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1 Introduction

Purpose of this note

This guidance note has been prepared by Tibbalds Planning and Urban Design on behalf of Dacorum Borough Council. It is to be used as a tool and good practice guide for developers and landowners to help ensure appropriate, convenient and well-designed waste management facilities are provided within new buildings.

It is intended to be a practical guide that sets out the expectations of the Council in relation to the storage of waste and helps ensure that good quality design is encouraged for planners, architects and developers. The Council acknowledge that individual developments may have unique arrangements and requirements and as such the contents of this note is guidance rather than absolute standards. In addition to the advice in this note, new development must take into account all relevant legislation and building regulations.

This note replaces all previous guidance notes and covers guidance for both residential and commercial development.

National waste and recycling objectives

The way in which waste is managed in England has changed dramatically over the last two decades, as have attitudes towards waste management. There has been a dramatic decrease in the amount of waste that is sent to landfill and an increase in recycling.

The Waste Management Plan for England (December 2013) sets out objectives and guidance towards creating a zero waste economy as part of the transition towards a more sustainable economy. In particular this means using the set of high level objectives within the waste hierarchy as a guide to more sustainable waste management in the UK. The principles of the hierarchy are enshrined in law through the Waste (England and Wales) Regulations 2011. The hierarchy gives priority to the prevention of the creation of waste, then preparing waste for re-use, recycling and other recovery and disposal to landfill as a final option.

County waste and recycling objectives

Hertfordshire County Council are responsible for the disposal of the Borough’s waste. The Waste Core Strategy and Development Management Policies, and Waste Site Allocations documents form part of the Minerals and Waste Development Framework for Hertfordshire. This can be viewed at http://www.hertsdirect.org/docs/pdf/w/wcsadopt and is referred to in passage 18.36 of the Dacorum Core Strategy. The Development Plan Documents on waste set out the County Council’s overall vision and strategic objectives for waste planning and establish the broad locations for strategic waste facilities. They also allocate sites, indicate areas of search for future waste uses and contain minerals and waste safeguarding areas. All of these policies have been designed to reflect higher level national policies.
2 Waste storage in Dacorum

Waste collection in Dacorum

Collection system as of November 2014

Over the last decade the recycling rate for Dacorum Borough Council has increased to 47%. This is a great achievement for the Borough. In order to build on this achievement and reach a target of recycling 60% of total waste in the Borough by 2031, a new recycling and waste collection system was introduced at the end of November 2014. The new collection and storage system is designed to make recycling easier for households.

Houses within Dacorum are provided with the following refuse storage (a summary table of the sizes of the various bins and their collection frequency is shown on the next page):

- A blue lidded bin for mixed recyclables: this replaced a previous system of three recycling boxes. This means there is less sorting of recyclables for households and also allows for more material to be recycled. Items such as tin foil and drinks cartons were not previously allowed within recycling waste. This is collected fortnightly.
- A green kerbside food waste caddy: This bin and collection facility is provided with a smaller green bin that is designed to be kept in the kitchen. This is collected weekly and is designed to discourage food waste from going to landfill where it can produce harmful gases.
- A green bin for garden waste: collected fortnightly between February and November.
- A black bin for all remaining non-recyclable waste: collected fortnightly.
- In addition to the above refuse storage bins, home composting areas should also be designed into new housing developments.

Waste storage for flatted and mixed use development:

- Where possible the same service is provided for flats as for houses. Where this is not possible a 1100ltr container is provided and emptied weekly. One container is shared between 5 residences.
- To provide for mixed waste, double the amount of containers may be required.
- For food waste, 240ltr wheeled bins are provided shared by up to 10 flats.

Accommodating storage

The new waste collection system will encourage further recycling and will enable the Borough to move towards its targets of greater recycling and a reduction in the amount of waste that goes to landfill.

- The use of ‘frames’ to store bins for recycling in less secure places can be considered for flatted accommodation. However, this should only be considered when other solutions have been discounted.
- There should be no steps between the storage area and the collection vehicle and there should be suitably robust doorways en-route if fitted. Consideration should be given to the size (approx 10m x 3m) and manoeuvrability of the collection vehicle.
- Particular consideration should be given to development within Conservation Areas and/or where they affect Listed Buildings. Bins preferably need to be kept out of public vantage points and located in garages or well designed bin storage areas.
### Waste storage external requirement for individual dwellings

<table>
<thead>
<tr>
<th>Collection Type</th>
<th>Material for collection</th>
<th>Bin size and capacity</th>
<th>Collection frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food - food caddy</strong></td>
<td>Cooked and uncooked veg and meat&lt;br&gt;Other material including eggshells, bones and teabags</td>
<td>23 litres&lt;br&gt;h-40.5cm w-32cm d- 40cm</td>
<td>Weekly</td>
</tr>
<tr>
<td><strong>Mixed recycling - blue bin</strong></td>
<td>• Paper&lt;br&gt;• Magazines&lt;br&gt;• Glass bottles and jars&lt;br&gt;• Food and drink cartons&lt;br&gt;• Cardboard&lt;br&gt;• Clean aluminium foil&lt;br&gt;• Cans</td>
<td>240 litres&lt;br&gt;h-107 w-538cm d- 74 cm,</td>
<td>Fortnightly</td>
</tr>
<tr>
<td><strong>Non recyclables - black bin</strong></td>
<td>Rubbish that cannot be recycled such as crisp packets and polystyrene*</td>
<td>240 litres&lt;br&gt;h-107 w-538cm d- 74 cm,</td>
<td>Fortnightly</td>
</tr>
<tr>
<td><strong>Garden waste - green bin</strong></td>
<td>This bin is <strong>exclusively</strong> for garden waste.</td>
<td>240 litres&lt;br&gt;h-107 w-538cm d- 74 cm,</td>
<td>Fortnightly between February and November <strong>ONLY</strong>. Outside this period garden waste must be taken to a household recycling centre.</td>
</tr>
</tbody>
</table>

Fig 1.1.3 - Waste requirements for individual dwellings.

*If the household has six or more full time residents or five full time residents where at least one infant is in nappies, then they may be eligible for a larger (360 litre) black bin.
# Waste storage requirement for flats

<table>
<thead>
<tr>
<th>Collection Type</th>
<th>Material for collection</th>
<th>Bin size and capacity</th>
<th>Collection frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food</strong> - brown bin</td>
<td>Cooked and uncooked veg and meat Other material including eggshells, bones and teabags</td>
<td>240 litres² h-107 w-538cm d-74 cm,</td>
<td>Fortnightly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amount - 1 per 10 units</td>
<td></td>
</tr>
<tr>
<td><strong>Mixed recycling</strong> - blue lid</td>
<td>• Paper • Magazines • Glass bottles and jars • Food and drink cartons • Cardboard • Clean aluminium foil</td>
<td>1100 litres² h-137cm w-126cm d-99cm</td>
<td>Fortnightly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amount - 1 per 5 units</td>
<td></td>
</tr>
<tr>
<td><strong>Non recyclable</strong> - green lid</td>
<td>Rubbish that cannot be recycled such as crisp packets and polystyrene</td>
<td>1100 litres h-137cm w-126cm d-99cm</td>
<td>Fortnightly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amount - 1 per 5 units</td>
<td></td>
</tr>
</tbody>
</table>

Fig 1.1.4 - Waste requirements for flatted development.

**N.B** Where possible flats should simply provide the same storage requirement per dwelling as Fig 1.1.3. Where this is not possible, the requirements set out in Fig 1.1.4 will be acceptable.
### 3 Planning policy context and the building regulations

#### Planning Policy Context

**National Planning Policy Framework - the NPPF**

The National Planning Policy Framework sets out government’s planning policies for England and how these are expected to be applied. Local authorities preparing waste plans and taking decisions on waste applications should have regard to policies in this document.

The NPPF champions positive planning and it states that local authorities should set out strategic priorities for waste management infrastructure in their area through their Local Plan. Authorities are also asked to assess the quality and capacity of their existing waste infrastructure. Alongside these requirements, the NPPF states that requiring good design is fundamental to achieving sustainable development. Paragraph 40 states that unsightly bins can be detrimental to the visual amenity of an area and that local authorities should ensure that bin storage is discretely designed, of an adequate capacity and accessible by all.

**National Planning Policy for Waste**

The National Planning Policy for Waste was first published in October 2014. It sets out the Government’s detailed waste management policies with an ambition to work towards a more sustainable and efficient approach to resource use and management. At the heart of this is an aspiration to positively plan to deliver its ambition by:

- Promoting sustainable development and resource efficiency.
- Encouraging people to take responsibility for their own waste.
- Identifying waste management as an essential part of creating sustainable communities.
- Securing the re-use and recovery or disposal of waste without endangering human health.
- Ensuring the design and layout of all new developments enables sustainable waste management, including provision of storage and segregation of facilities to facilitate high quality collections of waste.
- Providing guidance on how local authorities should meet their obligations for waste management through their Local Plans.
- Advising Local Authorities on the determination of planning applications for waste related schemes.

- Providing general advice on how waste management should be considered in planning applications. This includes a requirement that new development is designed to accommodate waste collection vehicles and provide sufficient well designed storage for refuse.

**Local Policy - the Core Strategy**

Dacorum Borough Council’s Core Strategy was adopted in September 2013, it contains a series of policies (together with saved policies from the Dacorum Borough Local Plan 1991-2011) that set the framework within which planning applications are assessed in the Borough.

Section 10 of the Core Strategy focuses on design quality and contains a set of policies in relation to the design of site layouts. These policies will need to be taken into consideration when bearing in mind the successful integration of refuse storage.

Particular consideration should be given to Policy CS29: Sustainable Design and Construction (clause i)
when planning for new development to “provide on-site recycling facilities for waste”. Further information regarding waste management is also set out in paragraphs 18.35-36 of the Core Strategy.

The Code for Sustainable Homes (CfSH)
The Code for Sustainable Homes is the national standard for the sustainable design and construction of new homes. It aims to reduce carbon emissions and promote higher standards of sustainable design above the current minimum standards set out by the building regulations.

It has 9 measures of sustainable design, including one for waste. More information on the requirements under the CfSH can be found at [http://www.planningportal.gov.uk/buildingregulations/greenerbuildings/sustainablehomes/technicalguide](http://www.planningportal.gov.uk/buildingregulations/greenerbuildings/sustainablehomes/technicalguide).

Building regulations
Approved Document H of the Building Regulations provides guidance and a set of requirements in relation to drainage and waste disposal. Of particular relevance to this document is the guidance contained within section H6 that has requirements and guidance in relation to solid waste storage.

The regulations state that waste storage must:

- Be designed and sited so as not to be prejudicial to health.
- Be of sufficient area to meet requirements set out by the waste collection authority.
- Be sited as to be accessible for use by people in the building and ready for access for removal to the collection point specified by the waste collection authority.

Domestic developments must meet the following requirements:

- Developments must provide space for storage containers for separated waste with a combined capacity of 25m$^3$ or such other capacity agreed with the waste collection authority.
- Low-rise domestic developments (up to 4 floors) must have access to a location where two individual (at least 1.2m x 1.2m) or communal waste containers can be stored.
- Dwellings above 4 storeys may share a waste container for non-recyclable waste fed by a chute (of at least 450mm in diameter) with separate space for the storage of recyclable waste. Alternatively, storage compounds or rooms can be provided.
- Waste storage areas must be sited so that householders do not have to carry refuse more than 30m (excluding vertical distances) to the rubbish store. Stores should be positioned away from windows and ventilators and preferably be under shade and shelter.
- Where possible rubbish stores should be located in a position where rubbish does not have to be taken through the building to the collection point. The route to the collection point must steps and avoid slopes of more than 1:12.
- Operatives from the waste collection authority should not have to walk more than 25m to pick up rubbish from the collection point. This should be assisted by the design of the road layout that must allow reasonable vehicular access to collection points.
- Rubbish stores must allow adequate space in and around bins to allow them to be filled and emptied with least 150mm of clear space around containers.
- Rubbish stores must be well ventilated and have a paved impervious floor. Communal stores must have provision for washing down and draining into a suitable system. Storage rooms or compounds must be secure to prevent access by vermin.
- The volume and nature of the waste and the capacity required, based on the frequency of collection and size and type of waste container.
- Any requirement to separate recyclable waste.
- The method of waste storage in relation to the layout and density.
- The location of waste stores to provide easy access for building users and collection operatives.
- Hygiene -storage areas must have an impervious paved floor with provision for washing down and drainage and be secured to prevent access by vermin.
- Fire protection measures.
- The need to clearly mark and direct building users and waste operatives to rubbish stores.
4 Design guidance for new build development

Residential development

In order to avoid bins being left out on the kerbside in residential areas between collections, appropriate external storage for waste and recycling bins must be provided. This must be a purpose-designed space within the curtilage of residential properties. Enough storage must be provided for the relevant house types in relation to the table in section 2.

There are a number of issues to consider in the design of appropriate storage, a number of these items will depend upon the character, scale and location of new development.

There are however an overarching set of principles that are relevant to all forms of residential development. These are shown in the adjacent box. This is to ensure the successful integration of suitable storage facilities that do not negatively impact upon the design of new places and buildings. These principles should be taken into account when considering refuse storage in residential development.

There are a number of different levels and circumstances in which refuse storage needs to be considered in residential development. Broadly speaking these are:

- Masterplanning / site wide principles;
- Individual dwelling design:
  - Internal storage of waste within a dwelling (CfSH)
  - Detached dwellings
  - Semi-detached dwellings
  - Terraced dwellings and infill development
- Flatted developments; and
- Mixed use development.

Guiding principles for residential waste storage/collection:

- Storage should be safe and convenient for householders to use.
- It should be easy for householders to wheel the bins to the boundary of the property for collection and back again (level access).
- Bins need to be collected as close to the boundary of a property as possible.
- Storage should not occupy useful open space or compromise household amenity.
- Storage should not be visually intrusive in the street scene.
- Storage should be designed to enable the safe and convenient collection of waste.

Figure 4.1.2 Image of lorry used by Dacorum Council to collect waste. This measures approximately 10m x 3m. All residential layouts must consider size and manoeuvrability of this vehicle.
Site layout

Dacorum Borough is an attractive and popular place to live, as such the site layout of new areas of housing and the streets and spaces that serve them need to be carefully designed to complement and add to the positive existing character.

Highways design

There are two main reasons for considering refuse collection needs at the highway design stage. Firstly highway safety and secondly design quality.

New development should design out the risk that is associated with refuse collection vehicles reversing, by designing roads and access arrangements that minimise the requirements for vehicles to reverse.

Ensuring that a ‘route’ is designed through new development for refuse trucks

- Where possible a ‘loop’ route should be created through new development to enable collection vehicles to continue in a forward direction wherever possible. This means that less external space and public realm is given over to providing turning circles.
- Sharp bends should be avoided where buildings are close to the back edge of the footway / highway to enable trucks to navigate the road network in a safe manner.
- Whilst on street parking may not be required / planned for, designers should consider the possibility of this and ensure that there is sufficient space for refuse vehicles to pass.
- Where there are other merits to a layout that cannot provide a loop road then reversing will be permitted but should be limited to 12m and the route should be straight, safe and easy to navigate.
- The requirement for operatives to walk no further than 25m from the truck to the collection point also needs to be carefully considered when designing site and road layouts. Situations where a truck needs to reverse and then an operative also walk 25m should be avoided.

Figure 4.1.3 A loop arrangement in new developments is preferable to reduce the need for turning circles and unnecessary vehicle movements and avoiding sharp bends.

Figure 4.1.4 Road widths must ensure that car parking on street does not prohibit movement of refuse trucks. Road widths of less than 4.8m will not allow a bin lorry to pass by a parked car. Only roads of 5.5m with some dedicated parking bays will allow a lorry to pass by parked cars on either side of the road.

Figure 4.1.5 Operatives must walk no further than 25m from the truck to the collection point.

Figure 4.1.6 Trucks should not reverse more than 12m. Where this is necessary situations where operatives also need to walk 25m should be avoided.
Considering rear and front boundary access for refuse collection

Within masterplans for larger sites there may be a number of situations where refuse is collected from the front or the rear of a property. This means different principles should be considered for each of these situations:

Access at front boundary to property:

- Layouts should enable residents to bring bins to the boundary of a property as a priority. If this cannot be achieved, then the distance that needs to be walked by operatives into the demise to the property needs to be minimised.
- The route taken from the storage area to the boundary should be level and unobstructed.
- The collection area should not block a public highway or footway.

Rear access for refuse trucks:

- Courtyards - collection from rear courtyards should be avoided but where this situation is unavoidable consideration should be given to minimising reversing distances and providing convenient and safe locations for refuse vehicles to turn.

Planning requirements:

The level of detail required to support a planning application will depend on whether it is at a detailed or outline stage.

Housing design

Well-designed and sensitive incorporation of refuse storage within individual homes is essential to ensuring a positive and high quality approach to design. Different types of homes will present different challenges with regards to refuse storage. For example the following typologies will require different approaches to storage:

- Detached / semi-detached homes.
- Terraced homes.
- Infill in existing urban areas.
- Flatted development.

General requirements for all house types

The preference is for refuse to be collected from the front boundary to a property for ease of access for refuse collection vehicles. Refuse collection to the rear boundary may be considered in circumstances where there are particular design or layout constraints. The balance between creating attractive and successful places to live and their practical functioning needs to considered at all stages in the design process.

Internal layout considerations

- The distance for residents to carry waste to bins should be considered when designing the internal layouts of new housing. Ideally refuse storage will be situated close to kitchen doors.
- Adequate storage space should be provided in kitchens - cross refer to CfSH.
- Residents should not have to wheel bins through their home in order to access refuse storage.

Screening, materials and impact on visual amenity

- Where storage is visible from public areas or from new dwellings it will need to be well screened, so as not to be visually intrusive.
- Particular care should be taken in the design and materials used for storage areas that are visible from the street, open spaces and in areas visible from windows that serve living spaces within dwellings.
- Materials used for storage should complement the materials used elsewhere in the scheme. Materials should be sturdy, robust and weatherproof.
- Storage can be screened by planting.
- Storage areas should consider the dimensions and movability of the refuse bins i.e. allow enough space to manoeuvre in and out, allow for opening of the bin lid.

Design of external storage areas

The external storage point must be:

- Located away from windows and ventilators.
- Covered or under shelter.
- Permanently ventilated from the top and bottom.
- Paved to allow for wash down and drained into a suitable system.
- Within 25m of the waste collection point.
- Be secured to prevent access by vermin (unless fitted with closely fitted lids).
General design requirements for external bin stores for individual dwellings

The below diagram shows the recommended dimensions for an external bin store designed to accommodate the required number of bins.

The user must be able to fully open the bin from the top. Stores MUST be covered or have tightly fitting lids.

The store should be ventilated from the top and bottom.

The store should be secure to avoid vermin.

There should be at least 15cm between bins.

Paved to allow for wash down and drained into a suitable system.

The above examples show attractive well considered storage designs with robust, sturdy waterproof materials that complement architecture.

The above example in Hemel Hempstead shows the unsightly views created by inadequate rubbish store provision.

The above example in Hemel Hempstead shows a well ventilated store of an adequate size that has been successfully integrated into the development.

The above examples show attractive well considered storage designs with robust, sturdy waterproof materials that complement architecture.
Detached and semi-detached homes

Where there is sufficient space to provide adequate external storage space, as defined on Pages 12/13, and there is convenient access to the rear garden of a property, refuse storage should be provided to the rear of properties and brought to the front boundary for collection. Care should be taken to ensure the following guidelines are met:

- Residents should not have to wheel bins further than 25m to the boundary for collection.
- There must be sufficient space for residents to wheel bins between two dwellings that are detached or semi-detached.
- Storage may be provided in a garage so long as there is sufficient space to park a car and provide sufficient dedicated space for the storage of bins and manoeuvre them out with a parked car in place.
- Where front boundary treatments allow enough space for satisfactory storage and manoeuvring of bins to the collection point, bins may also be stored in front gardens. Appropriate screening should however be incorporated.
- Adequate internal storage space for segregated waste should be provided. CfSH recommends that integral segregated waste storage is located in kitchens or utility rooms. It recommends at least three identifiably different internal bins with a total capacity of at least 30 litres.
Distance from container to collection point should be no more than 25m.

Boundary treatments must allow satisfactory space for manoeuvring bin without blocking driveways.

The store can be integrated into garages if adequate room is left to park cars.

Where possible rubbish should not be carried through the building from internal to external storage point.

External store should be covered and follow dimensions set out on P8 (* image from http://www.britishbins.co.uk/wheelie-bin-enclosures/).

The store can be provided in front gardens where there is adequate depth to accommodate it. This must be screened from the street.

Internal storage for segregated waste should be provided at an adequate size. *http://www.britishbins.co.uk/wheelie-bin-enclosures/

Internal storage for segregated waste should be provided at an adequate size. *http://www.britishbins.co.uk/wheelie-bin-enclosures/

Locating the collection point of at the front of properties encourages residents to take ownership of their own bin. The position of the collection point should not obstruct pedestrians.

External storage can be provided in front gardens where there is adequate depth to accommodate it. This must be screened from the street.

Figure 4.1.8 Design requirements for detached and semi detached houses.
**External store** can be integrated into garages if adequate room is left to park car. Rubbish does not have to be taken through the property in this solution. **Internal storage** for segregated waste should be provided at an adequate size. **External store** can be integrated into front garden as long as the minimum length is 3m. This must be screened from view from the street. **Internal storage** for segregated waste should be provided at an adequate size.

Locating the **collection point** at the front of properties encourages residents to take ownership of their own bin.

Figure 4.1.9 Examples of design solutions for terraced houses.

**Guidance for terraced or infill development**

Where new development is terraced or consists of infill development in an existing neighbourhood, storage will need to be sensitively incorporated at the front boundary of new development. The following should act as a guideline but individual solutions that are appropriate to the unique designs of new homes are expected:

- In infill schemes, consideration of the boundary treatments of adjacent homes should be taken into account and any storage will need to be designed to be in keeping with surrounding homes.
- No shared facilities will be provided but residences will take responsibility for their own collection point. Exceptions can be made in special circumstances.

The following examples show some potential solutions for terraced housing. The Council will welcome other well considered innovative solutions.

This example shows development at Harmony Place, London. Refuse storage has been integrated into front garden spaces. The design complements the architecture and screens bins from the street.
Internal storage for segregated waste should be provided at an adequate size.

The design of external stores can be cleverly integrated into the design of façades.

Locating the collection point at the front of properties encourages residents to take ownership of their own bin.

Any lane or alley must be secured with lockable gates and be an adequate width to manoeuvre bins. Gates to properties must also be secure.

Internal storage for segregated waste should be provided at an adequate size.

Locating the collection point at the front of properties encourages residents to take ownership of their own bin. The distance from the external store to the collection point must be 25m or less.

This example shows development at Newhall, Harlow. Space for bins has been cleverly integrated into the facade below the main access to the property.

This example shows development at Upton Park. Bin stores have been integrated into back gardens with gate access to a lane for owners to drag their bin to the collection point.
Flatted development

General requirements:

• The quantity of storage required needs to be calculated based on the requirements set out in section 2.
• Based on this requirement a dedicated storage area that is of sufficient space to allow for the storage and manoeuvring of the required bins must be provided.
• The preference is for a dedicated internal storage area rather than external storage areas. The council will consider external storage spaces for smaller developments and where there are other factors to take into consideration in the design of new buildings.
• Storage spaces should be secure and provide level and convenient access for operatives to retrieve waste receptacles and wheel them to the refuse vehicle.
• The location of stores should be carefully considered in relation to the street scene and where possible should not make up a major proportion of the frontage to main streets or walkways.
• Storage facilities must be located in publicly accessible areas within 30m (not including vertical distances) from individual flats.
• Developments should provide separate storage facilities for recyclable and non recyclable waste in accordance with the table in section two.
• For development above four storeys, it is preferable although not a requirement, that rubbish should be transported to the waste storage area by a rubbish chute. Rubbish chutes must:
  − At least 450mm in diameter;
  − Have a smooth non absorbent surface;
  − Have close fitting doors at each storey; and
  − Be ventilated from the top and bottom.

Design of external storage areas

• The external storage point must be :
  − Located away from windows and ventilators;
  − Covered or under shelter;
  − Designed to leave a minimum of 150mm around each reciprocal to facilitate filling and emptying;
  − Be secure and lockable;
  − Permanently ventilated from the top and bottom;
  − Paved to allow for wash down and drained into as suitable system;

• Internal storage rooms must:
  − Allow room for filling and emptying
  − Provide clear space of 150mm around each container for manoeuvring
  − Designed to allow adequate vertical space to allow the bin lid to open fully (at least 2m)
  − Permanently ventilated from the top and bottom
  − Have provision for washing down and draining the floor into a system suitable for receiving a polluted effluent
  − Have a paved impervious floor
  − Be secured to prevent access by vermin

The use of keys or key pads for bin stores will be discouraged, but where these are necessary the council will not take responsibility for the security of buildings. Management companies are responsible for informing Council officers of any change to keys or codes to prevent waste collection contractors not being able to gain access to collect waste.
Design requirements for external bin stores for flats

The below diagram shows the recommended dimensions for an external bin store designed to accommodate the required number of bins. It illustrates capacity for 10 flats.

- The space has to be at least 2m high.
- Internal space between bins should be large enough to accommodate a wheelchair turning circle.
- A clear space of 15cm should be left around each container.
- The floor should be paved and impervious and be able to be washed down.
- Doors should be at least 2m wide to allow easy access/egress with containers and should provide permanent ventilation. The doors should be secure to avoid vermin.
- The space has to be at least 2m high.

**Fig 4.1.10 - Waste requirements for flatted development.**

- Doors to internal compounds should be well integrated into façades.
- The above example in Hemel Hempstead shows a well designed internal store with at least 2m headroom and adequate internal space to manoeuvre bins.
- External stores, such as the above example in Hemel Hempstead, are acceptable. These should have a clear height of 2m and be attractively designed.
- The above example in Hemel Hempstead shows where external rubbish stores have been poorly integrated into flatted developments and create unsightly views.
Guidance for commercial development

Commercial waste within Dacorum Borough Council is collected in a different way to residential waste and as such has a different set of requirements when it comes to the design of new buildings. The waste authority must be consulted on the following points with regard to commercial development:

- The volume and nature of waste and the storage capacity required;
- Requirements to segregate recyclable waste;
- Method of waste storage, including any on-site treatment;
- Location of waste storage areas, waste treatments areas, waste collection points and access to these locations for operatives and vehicles;
- Hygiene arrangements in waste storage areas;
- Fire protection and hazards measures; and
- The design of any external and internal storage spaces.

Commercial development should also adhere to the following principles:

- Waste areas must have an impervious floor and should have provision for washing down and draining the floor into a system suitable for receiving a polluted effluent.
- Any storage rooms must be secure to prevent access by vermin unless waste is stored in secure containers with close fitting lids.
- Waste storage areas should be marked and signs should be provided.
- Waste containers should not be placed on the public highway for collection unless completely unavoidable.
- Waste collection points at the rear of buildings may be suitable in non-domestic situations.

Guidance for Mixed Use

In a mixed use development such as a commercial property that includes dwellings, there should be a strict separation of waste to ensure that commercial waste does not enter the domestic waste stream. Storage and design for each type of waste should follow the guidance given above.

Further Information

For more information of Refuse Storage Guidance, please visit our website at dacourm.gov.uk or call 01442 228000 and ask for Planning or Waste Services.