



Warringah Waste Management Plan

2010

To be completed in accordance with Council's
Waste Management Policy

Waste Management Plan Section 1 - Ongoing management

This Section is to be lodged with all Development Applications **excluding** those for

- Alterations and additions to residential accommodation including attached dwellings, dwelling houses, dual occupancies, secondary dwellings, semi-detached dwellings and shop top housing (with one or two dwellings).
- New residential accommodation including attached dwellings, dwelling houses, dual occupancies, secondary dwellings, semi-detached dwellings and shop top housing (with one or two dwellings).
- Demolitions only.

Refer to Council’s Waste Management Policy for specific objectives and requirements.

Applicant and Project Details (All Developments)			
Applicant Details			
Development Application No. (office use only)			
Name			
Applicant Address			
Phone number(s)			
Email			
Project Details			
Subject Property Legal Description	Lot:	DP:	
Street Address	Unit No. Suburb:	House No. Postcode:	Street.
Description of proposed development			
<i>This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste relating to this project.</i>			
Name			
Signature			
Date			

Section 1 – Ongoing Waste Management

1.1 Details for ongoing operation for residential accommodation including boarding houses, group homes, hostels, multi dwelling housing, residential flat buildings, seniors housing, shop top housing (with 3 or more dwellings)

Refer to Council's Waste Management Policy for objectives and requirements that relate to the particular development.

Requirements	Example	Answer	Coun Tick
No of Dwellings	20		
No and type of bins required (refer to Appendix 1)	16 x 240 Litre Bins		
No of Waste and Recycling Storage Rooms or Areas	2		
Dimensions and Floor area (m2) of Waste and Recycling Storage Rooms or Areas	Rm 1 – 3.2 x 3 = 9.6m ² Rm 2 – 3.2 x 3 = 9.6m ²		
Distance from Waste and Recycling Storage Rooms or Areas to collection point or service area	6.5 metres		
Minimum distance between the waste storage rooms or areas to the nearest opening within a dwelling	6 metres		
Does this development propose any equipment such as garbage chutes or compaction equipment? If yes, please describe.	<ul style="list-style-type: none"> • 1 garbage chute • 1 garbage compactor – compaction rate 2:1 		
Who will be responsible for transferring waste from any service rooms to the waste and recycling storage room or area?	<ul style="list-style-type: none"> • Tenants 		
Describe how waste/recycling storage rooms and equipment will be cleaned and maintained, and how tenants and cleaners will be made aware of the obligations	<ul style="list-style-type: none"> • A Private Waste Management Service will be contracted to clean and maintain rooms • Signage will outline responsibilities 		
Describe measures taken to ensure waste storage areas are aesthetically consistent with the rest of the development.	<ul style="list-style-type: none"> • External finishes consistent with those of the main building • The entrance of the room will be screened by landscaping 		

Section 1 – Ongoing Waste Management

1.2 Non-Residential Development – Details for Ongoing Operation

Refer to Council's Waste Management Policy for objectives and requirements that relate to the particular development.

Requirements	Example	Coun Tick
Ongoing use of the premises	Take away food shop	
No of Units/Tenancies	5	
Designated Floor Area per use (m2)	500	
Daily Waste Generation (L)*	400	
Daily Recyclable Material Generation (L) *	400	
Number of operating days per week	6	
Proposed Frequency of Collections per week	2	
No of Waste and Recycling Containers	10	
Capacity of Individual Waste and Recycling Containers (L)	240	
Dimensions (height x width x depth) of Waste and Recycling Containers	1060 mm x 585mm x 730mm	
No of Waste and Recycling Storage Rooms or Areas	1	
Dimensions and Floor area (m2) of Waste and Recycling Storage Rooms or Areas	4 x 3 = 12m2	
Distance from Waste and Recycling Storage Rooms or Areas to collection point or service areas	6.5 metres	
Minimum distance between the waste storage rooms or areas to the nearest opening within a dwelling	6 metres	
Does this development propose any equipment such as garbage chutes or compaction equipment? If yes, please describe.	<ul style="list-style-type: none"> • 1 garbage chute • 1 garbage compactor 	
If applicable, what reduction will be achieved from the compacting equipment?	2:1	
Who will be responsible for transferring waste from any service rooms to the waste and recycling storage room or area?	A Private Waste Management Service	
Describe how waste/recycling storage rooms and equipment will be cleaned and maintained, and how tenants and cleaners will be made aware of the obligations	<ul style="list-style-type: none"> • A Private Waste Management Service will be contracted to clean and maintain rooms • Signage will outline responsibilities • Tenants will retain a copy of the private waste management service contract 	
Describe measures taken to ensure waste storage areas are aesthetically	<ul style="list-style-type: none"> • External finishes consistent with 	

Section 1 – Ongoing Waste Management

Requirements	Example	Coun Tick
consistent with the rest of the development.	those of the main building <ul style="list-style-type: none"> The entrance of the room will be screened by landscaping 	
Describe arrangements for ensuring bins are adequately labelled ensuring tenants are aware of how to use the waste management system correctly	<ul style="list-style-type: none"> Management of this will form part of the Private Waste Management Service contract 	
Evidence of compliance with any specific industrial waste laws/protocols. For example, those related to production, storage and disposal of industrial and hazardous wastes as defined by the <i>Protection of the Environment Operations Act 1997</i> .		

* In the absence of project specific information the waste/recycling generation rates shown in Table 1 can be used.

Section 1 – Ongoing Waste Management

1.3 Details Required on Plans (all developments)

The applicant must submit plans which highlight the information required below:

	Applicant Tick Yes	Council Tick Yes
The nominated service area or collection point and dimensions including height*	<input type="checkbox"/>	<input type="checkbox"/>
Any access driveways and internal roads	<input type="checkbox"/>	<input type="checkbox"/>
Clearance, geometric design and strength of internal access driveways and roads*	<input type="checkbox"/>	<input type="checkbox"/>
Direction of traffic flow for internal access driveways and roads	<input type="checkbox"/>	<input type="checkbox"/>
The location of any waste/recycling storage rooms or areas and dimensions	<input type="checkbox"/>	<input type="checkbox"/>
Access route(s), doors and openings for residents/tenants to deposit waste in the waste/recycling storage rooms or areas showing minimum clearances, proposed surface and gradients	<input type="checkbox"/>	<input type="checkbox"/>
Access route(s), doors and openings from the waste/recycling storage rooms or areas to the collection point or service area showing minimum clearances, proposed surfaces and bin carting grades	<input type="checkbox"/>	<input type="checkbox"/>
Dimensions and volume of proposed waste/recycling storage containers	<input type="checkbox"/>	<input type="checkbox"/>
The number and layout of bins to be stored in the waste/recycling storage rooms including access aisles	<input type="checkbox"/>	<input type="checkbox"/>
Construction details of storage rooms/areas (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions etc)	<input type="checkbox"/>	<input type="checkbox"/>
The location of any garbage chute(s) and service rooms	<input type="checkbox"/>	<input type="checkbox"/>
Construction details of any service rooms	<input type="checkbox"/>	<input type="checkbox"/>
The location of any waste compaction equipment	<input type="checkbox"/>	<input type="checkbox"/>
Any storage rooms for temporary storage of bulky items awaiting removal and dimensions including height (residential development only)	<input type="checkbox"/>	<input type="checkbox"/>
Signage – types and locations. Signage will be required on bins and outside waste/recycling storage rooms (non-residential development only)	<input type="checkbox"/>	<input type="checkbox"/>

* Refer to Council's Design Specifications 'Auspec 1' and the Australian Standard AS 2890.2-2002 'Parking Facilities – off-street commercial vehicle facilities'.

Section 1 – Ongoing Waste Management

Table 1 - Waste/recycling generation rates for ongoing operation

PREMISES TYPE	WASTE GENERATION	RECYCLABLE MATERIAL GENERATION
Backpackers' Hostel	40L/occupant space/week	20L/occupant space/week
Boarding House, Guest House	60L/occupant space/week	20L/occupant space week
Food premises:		
Butcher	80L/100m ² floor area/day	Variable
Delicatessen	80L/100m ² floor area/day	Variable
Fish Shop	80L/100m ² floor area/day	Variable
Greengrocer	240L/100m ² floor area/day	120L/100m ² floor area/day
Restaurant, Café	10L/1.5m ² floor area/day	2L/1.5m ² floor area/day
Supermarket	240L/100m ² floor area/day	240L/100m ² floor area/day
Takeaway food shop	80L/100m ² floor area/day	Variable
Hairdresser, Beauty Salon	60L/100m ² floor area/week	Variable
Hotel, Licensed Club, Motel	5L/bed space/day 50L/100m ² bar area/day 10L/1.5m ² dining area/day	1L/bed space/day 50L/100m ² bar area/day 50L/100m ² dining area/day
Offices	10L/100m ² floor area/day	10L/100m ² floor area/day
Shop less than 100m ² floor area	50L/100m ² floor area/day	25L/100m ² floor area/day
Shop greater than 100m ² floor area	50L/100m ² floor area/day	50L/100m ² floor area/day
Showroom	40L/100m ² floor area/day	10L/100m ² floor area/day

Source: Model Waste Not DCP Chapter – A Site Waste Minimisation and Management Chapter for Consolidated Development Control Plans, NSW Department of Environment and Climate Change (July, 2008)

References

Model Waste Not DCP Chapter – A Site Waste Minimisation and Management Chapter for Consolidated Development Control Plans, NSW Department of Environment and Climate Change (July, 2008)

Waste Planning Guide for Development Applications, Inner Sydney Waste Board, 1998

Section 2 – Demolition and Construction Waste

Waste Management Plan Section 2 - Demolition and Construction

This Section is to be lodged with all Development Applications which involve any demolition and construction works.

Note this section of the DCP must be completed by a qualified builder or waste contractor.

Applicant and Project Details (All Developments)			
Applicant Details			
Development Application No.			
Construction Certificate No. (office use only)			
Applicant Name			
Applicant Address			
Phone number(s)			
Email			
Project Details			
Subject Property Legal Description	Lot:	DP:	
Street Address	Unit No. Suburb:	House No. Postcode:	Street.
Existing buildings and other structures currently on the site			
Description of proposed development			
<i>This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as council, DECC or WorkCover NSW.</i>			
Name of Builder/Waste Services Provider who completed the form			
Building License No. or Business ABN			
Signature			
Date			

Sustainable waste management during demolition and construction

To facilitate waste management and reduction, Council requires on-site sorting and storage of waste products pending re-use or collection. Completing this part of the WMP will assist you to identify the type of waste that will be generated during demolition and construction and will advise Council how you intend to reuse, recycle or dispose of the waste.

Following is some advisory notes to assist in waste management during demolition and construction. These can be read in addition to the objectives and the requirements (Section 3.2.1) of Council's Waste Management Policy.

Demolition

1. Pursue adaptive reuse opportunities of buildings/structures.
2. Identify all waste likely to result from the demolition and identify any opportunities for reuse of materials (See table 2).
3. Facilitate reuse/recycling by using the process of “deconstruction”, where various materials are carefully dismantled and sorted.
4. Reuse or recycle salvaged materials onsite where possible.
5. Provide separate collection bins or areas for the storage of residual waste.
6. Clearly 'signpost' the purpose and content of the bins and storage areas.
7. Implement measures to prevent damage by the elements, odour and health risks, and windborne litter.
8. Estimate volumes of materials to be used and incorporate these volumes into a purchasing policy so that the correct quantities are purchased. For small scale building projects see Table 3.
9. Identify potential reuse/recycling opportunities of excess construction materials.
10. Incorporate the use of prefabricated components and recycled materials.
11. Arrange for the delivery of materials so that materials are delivered “as needed” to prevent the degradation of materials through weathering and moisture damage.
12. Consider organising to return excess materials to the supplier or manufacturer.
13. Arrange contractors for the transport, processing and disposal of waste and recycling. Ensure that all contractors are aware of the legal requirements for disposing of waste.

When implementing the Waste Management Plan the applicant must ensure:

14. Footpaths, public reserves, street gutters are not used as places to store demolition waste or materials of any kind without Council approval.
15. Any material moved offsite is transported in accordance with the requirements of the *Protection of the Environment Operations Act (1997)*.
16. Waste is only transported to a place that can lawfully be used as a waste facility.
17. Generation, storage, treatment and disposal of hazardous waste and special waste (including asbestos) is conducted in accordance with relevant waste legislation administered by the EPA and relevant Occupational Health and Safety legislation administered by WorkCover NSW.
18. Evidence such as weighbridge dockets and invoices for waste disposal or recycling services are retained.

Section 2 – Demolition and Construction Waste

Note: Materials that have an existing reuse or recycling market should not be disposed of in a landfill. **Table 2** provides a list of some potential reuse/recycling options. Reuse and recycling opportunities are decreased when asbestos is not carefully removed and segregated from other waste streams.

Table 2 - Reuse and Recycling Potential of some materials

MATERIALS	PROCESS		END USE	POTENTIAL
Concrete	crushed	recycled	fill, levelling, road base	100%
Surplus pour	use up	pavers, slabs		high
Bricks	cleaned	reused	construction	100%
	crushed	recycled	landscaping, driveways, drains	100%
Roof tiles	cleaned	reused	roofing, landscaping	100%
	crushed	recycled	landscaping, driveways, drains	100%
Plasterboard (clean)	reprocessed	recycled	new plasterboard	100%
Hardwood beams denailed	reuse		flooring, furniture, fencing, craft	100%
Other timber	cleaned	reuse	formwork, bridging, propping,	high
	ground		landscaping, woodflour (oil spills)	100%
Doors, windows	cleaned	reuse	second hand market	market driven
Fittings	cleaned up	reuse	second hand market	market driven
Glass unbroken	crushed	recycled	aggregate for concrete products	100%
		reuse	repairs, glazing, glass houses	100%
Carpet - wool		reuse	mulch, landscaping	
Underfelt - natural	reuse		compost cover, mulch, landscaping	high
Synthetic rubber (as in underlay)	shredded	recycled	safety barriers, speed humps	new markets
Trees	relocated	reuse	landscaping on or off-site	100%
Greenwaste	shredded	recycled	compost, mulch, fertiliser	100%
Soil	screened	reuse	topsoil	100%
Metals; aluminium, copper lead, zinc, steel	scrap metal	recycled	new metal products	100%
Packaging; Cardboard		recycled	new packaging	100%
Plastic/steel drums	cleaned		reused	
Metal strapping	reused		return to supplier	high
Paint tins		recycled	tine extracted	100%

Source: Waste Planning Guide for Development Applications, Inner Sydney Waste Board, 1998

Section 2 – Demolition and Construction Waste

Details required on plans

Refer to Council's Waste Management Policy for specific objectives and measures.

Do the site plans detail/indicate:

	Applicant Tick	Council Tick	NA
Existing buildings on site to be demolished	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Size and location(s) of waste storage area(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access for waste collection vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Areas to be excavated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Types (including volumes and dimensions) and numbers of storage bins likely to be required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location of signage required to facilitate correct use of storage facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table 3 - Waste/recycling generation rates for Construction

Material	% Waste of Material Ordered *
Timber	5-7%
Plasterboard	5-20%
Concrete	3-5%
Bricks	5-10%
Tiles	2-5%

**Rule of Thumb' for renovations and small home buildings

Source: Waste Planning Guide for Development Applications, Inner Sydney Waste Board, 1998

Section 2 – Demolition and Construction Waste

2.1 Demolition Stage

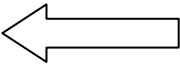
Materials on-site	Waste Estimate - Volume (m3) or Area (m2)	On-Site Reuse	Off-Site Recycling	Off-Site Disposal
		Specify proposed reuse or on-site recycling methods	Specify contractor and recycling outlet	Specify contractor and landfill site
		Most favourable	←	Least favourable
Example: Bricks	5m3	Clean and reuse some for footings and as fill behind retaining walls	Remainder sent by <u>XYZ</u> Demolishers to <u>ABC</u> Recycling Company	Nil to Landfil
Excavation material				
Timber (specify)				
Concrete				
Bricks/Pavers				
Tiles				
Metal (specify)				
Glass				
Furniture				
Fixtures and Fittings				
Floor Coverings				
Packaging (used pallets, pallet wrap)				
Garden Organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste eg asbestos (specify)				
Plasterboard				
Furniture				

Section 2 – Demolition and Construction Waste

Other – please specify				
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Resource NSW: Better Practice Guide for Waste Management in Multi-Unit Dwellings, 2002

2.1 Construction Stage

Type of Material	Waste Estimate - Volume (m3) or Area (m2)	On-Site Reuse	Off-Site Recycling	Off-Site Disposal
		Specify proposed reuse or on-site recycling methods	Specify contractor and recycling outlet	Specify contractor and landfill site
		Most favourable		Least favourable
EXAMPLE Bricks	1m3	Any whole bricks retained on-site to build BBQ	Remainder sent by <u>XYZ</u> Construction company to <u>ABC</u> recycling facility	Nil to landfill
Excavation material				
Timber (specify type)				
Concrete				
Bricks/Pavers				
Tiles				
Metal (specify type)				
Glass				
Plasterboard (offcuts)				
Fixtures and Fittings				
Floor Coverings				
Packaging (used pallets, pallet wrap)				
Garden Organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste eg asbestos				

Section 2 – Demolition and Construction Waste

(specify)				
Other – please specify				

References

Model Waste Not DCP Chapter – A Site Waste Minimisation and Management Chapter for Consolidated Development Control Plans, NSW Department of Environment and Climate Change (July, 2008)

Waste Planning Guide for Development Applications, Inner Sydney Waste Board, 1998

Appendix 1 – Number of waste/recycling containers for residential premises

The following table outlines the number of bins to be allocated for residential development according to the number of dwellings. This table is to be used to determine the area required for the storage of waste/recycling containers. In the event that the exact amount of residential dwellings have not yet been determined (e.g. for Stage 1 developments), Council will require storage areas to be large enough to accommodate the maximum amount of residential dwellings applicable.

Waste storage requirements - Domestic waste in residential buildings

SCHEDULE OF BINS REQUIRED

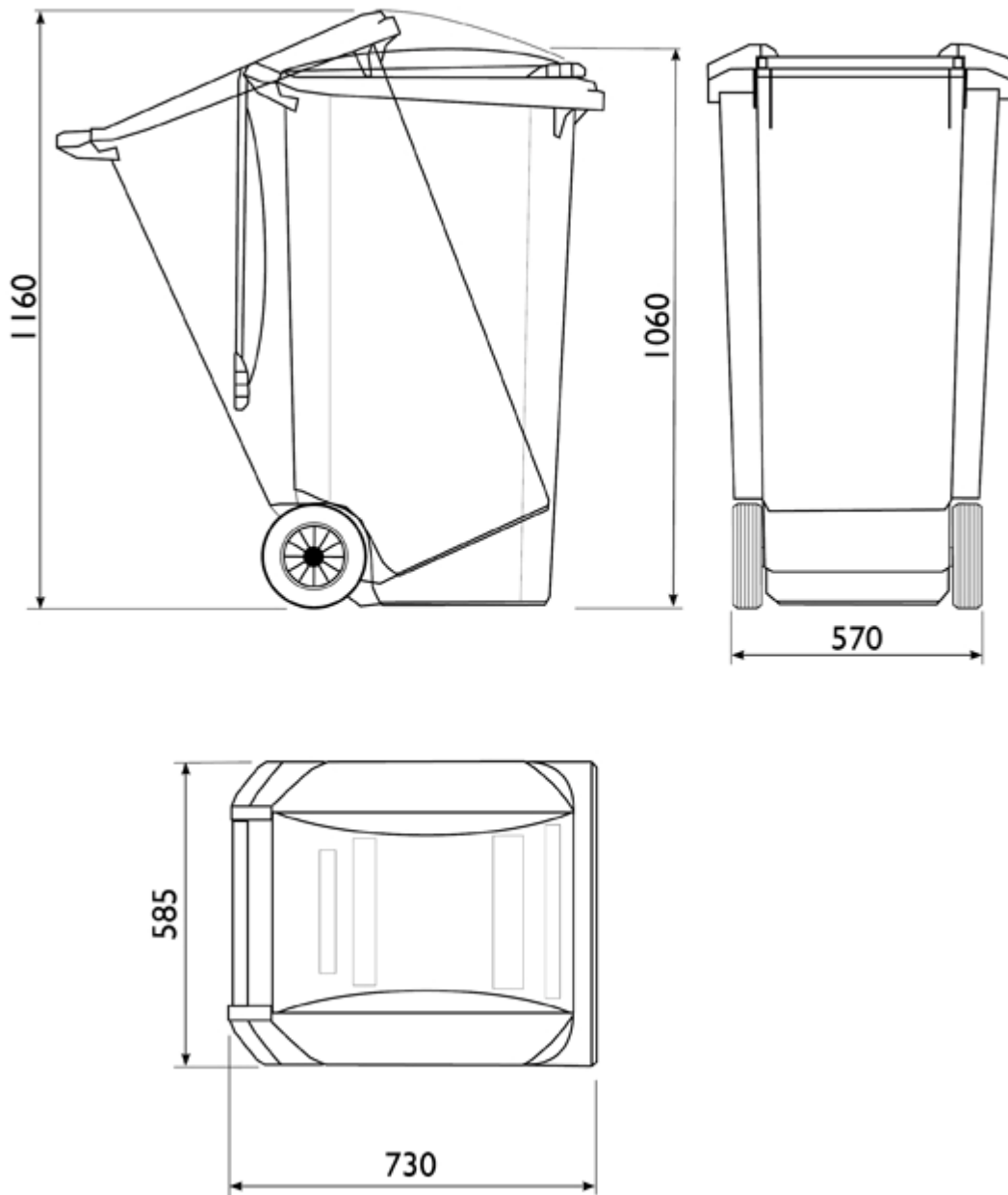
Number of dwellings	240 litre bins to be accommodated	Number of dwellings	240 litre bins to be accommodated
1	3 x 120 L & 1 x 240 L	51	39
2	6 x 120 L & 2 x 240 L	52	40
3	3	53	41
4	4	54	41
5	5	55	41
6	5	56	44
7	5	57	44
8	7	58	44
9	7	59	45
10	8	60	46
11	9	61	47
12	10	62	48
13	11	63	48
14	12	64	48
15	12	65	51
16	12	66	51
17	15	67	51
18	15	68	52
19	15	69	52
20	16	70	54
21	16	71	54
22	18	72	54
23	19	73	55
24	19	74	56
25	19	75	57
26	20	76	58
27	21	77	59
28	22	78	59
29	23	79	59
30	23	80	62
31	24	81	62

Appendix 1 – Number of waste/recycling containers for residential premises

Waste storage requirements - Domestic waste in residential buildings

SCHEDULE OF BINS REQUIRED

Number of dwellings	240 litre bins to be accommodated	Number of dwellings	240 litre bins to be accommodated
32	26	82	62
33	26	83	63
34	27	84	64
35	27	85	65
36	28	86	66
37	29	87	66
38	30	88	66
39	30	89	67
40	30	90	68
41	33	91	69
42	33	92	70
43	33	93	70
44	34	94	72
45	34	95	73
46	34	96	73
47	35	97	74
48	36	98	75
49	37	99	75
50	38	100	76



Dimension details of 240 litre wheelie bin (height 1060mm, width 585mm, depth 730mm)

Appendix 2 – Garbage Chute and Service Room Design

The following provisions apply to Garbage Chute and Service Room Design.

Garbage Chutes are not suitable for recyclable materials and must be clearly labelled to discourage improper use.

Access to the Garbage Chute is provided by an inlet hopper which must be located within designated Service Rooms. The Service Room must also provide interim disposal facilities for the temporary storage of recyclables. Ongoing management of these waste storage and collection facilities must be detailed in Section 2 of the Waste Management Plan.

Applies to Land

For more information, refer to the [Better Practice Guide for Waste Management in Multi-Unit Dwellings \(Department of Environment and Climate Change, 2008\)](#).

Garbage Chutes

Garbage chutes must be constructed in accordance with the requirements of the [Building Code of Australia \(BCA\)](#).

Chutes, service openings and charging devices must be constructed of material (such as metal) which is smooth, durable, impervious and non-corrosive.

Chutes must be cylindrical and should have a diameter of at least 500mm.

There must not be any bends (or sections of reduced diameter) in the main shaft of the chute.

Internal overlaps in the chute must follow the direction of waste flow.

Chutes must deposit rubbish directly into a bin or compactor located within a designated Waste/Recycling Storage Room.

A cut-off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or compacting device at the bottom of the chute is withdrawn or being replaced.

The service opening (for depositing rubbish into the main chute) on each floor of the building must be located in a dedicated service room.

The charging device for each service opening must be self closing and must not project into the main chute.

Branches connecting service openings to the main chute are to be no more than 1m long.

Service room design

Service Rooms must be ventilated to external air by natural or mechanical means complying with the relevant [Australian Standard](#). Mechanical ventilation systems servicing Waste/Recycling Storage Rooms must be isolated from mechanical ventilation systems servicing any other part of the building.

Notes

Australian Standard AS 1668.2-2002 'The use of ventilation and airconditioning in buildings - Ventilation design for indoor air contaminant control' applied at the time this DCP was adopted.

The internal walls of the Service Rooms must be cement rendered or tiled with glazed tiles fixed in accordance with the relevant [Australian Standard](#), and coved at the floor/wall intersection.

Notes

Australian Standard AS 3958.1-2007 'Ceramic tiles - Guide to the installation of ceramic tiles' applied at the time this DCP was adopted.

The floor of any Service Rooms:

(a) is to be graded and appropriately drained to a [Sydney Water](#) approved drainage connection located upon the site;

(b) must have an impervious, non slip and non abrasive finish with no protrusions that would prevent easy cleaning or manoeuvring of bins.

Service Rooms must be serviced by a cold water tap. The hose cock must be protected from the waste containers and must be located in a position which is easily accessible when the area is filled with waste containers. The tap must not obstruct aisles and access ways.

No other service infrastructure or services bays are to be located in the Service Rooms. This includes and is not limited to air conditioning ducts, pipes gas or water meters, swimming pool pumps or electrical installations.