

Waste Storage and Collection Guidance for new Developments



Waste and Outdoor Services Mid Sussex District Council

Revision Schedule

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1.0. Introduction

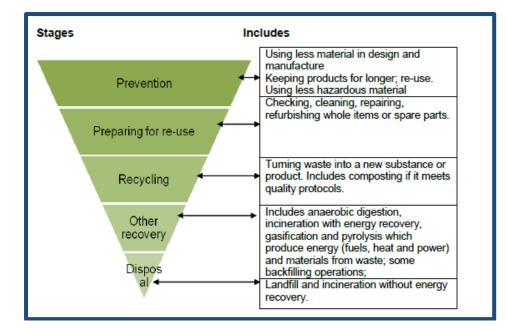
- **1.1.** This guidance seeks to assist those involved in the design of buildings to produce waste management strategies that best facilitate the storage of waste and maximise the amount that can be sent for recycling. It can be used as a design tool for architects and developers and will be used by Planning Officers in assessing planning applications to ensure that waste management priorities are addressed.
- **1.2.** Mid Sussex District Council (the Council) is committed to maximising recycling, improving the quality of recycling, reducing general waste and making the collection service easy to use. The Council also has to ensure that the service is Health and Safety compliant for both collection crews and residents.
- **1.3.** This guidance applies to proposals for all new builds and any developments to existing properties to ensure adequate waste and recycling storage and collection facilities are provided. Following this guidance will help you to produce successful waste management strategies and will assist you in complying with Part H of the Building Regulations 2002. The document should be read within the context of other Council policies and legislation.
- **1.4.** The Council would also like to see non-residential buildings designed and managed to better facilitate the recycling of waste.

2.0. Background

2.1. This guidance is appropriate to all types of development, from small householder extensions to large scale residential development. It establishes good design practice to minimise waste, increase recycling and underpin the Waste Hierarchy.

2.2. The Waste Hierarchy

In England, the waste hierarchy is both a guide to sustainable waste management and a legal requirement, enshrined in law through the Waste (England and Wales) Regulations 2011. The hierarchy gives top priority to waste prevention, followed by preparing for reuse, then recycling, other types of recovery (including energy recovery), and last of all disposal (e.g. landfill).



3.0. Planning Applications

- **3.1.** The Council is committed to promoting sustainable development and encouraging the recycling of waste. The Council wish to ensure that new development makes adequate provision for recycling and this guidance supports Development and Infrastructure: Supplementary Planning Document / Section 6 and takes account of the Local Plans in place.
- **3.2.** Recommendations within this guidance are integral to building design and are intended to be used from the earliest stage possible to prevent future problems. Inadequately sized bin storage areas and the provision of safe and adequate access for collection vehicles and crews are difficult to resolve retrospectively.

4.0. After Granting of Planning Permission

- **4.1.** Where the Council is to provide a collection service for waste and recycling the developer must notify the Council's Waste Management Department at least one month before the first property is due to be occupied. The developer must ensure that suitable containers are provided prior to occupation of any properties as detailed in Sections 6 to 11.
- **4.2.** The Council will not commence collections within a development until a route risk assessment has been completed (by the Council and their contractor) and deemed to be safe, the carriageway has been constructed to binder (base) course layer and access is unhindered at all times. If collections are required prior to this, private waste collection arrangements must be made by the developer.

5.0. Internal Segregation and Storage of Waste

- **5.1.** To encourage residents to recycle waste, internal storage areas should be designed into each unit of new developments. This will enable occupants to segregate their waste into recycling and general waste, for temporary storage, prior to transfer to external bins.
- **5.2.** The size of the units should be sufficient to store a volume of waste that supports the Council's alternate weekly collection system. It is therefore recommended that no individual bin should have a volume less than 15 litres and that developers provide a minimum total capacity of 60 litres (BS5906 2005). This may be achieved, for example, through the use of kitchen units with drawers or containers.

6.0 Residential Developments

6.1 Housing Developments

To promote recycling within the home environment, provision should be made for both internal and external storage of all the waste streams collected by the Council. The Council operates an Alternate Weekly Collection of refuse and recycling so it is essential that the right capacity for refuse and recycling is provided.

6.1.1 Containers Required for External Storage of Waste for Housing developments

Waste Type	Refuse	Recycling	Garden (Subscription service optional)
Container	Wheeled Bin	Wheeled Bin	Wheeled Bin
Туре	Grey body, grey	Grey body, blue	Grey body, green lid
	lid	lid	
Capacity	240	240	240
(litre)			

The dimensions for the above containers can be found in **Appendix C**. Where 240 litre bins are used the Council will only collect from Council supplied bins.

6.1.2 Specifications for External Storage Areas for Waste Containers for Housing Developments

Storage areas for waste bins should take into consideration all following criteria.

- i. The waste bins described above should be accommodated within the curtilage of each property and should not be stored on the highway.
- ii. Storage areas should be identified on plans.
- iii. Storage areas and collection points must be on hard standing.
- iv. Storage areas should be positioned to make it convenient for the householder to transport waste/recycling to. They should not be more than 30 metres from the external door (not including any vertical distance).
- According to Building Regs, the maximum distance collection crews should have to move 2 wheeled bins is 25 metres and gradients should not be more than 1 in 12 (Schedule 1 Part H Building Regs 2002). A risk assessment will be required to determine collection points where standard kerbside collection points are not available.
- vi. The Council prefer that the distance collectors should have to cover in respect of transporting waste containers to and from the collection vehicle should be minimized to achieve an economical service, and residents should be able to transport their bins to a point at the property boundary within 1 metre of the public highway.
- vii. Steps should be avoided, but where this is not possible there should be no more than 5 steps between the storage area and collection point.
- viii. Containers should have designated storage areas which are sensitively located and designed, taking into account the prevailing weather conditions and the aesthetics of the area. Storage areas should be large enough to house at least 2 x 240 litre wheeled bins for refuse and recycling.
- ix. Where properties have a garden, space for an extra 240 litre wheeled bin should be provided.
- x. Storage areas also need to be accessible for collection crews in order to accommodate any assistance which may be required by current or future occupants.

6.1.3 Waste Container Collection from Housing Developments

- i. Householders are required to present their bins at the edge of their property, at the point nearest the highway, on collection day, and return them to their storage area, as soon as possible following collection.
- ii. Collection vehicles used by the Council are described in **Appendix A.** New developments and their access roads should be designed to accommodate these vehicles and allow them to collect containers directly from the kerbside. Plans should include proposed

routes of collection vehicles (swept path analysis) around the site, including access to proposed collection points.

- iii. Access to developments, wherever possible, should enable collection vehicles to continue in a forward gear and minimise reversing manoeuvres. Reversing of waste collection vehicles is a dangerous operation and requires the use of reversing assistants to support the driver. Injuries to collection crews or members of the public by moving collection vehicles are invariably severe or fatal. Where reversing cannot be avoided, vehicles should not be required to reverse distances in excess of 12 metres (BS5906 2005). Longer distances may be considered but the routes should be straight and free from obstruction.
- iv. Traffic regulation orders should be considered if access to a specific part of a development would not be possible if vehicles are parked in the area.

6.1.4 Housing Developments with Limited Access

- i. Where developments are made up of individual properties the Council would expect all properties to use individually allocated 240 litre bins and to store these bins within the curtilage of the property.
- ii. The Councils standard collection procedure is to collect bins from kerbside locations at each property. If access is not possible to the whole of (or part of) a development, it may be necessary for residents to present their bins at a designated collection point within 10 metres of where the waste freighter can get to.
- iii. Shared collection points should be constructed using hard standing, and large enough to take 1 bin from each property that is to use the area. Collection points should not be covered or designed as a bin store (such as those used at apartment blocks) to minimise the risk of residents choosing to leave bins in these areas on a permanent basis.
- iv. The Council does not support the use of communal bins in developments of (or parts of) individual properties that have space for storage of individual bins.

6.1.5 Housing Extensions

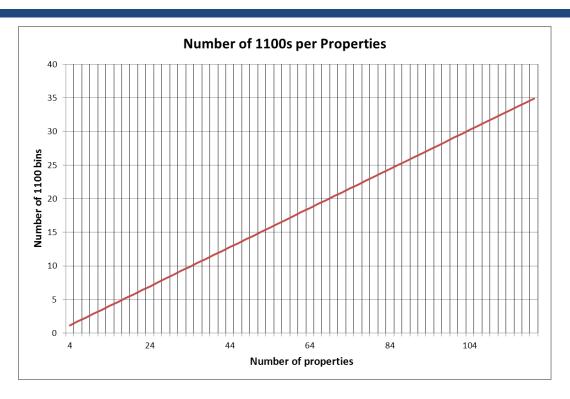
Where an extension to an existing property is proposed, this may result in the removal of existing container storage areas. This is acceptable provided that an alternative storage area is designated as part of the proposed development, in line with this guidance.

6.2 Flats and Apartment Developments

6.2.1 Containers Required for External Storage of Waste for Flats and Apartments

Communal storage facilities are deemed to be more appropriate for flats and apartments and should be provided at strategic locations throughout the site. The Council operates an Alternate Weekly Collection of refuse and recycling and it is expected that new developments will have storage capacity for sufficient waste containers for this service. The Council use 4 wheeled 1100 litre bins in communal bin areas and recycling bins should preferably have a lockable blue lid with an aperture.

The graph below is a simple method for calculating the number of 1100 litre bins that an apartment development will require. For example 95 apartments would require approximately 13 x 1100 litre bins for refuse and 13 x 1100 litre bins for recycling.



Storage areas should be designed to accommodate the containers as calculated via the table in **Appendix B**. The dimensions of the bins can be found in **Appendix C**.

It is advisable to contact the Waste Management Department at the Council to verify that the numbers of bins that have been allocated are sufficient for the development.

6.2.2 Developers will be required to purchase 1100 litre bins for residential refuse and recycling. Bins can be purchased through the Council or through another supplier. If bins are purchased through another supplier they will need to fit Council specifications as shown in Appendix B.

6.2.3 Waste Storage Areas for Flats and Apartments

Storage areas should be designed to accommodate bins as calculated in **Appendix B**. The design of communal bin storage areas is vitally important within a development site. Poorly designed areas can lead to contamination of materials and litter, potentially resulting in public health issues. They must be an integral part of the development, located to avoid conflict with parking areas and to ensure that residents, collection vehicles and collectors can obtain access at all times.

6.2.4 Storage areas for Waste Bins for Flats and Apartments

- i. Storage areas should be identified on plans.
- ii. Bins should have designated external storage areas that are sensitively located and designed.
- iii. Bin storage areas should be in a position that is mutually convenient and easily accessible for the occupants and the collection crew.
- iv. The design of storage areas should allow for easy removal of the bins over smooth, continuous surfaces, including the use of dropped kerbs to allow for emptying of the bins.
- v. Areas should be provided on suitable hard standing with adequate drainage.

- vi. Gradients should not be more than 1 in 12 and avoid steps.
- vii. Access for all residents including people with disabilities and wheelchairs users should be considered in line with appropriate building regulations and guidance.
- viii. Doorways should provide at least 1.3m clearance (including thickness of doors).
- ix. A walkway of at least 1.3m wide should be provided within the store that allows access to each of the individual bins and ensures that an individual bin can be removed from the store without the need to move any other bins.
- x. Storage areas should be well illuminated to allow residents to use the areas in the evenings and feel safe doing so.
- xi. Bins should be located away from windows and ventilators to avoid any nuisance odours entering the premises.
- xii. The horizontal distance that occupants will be required to travel to waste storage areas from their apartments should not exceed 30m, in line with the building Regulations 2002, Part H.
- xiii. The collection vehicle should be able to get within 10 metres of the waste storage area to service the bins.
- xiv. If a bin storage area forms part of the apartment block and there is an internal access door from the residential part of the development area, this door should be connected to the residential area by a lobby, so as to prevent nuisance odours entering the residence.
- xv. It is good practice to provide signage at the storage points to remind residents of the need to segregate recyclable materials and to use the correct bin for each specific material source. The Council can provide signage about recycling to go up in collection areas. Please contact the Waste Management Department to discuss the provision of signage.
- xvi. Where possible an area for collection of bulky waste should be provided.
- xvii. **Appendix D** shows some examples of good and bad practice of bin storage at apartments including photographs to illustrate the issues being highlighted.

6.2.5 Waste Collection for Flats and Apartments

- i. Two options exist for the collection of waste bins from flats and apartments:
 - 1. Waste bins are collected directly from the container store, in line with the points below.
 - 2. Waste bins are collected from an agreed collection point, in line with the points below.
- ii. It is the responsibility of the caretaker / management company (or similar) to allow the collection crews access to the container stores / collection point on collection day and to ensure that access is not restricted, for example by parked cars.
- iii. The Waste Management Department can take responsibility for a key or access code to gain access into a development or bin area. The preferred option is for a lock with a code to be used to avoid the use of keys.
- iv. Collection vehicles used by the Council are described in **Appendix A.** Access roads for collection should meet criteria in **Section 6.1.3**.
- v. Access to developments, wherever possible, should enable collection vehicles to continue in a forward gear and minimise reversing manoeuvres as described in **Section 6.1.3**.

7.0 Waste Compaction

On-site waste compaction is not an option for residential developments as it presents problems for collection.

8.0 Waste Chutes

Chutes should not be included in apartment developments as they can create problems for segregating and storing waste for recycling.

9.0 Bulky Refuse

The Council offers a collection service for the removal of bulky waste (e.g. furniture, fridges, mattresses, televisions etc.) from residential properties. The service is chargeable and bulky refuse items should not be placed in waste storage areas without prior booking of a bulky waste collection.

10.0 Composting

Flats and apartment developments with communal garden facilities should consider the use of composting facilities which can be incorporated into the landscaping plan for the site. However, developers will be required to identify a suitable community body or management / maintenance company who will assume responsibility for the area.

11.0 Change of Use Developments

Where a development involves change of use of a building e.g. change of a terraced or detached property into individual flats and HMOs, storage areas should be provided for wheeled bins for each individual property and accessible collection points should be provided in line with this guidance. In some cases it may be more appropriate to provide communal bins. Contact the Waste Management Department for further advice.

12.0 Un-adopted (Private) Roads

- **12.1** Where it is proposed to include private roads within a development, the Council should be consulted at an early stage to confirm their collection requirements. As a general rule, the Council will not enter a private road/area for collection and the occupiers will be required to bring their bins to a designated collection point, usually adjacent to the public highway. Developers should therefore consider the use of a communal collection point sited discretely at the development edge. Informal solutions that would result in a significant number of wheeled bins left in the open in public view are not acceptable.
- **12.2** The Council's Waste Management Team will consider entering private roads where there are large numbers of properties or where the roads run for long distances. However, this will depend on the surface and the construction of the road. It is essential that the road is constructed to take the weight of a fully loaded refuse freighter (26 tonnes). Confirmation that the road has been constructed to a standard equivalent to Highways Adoption Standard, to take the weight of a freighter and permission for the Council to enter the road with a freighter, will be needed prior to the Council entering the road.
- **12.3** Neither the Council nor its contractor will accept any responsibility for any damage to a road surface if permission to enter this area with a freighter has been granted.

13.0 Gated Communities

Either permission to gain access to collect waste is required (dependant on a route risk assessment), or bins need to be presented at a designated collection area outside the gate. This should be established by the developer and then maintained by the Managing Agent. Collections will depend on the nature of properties in the gated community; where there are several apartments refer to section 6. The Council prefer where possible for individual houses within a gated community to bring their bins to single collection point.

14.0 Mixed Use Developments

Requirements for most mixed-use developments should follow the guidance provided for residential and commercial developments. Separate stores for the refuse and recycling containers should be provided for the commercial aspects of a development and the residential aspects. Under no circumstances should commercial waste enter the domestic waste stream.

15.0 Commercial Developments

15.1 Containers Required for Storage of Waste at Commercial Developments.

- i. The volume of waste generated and thus the number and type of containers required by a commercial development is ultimately dependent on the activity of the occupant.
- ii. Containers should be provided that maximise the amount of recyclable material that is segregated and sent for recycling.
- iii. The number of containers provided should be maximised in order to reduce the number of collections and therefore collection vehicle traffic.
- iv. The provision of adequate storage space for recyclable materials is likely to result in lower collection charges and reinforce the occupiers' environmental policies.
- **15.2** WRAP offers UK businesses advice on ways in which businesses can become more sustainable, including advice on commercial waste management. Contact details in **Section 16.**

15.3 Storage Areas for Waste Containers and Waste Container Collection for Commercial Developments

Storage areas should be within the confines of the development. The guidance given in **Section 6** on storage areas/container collection for residential developments should be followed for commercial developments.

15.4 Waste Compaction

On-site waste compaction is an option for commercial developments. However, the Council does not provide a collection service for compacted waste. Adopting this approach must not discourage occupants from segregating their waste for recycling.

15.5 Food Waste

Developments which generate food waste have to comply with the requirements of the Animal By-Products Regulations 2003.

The Regulations place controls on the collection, handling, transport, storage, and disposal of animal by-products. This may have implications for the design of the building and the waste containers required.

Further information on The Animal By-Product Regulations 2003 can be gained from DEFRA at <u>http://www.legislation.gov.uk/uksi/2003/1482/contents/made</u>

15.6 Tenant Contracts

Clauses should be written into Tenant Contracts to ensure that they commit to segregating their refuse and recycling as much as possible.

16.0 Contact Details

16.1 Mid Sussex District Council Waste Management Team

Telephone 01444 477440 Email - <u>wastematters@midsussex.gov.uk</u>

Website - www.midsussex.gov.uk/recycling

Post - Waste Management Team, Mid Sussex District Council, Oaklands Road, Haywards Heath, West Sussex, RH16 1SS.

- **16.2** WRAP offers UK businesses advice and support on waste management. Website <u>http://www.wrap.org.uk/</u>
- 16.3 Waste Recycling Directory for Business Website <u>www.wasterecycling.org.uk</u>

Appendix A

Waste Collection Vehicle Dimensions

The figures below are based on the vehicles used by the Council.

- 1. Vehicles used by the Council are Dennis Eagle Elite 2 models with Terberg bin lifts.
- 2. Sufficient room should be allowed to manoeuvre and load a vehicle of the following dimensions:
 - Length 10.5m
 - Width 2.6m
- **3.** Fully laden collection vehicles weigh approximately 26 tonnes. Service manholes and road surfaces should be constructed with this in mind.
- **4.** Overhead service cables, pipes, archways and other potential obstacles must be at least 7 metres from ground level.
- **5.** If Waste Management Department are unable to verify the suitability of a proposal in terms of collection vehicle access, accurate technical drawings detailing the proposed route of the collection vehicles around the development should be included in plans submitted to the Council.
- 6. Recycling and refuse bins are picked up from the rear of the collection vehicles. This should be reflected in the proposed routes for collection vehicles.
- The need for collection vehicles to reverse into developments from a major road, or reverse onto a major road when exiting should be minimised (<u>http://www.highways.gov.uk/</u> for the definition of a 'major road').





Mid Sussex District Council Recycling and Refuse Collection Vehicle

Appendix B

Container capacity calculation and specifications

To calculate bins required for communal bin areas:

- Number of properties x 240 divided by 0.75 Then:
- If less than 6 apartments divide by 240, and round up for number of 240 bins required
- If more than 6 apartments divide by 1100 and round up for number of 1100 bins required
- Summary chart in **Section 6.2.1**

A Capacity Calculation Table for more than 6 apartments is shown on the next page.

If you are uncertain please contact the Waste Management Team for advice.

Number of	•	1100 litre	Number of	Litres (No x	1100 litre
properties	240 / 0.75)	bins	properties	240 / 0.75)	bins
8			8		23.9
10	3200	2.9	84		24.4
12	3840	3.5	8		25.0
14			8		25.6
16			90		26.2
18		5.2	97		26.8
20		5.8	94		27.3
22	7040	6.4	90	5 30720	27.9
24	7680	7.0	98	3 31360	28.5
26	8320	7.6	10	32000	29.1
28	8960	8.1	102	2 32640	29.7
30	9600	8.7	104	1 33280	30.3
32	10240	9.3	10	5 33920	30.8
34	10880	9.9	10	3 34560	31.4
36	11520	10.5	110	35200	32.0
38	12160	11.1	112	2 35840	32.6
40	12800	11.6	114	4 36480	33.2
42	13440	12.2	110	5 37120	33.7
44	14080	12.8	118	3 37760	34.3
46	14720	13.4	120	38400	34.9
48	15360	14.0	12	2 39040	35.5
50	16000	14.5	124	1 39680	36.1
52	16640	15.1	120	6 40320	36.7
54	17280	15.7	12	3 40960	37.2
56	17920	16.3	130	41600	37.8
58	18560	16.9	132	2 42240	38.4
60	19200	17.5	134	42880	39.0
62	19840	18.0	130	6 43520	39.6
64	20480	18.6	13	3 44160	40.1
66	21120	19.2	14	44800	40.7
68	21760	19.8	142	2 45440	41.3
70	22400	20.4	14	46080	41.9
72	23040	20.9	14	6 46720	42.5
74	23680	21.5	14	3 47360	43.1
76	24320	22.1	150	48000	43.6
78	24960	22.7	152	2 48640	44.2
80	25600	23.3			

Capacity Calculation Table for more than 6 Apartments

Appendix C

Waste Container Dimensions

Container	Dimensions		Space required	
1100Ltr Bin	Width	1375mm	1575mm x 1275mm	
	Depth	1075mm		and the second sec
	Height	1460mm		
				55-5
240Ltr	Width	580mm	780mm x 925mm	and the second s
Wheeled Bin	Depth	725mm		
	Height	1075mm		in averes

1100 litre bin Specification and Purchase

1100 litre bins can be purchased from the Council at £250 including delivery. Bins purchased from another supplier will need to fit Council specifications:

- 1100 litre bin for general waste: flat lidded, grey body, grey lid.
- 1100 litre bin for recycling: grey body, blue lockable lid with an aperture for recycling.

Recycling bin stickers and signage will be provided by the Council. Please contact the Waste Management Team to arrange delivery of recycling signs and stickers.

Appendix D

Examples of Good and Bad Practice

1. Good Practice

Factors which need to be taken into consideration when designing refuse and recycling storage, to ensure efficient collection by the collection vehicles/operatives and as a means of encouraging efficient use by residents are detailed in **Sections 5, 6 and 15** of this document.

Photo 1 shows a development that has a number of bin stores located in strategic locations that are accessible to residents and the collection crews at all times. The stores are also secure and hide the bins from view.



Photo 1. Example of good practice - bin storage.

Photo 2. A further example of good practice where the bin store is included in the main building but is not underneath a property. The store is also close to the road so is accessible to the collection crew at all times and is not affected by parked vehicles. The refuse freighter can access the bin store without the need to reverse into the development. **Photo 3** shows that the store is secure and has a key pad so that the crew can gain access with a card.



Photo 2. Example of good practice - bin storage.



Photo 3. Example of good practice - bin store lock.

2. Bad Practice

Photos 4, 5 and 6 illustrate some of the problems encountered by the recycling and refuse collection service in Mid Sussex.



Photo 4. Example of bad practice - inaccessible bin store.

Photo 4 shows that the doors to the bin store cannot be opened when a car is parked in the space in front of the store. A design such as this could lead to missed collections, overflowing bins and health and safety issues. This could be avoided with more space provided between the store and the parking space to allow access for the bins to be moved to the collection vehicle.



Photo 5. Example of bad practice – no drop kerb and potentially inaccessible bin store.

Photo 5 shows a bin store that does not provide sufficient capacity to store both refuse and recycling bins. Therefore, the recycling bins are outside of the store on full view and not secure in any way. The access from the store to the collection vehicle is over a standard kerb that is not dropped to allow for safe movement of the 1100 bin. The access to the bin store is also via a parking space.

The issues here could be avoided by the installation of a dropped kerb in front of the bin store and an access route demarked on the road surface at the edge of the parking space (with bollards to stop vehicles parking over the access route).

It is difficult to make space for bins that may be introduced after the store has been constructed. However, the recycling bins in this location could be secured by a simple fence around them.



Photo 6. Example of bad practice – bin store accessed via steps.

Photo 6 shows a bin store that is accessed down a flight of 8 steps. This makes the use of 1100 litre bins impossible and the use of 240 litre bins a health and safety issue. Stores constructed in this type of location are very difficult to use for wheeled bin storage and are likely to become obsolete.