:

- Individual properties and smaller developments (individual bin storage is provided for each property)
- Purpose built blocks of flats and large developments (communal bin storage is provided).

2.1 Residential premises with individual refuse facilities

The council provides the following receptacles to street-based individual houses in the borough:

- A 240l green wheeled bin for refuse
- A 240l blue wheeled bin for mixed dry recycling
- A 23 litre food waste bin (any properties without the need/space for a garden waste wheeled bin will instead be provided with a 23l bin for food waste collections).
- A optional 240l brown wheeled bin for garden waste - this is a paid for service

For smaller individual properties e.g. one bedroom houses, 140l bins may be used for refuse and mixed dry recycling.

For houses split into flats, suitable numbers of containers will be provided to suit individual requirements.

Space must be provided for all three types of containers at the front of new properties or re-developed properties. Any properties with a private garden should also be provided with space for a compost bin.

2.2 Residential premises with communal refuse facilities

Recycling should be made as convenient as possible for all residents and some or all of these measures should be considered and provision made within the management arrangements for the block(s):

- Where caretaking / concierge facilities are provided, this should include ensuring that recycling bins are kept clean and attractive for residents to use including positioning so all bins are accessible.
- Consider providing a door-to-door collection service for recyclables only
- Management companies can assist to reduce waste by facilitating the delivery and display of recycling and waste service information.

CALCULATION OF VOLUME REQUIRED:

The following formula is used to calculate the estimated total weekly refuse (recyclable and non-recyclable) arising from a residential development with communal refuse facilities:

Total weekly refuse = 30 litres per unit + 70 litres per bedroom

This calculation is based on the method set out in the British Standard (BS5906) Waste Management in Buildings, which has been amended following the introduction of mandatory food waste services for all household waste colelctions:

- Recycling provision = Total weekly refuse x 0.5
- Residual waste provision = Total weekly refuse x 0.5
- Food waste provision = total weekly refuse x 0.25

e.g. If the 'total weekly refuse' figure is 2000L, we would require:

1000 litres of capacity for recycling, and
1000 litres of capacity for residual waste, and
500 litres of capacity for food waste

Any planned waste capacity over 660 litres will require the use of communal bins.

Southwark operates a commingled recycling service from our communal recycling bins. The following can all be placed in one container:

- Paper and cardboard
- Cans, food tins, aerosols, and foil
- Glass bottles and jars
- Plastic bottles, foodtrays and pots
- Food and drink cartons e.g. Tetra Pak

Details of all the recycling and refuse containers available from the council to help you meet the capacity requirements discussed above can be found at section 5.

2.3 Further design principles

To help residents to actively move towards a culture of recycling wherever possible, we encourage architects / designers to provide space in the kitchen area for the separation of waste into recyclable and non-recyclable waste.

Wherever possible, depending on whether it is operationally possible and subject to risk assessments on fire and safety grounds, residents in flats or apartments can benefit from the council's weekly clear bag recycling doorstep collection scheme. Designs for walkways and corridors should incorporate sufficient space for clear bags to be left outside the resident's doorway on the day of collection.

In suitable residential developments, and again where operationally feasible, refuse collection may also be on a door-to-door basis once a week, rather than using communal facilities. Storage spaces on corridors for refuse containment prior to day of collection should also be designed in to be included on each floor.

Additionally, within corridors and/or foyers of developments, spaces should be designed in for signage to promote recycling and refuse schemes

2.4 Organic waste options within purpose built flats

Composting is an option for the treatment and recycling of garden and food waste, either at source, at communal facilities or at industrial–sized facilities fed by council collections. Composting reduces the effect of food and garden waste on the environment by creating the conditions for it to turn into a nutritious organic material. This can be used by residents on their own gardens, where produced locally. Material from council collections is sent to industrial-sized facilities and once processed, is used on agricultural land. The council is keen to divert organic waste from the residual waste stream.

Developers and management companies of purpose built flats should consider:

- provision of composting facilities in developments with a garden
- communal food waste collection containers (please consult waste management if you are considering this)
- sufficient space to accommodate wormeries on balconies
- kitchen sink food disposal units- these macerate food waste and discharge it with the grey water output into the waste water system.

2.5 Storage for bulky articles

Southwark operates a bulky waste collection service for its residents.
Separate accommodation at ground level should be provided for the storage of large items such as white goods and furniture, prior to special collection by our bulky waste crews or re-use organisation. This site should include an area for signage detailing the options and procedures for disposal of bulky waste. By the terms of the council's bulky waste service, items may only be put out on the day of arranged collection, and not before.

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3. CLINICAL AND HAZARDOUS WASTE

Clinical waste:
In all applications where clinical waste is likely to be generated separate storage and collection arrangements for clinical waste will need to be considered.

Hazardous waste:
All hazardous wastes should be correctly identified, segregated and stored separately in accordance with guidance from the Environment Agency and specialist hazardous waste contactors. Hazardous waste must not be mixed with general waste, composting or recycling. Please note that the council does not collect hazardous waste. These collections are undertaken by the City of London's hazardous waste removal team.

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4. SPECIFICATIONS

4.1 Access specifications

Drag distances: Collection points should be within 10m of the nearest safe stopping point for refuse collection vehicles.

The distance residents will have to walk to the bin store must be under 30m horizontal distance **(Building Regulations Approved Document H6).** Consideration should be taken wherever possible for potential elderly or disabled residents and their ability to travel this distance. Please refer to both BS 8300:2009 and DD 266:2007 for codes of practice regarding access to and design of accessible buildings

Surfaces: The path between the bin storage and collection point must be free of steps and kerbs. Where new pavement or road surfacing is being installed, this should provide a smooth surface for the wheeling of bins to the collection vehicle. Cobbled paving of any kind is not suitable. Paths should be level, unless the gradient falls away from the housing or chamber, in which case it should not exceed 1:12 (BS5906).

Positioning: Bin stores should be located at street level. Where this is not possible, a suitable ground floor collection area must be indicated on drawings submitted for approval. In addition, a written statement must be attached describing the proposed method for transporting the containers to the ground level collection point, indicating parking arrangements for a tractor unit, if these are required. If waste containers are to be transported to ground level by a goods lift, it must be large enough to accommodate at least one waste container as well as the porter.

In large developments more than one waste container will need to be accommodated. The lift doors and adjacent lobby or corridor must be sized so that waste containers can be easily manoeuvred. Within new buildings, the position of storage containers should allow movement of containers to the collection point without being taken through a building (unless it is a porch, garage or carport or other open covered space). It is the responsibility of the property manager for moving bins to the collection point(s) for the collection to take place.

Ground level collection points must be within the curtilage of the building served and not within any part of the public realm. Storage points must enable safe access to the bins for collection without causing obstruction, hazards or impacts on the amenity value of the surrounding area.

Roads: The road must be wide enough for a vehicle with a maximum width of 2500mm to fit down. For full details including heights, turning circles and weights, please see section 7 – 'vehicle types and dimensions'.

It is preferable that collection vehicles can both enter and exit a development using a forward gear, and make the collections on-site without the containers having to be moved out to a road. There should be sufficient on-site turning circles or hammerheads to allow safe manoeuvring and exit from the development. Road layout should allow for a turning circle of about 20 metres.

The maximum distance we would expect a collection vehicle to reverse in order to access a collection site is 2 vehicle lengths (up to 15 metres).

Please refer to BS5906 for further details of road layout and distance requirements. When developing routes and footways, developers should be aware of, and refer to, Transport for London's Streetscape guidance which provides advice on the design, appearance and upkeep of roads and streets in the capital.

If a service road / access is to be constructed for refuse vehicles to use, this must be constructed to a standard that would withstand the weight and vibrations of the vehicle (in accordance with the Department of Transport's Manual for Streets, which replaced the previous Design Bulletin 32: Residential Roads and Footpaths (DB 32). All manhole covers, gully gratings etc. should also be able to withstand this weight.

Bin stores which are accessible from the street should be provided with a lockable door fitted with either a Fire Brigade (FB) 1, FB 2 or FB 4 mortice lock (waste collection operatives carry keys for these locks). Where there are electronic gates and/or barriers controlling access to waste container housing, codes should be provided to the Council prior to bins being installed.

Doors or gates to any container housing must not open out over the public highway. Bin storage areas must not obstruct sight lines for pedestrians, drivers and cyclists.

Doors should also be fitted with a hook back facility to prevent damage from bins colliding into doors upon entry or exit. Doorways must be wide enough for bins to fit through.

4.2 Storage specifications

All bins must be accessible within the bin store, on the long edge of each bin, without residents having to re-arrange bins. This is to enable the bins to remain closed other than when being used and ensure waste is deposited within them, rather than at their side, to prevent access to that waste by pests and vermin.

Waste storage facilities should not block any utility service points.

Bins should be in a separate storage area from bicycles.

Bins should be inside or at least enclosed. If bins are outside, they should be secured in a compound to prevent them being moved to a position next to the building and set on fire. Stores should be designed and located in such a way as to limit potential noise disturbance to residents (for example through the sound of glass breaking) either through use, or during collection of waste.

Storage sites should include areas for instructional signage detailing correct use of the facilities.

Within any enclosed storage area there should be adequate lighting that is easily maintained and good natural ventilation.

Communal container housing should have an impervious floor to permit washing down.
Waste storage areas should be of adequate height to allow the lids of containers to be fully opened; a minimum height of 2 metres is required.

Skips should never be placed against a building and should normally be a minimum of 6 metres away from any part of the premises.

4.3 Mixed residential/ commercial developments

Refuse from most types of non-residential premises is chargeable and must be collected by a licensed waste contractor.

In mixed use developments, separate refuse areas and containers should be provided for residential and commercial premises. The council does not provide commercial collections, except for some schools and ‘chargeable domestic’ premises, and therefore cannot give specific guidance on containers.

The waste contractor chosen by the business will generally provide both advice on suitable capacity and recycling arrangements, and suitable containers.

Impartial guidance on the obligations of businesses, commercial waste provision and recycling can be obtained from Waste Resources Action Programme (WRAP), www.gov.uk, and BREEAM (see section 7).

5. BIN TYPES & DIMENSIONS

The main methods of refuse storage used in Southwark, and available from the council, are listed below. All provision for recycling is available free of charge. Hire charges are payable for refuse bins 660l and above.

(a) **WHEELED BINS** - These are plastic wheeled bins (two wheels) with capacities as follows:

Capacity (Ltrs): 140/240/360

Dimensions (mm): Depth - 560/735/860

Width - 480/580/625

Height - 1065/1065/1095

NB Brown bins for food and garden waste are available in 240l and 23l size. Paper sacks (75l) and larger reusable jute bags (121.5l) are available to supplement the 23l size if required.

(b) **CHAMBERLAIN TYPE CONTAINERS** - These are wheeled bins (four wheels) with capacities of 720 and 940 litres. The 940 litre model also has the option of having a fitted lid.

Capacity (Ltrs): 720

Dimensions (mm): Depth - 790

Width - 1040

Height - 1430

(c) **EUROBINS** - These are wheeled bins (four wheels) with capacities of 660, and 1100 litres. They may be used as an alternative to chamberlains, and have the advantage of a lower loading height.

Capacity (Ltrs): 660/1100

Dimensions (mm): Depth - 740/1000

Width - 1265/1270

Height - 1320/1380

6. VEHICLE TYPES AND DIMENSIONS

(a) Standard Collection Vehicle:

Dimensions (m): Length - 10.7m

Width - 2.53m

Maximum height - 4.3m

Maximum weight - 26 tonnes

(b) Roll-on roll-off collection vehicle:

Dimensions (m): Length - 9.14m

Vehicle plus container length – 15.54m

Width - 2.5m

Travelling height - 3.85m

Operating height – 4.95m

7. FURTHER INFORMATION AND REQUIRED READING

www.southwark.gov.uk/recycle

Southwark Council Sustainable Design and Construction Supplementary Planning Documents

Building Control information and documents

Planning Enforcement information and documents

For further information or to discuss particular issues please contact your planning officer or the Waste Management Team: 020 7525 2000

British Standards Institution Codes and Standards

BS5906:2005 Waste management in buildings – Code of practice

(Formula used in this guide are based on recommendations in BS5906:2005 or in line with best practice)
BS1703: 2005 Specifications for Refuse Chutes and Hoppers
BS EN 840: 2004 Mobile waste containers
BS 8300:2009 Design of Buildings and their approaches to meet the needs of disables people- code of practice
BS 5395-1:2000 Stairs, ladders and walkways
Building Regulations 2000 (as amended by SI 2001/3335) requirement H6, Solid waste storage

Other Useful Information

Chartered Institute of Waste Management. Publication no 3 Advice on storage and on-site treatment of household, commercial and industrial wastes

Department of Transport Design Bulletin 32, Residential Roads and Footpaths

The Mayors Draft Municipal Waste Strategy Oct 2010
BREEAM (Building Research Establishment Environmental Assessment Method) www.bre.co.uk
www.wrap.org.uk/construction

For businesses: https://www.gov.uk/managing-your-waste-an-overview/overview