Waste Management Plan

Prepared for: Meriton Apartments

Project Site: 14-18 Boondah Rd Warriewood NSW

Date of Issue: 24th February 2010

Prepared by: Shane Johnson – Project Coordinator

WASTECH ENGINEERING PTY LTD
Free Call: 1800 465 465
Online: wastech.com.au
ABN: 52 059 404 152

CONTENTS

1. INTRODUCTION

Wastech Engineering Pty Ltd was commissioned by Meriton Apartments to prepare a waste and recycling plan associated with a proposed development to be located at 14-18 Boondah Road Warriewood New South Wales.

Development description and use;

- The project consists of:
  - Seven (7) Residential Apartment Buildings incorporating;
  - 21 Residential Units to Building A
  - 21 Residential Units to Building B
  - 21 Residential Units to Building C
  - 54 Residential Units to Building D
  - 48 Residential Units to Building E
  - 93 Residential Units to Building F
  - 55 Residential Units to Building G

Scope: Wastech Engineering will review the building layout drawings and apartment details and provide a Waste Management Plan including the following:

- Calculation of weekly waste and recyclable volumes
- Provide recommendations for compaction, storage and transportation of waste and recyclables within the building
- Highlight relevant design issues that may affect the handling and movement of Waste and Recyclables within the development
- Include technical brochures and drawings for recommended equipment
- Provide recommendation for collection vehicle type
- Reference collection companies and/or council collection/disposal services
- Provide a bound, hard copy and electronic version of the report

All recommendations and equipment shall be in compliance with council codes, BCA, Australian Standards, and statutory requirements.

The results of the above analyses are outlined in the following sections.

2. SUMMARY

- Residents will be responsible for disposing of bagged garbage into the garbage chutes
- Residents will separate recyclable waste from garbage waste for disposal into 120 litre bins at each apartment level
- The building manager will collect 120 litre bins from each apartment level for emptying into the 660 litre collection bins located in the carpark level 2 refuse rooms
- The building manager will be responsible for monitoring garbage bin levels ensuring clean empty bins are available to receive waste from the chutes
- The building manager will be responsible for transferring all full bins for collection from the carpark level 2 refuse rooms to the collection point and return to refuse rooms upon completion of collection
- Collections shall be performed weekly, between 7am and 4pm Monday to Friday, for the garbage and recycling waste streams by a private contractor from the collection point at building F with entry off Johnson Street

3. WASTE MANAGEMENT PLAN

This waste management plan is based on the following conditions

3.1 Inclusions

- On-going use of the premises. Does not include demolition or construction stages.
- Figures and calculations are based on drawings and information supplied by Meriton Apartments.
- Waste volume figures are estimates only and will be influenced by the tenant, resident and operator's disposition toward waste disposal and recycling, and by the development's occupancy rate. Refer to the enclosed tables for rates and assumptions.

3.2 Exclusions

- Hard rubbish and green/garden wastes. Disposal shall be arranged by the building manager via appropriate contractors.

3.3 Waste Room Dimensions

The waste rooms, as shown on drawing DA03 rev A, are sufficient to accommodate the garbage equipment and bins specified within this report.

The bin holding room at the collection point, as shown on drawing DA04 rev A, is sufficient to accommodate the quantity of bins presented for collection.

4. GENERATED WASTE VOLUME ESTIMATE

The enclosed waste estimates, expressed in uncompacted cubic metres per week, are summarised as follows;

Refer to the enclosed waste generation calculations for further detail.

RESIDENTIAL WASTE	Garbage	Commingled Recycling
Building A	1.68	0.84
Building B	1.68	0.84
Building C	1.68	0.84
Building D	4.32	2.16
Building E	3.84	1.92
Building F	7.44	3.72
Building G	4.40	2.20
Total (m^3/wk uncompacted)	**25.04**	**12.52**
Bin	1100 litre bins	660 litre bins

Note: Commingled Recycling incorporates Glass, HDPE and PET containers, paper and cardboard.

5. RESIDENTIAL WASTE MANAGEMENT

The following is recommended:

5.1 Waste Streams

Residential waste shall be sorted on-site by the residents into the following streams and associated bins:

- Garbage; and
- Recycling (PET, aluminium, steel, HDPE, and Paper/Cardboard).

5.2 Residential Garbage Disposal

Residential apartments shall be furnished with plastic lined under bench storage bins, with a minimum capacity of 15 litres, for the temporary holding of garbage waste. Residents shall transfer bagged garbage to the garbage chutes for disposal. Each chute shall serve all apartment levels and discharge into bins located at carpark level 2. The building manager shall replace full bins under each chute with clean, empty ones as required.

5.3 Residential Recyclable Disposal

Residential apartments shall be furnished with under bench storage bins for the temporary holding of recyclable waste with a minimum capacity of 10 litres. Residents shall transfer recyclables into 120 litre bins located within the chute airlock at each apartment level for disposal. Cardboard shall be flattened and containers rinsed and cleaned prior to disposal.

The building manager shall collect the 120 litre bins, as required, from each apartment level and transfer recyclables to the 660 litre collection bins located in the carpark level 2 refuse rooms. The building manager shall utilise the bin lifter in each refuse room to transfer recyclables from 120 litre bins into 660 litre collection bins to comply with OH&S regulations.

5.4 Residential Garbage & Recycling Collection

The building manager shall make 660 and 1100 litre bin transfers between the refuse rooms and the bin store room in building F at ground level. Transfer of bins from carpark level 2 to the ground level will be via a bin hoist/goods lift. The building manager shall prepare bins for collection and coordinate with collection vehicle arrival so that bins do not impede vehicle access into the loading zone at building F. Full bins only are to be transferred to the bin holding zone on day of collection, utilising a bin trailer/bin tug or similar, and returned to each carpark level 2 refuse room upon completion of collection.

Weekly garbage and recycling collections are envisaged.

The collection of waste and recycling bins is to be performed by a private contractor, to be confirmed by Meriton Apartments, from the designated collection point at ground level of Building F which has entry off Johnson Street. All collections shall be performed between the hours of 7am and 4pm Monday to Friday. The collection contractor shall transfer bins presented for collection from the bin store room to the collection vehicle and return emptied bins to the bin store room upon completion of collection. It is suggested that garbage and recycling collections are conducted on alternate days to reduce the number of bins presented for collection at one time.

There is no waste collection vehicle type that can perform bin pick up from within carpark level 2 with a ceiling height of 2.9m. Minimum overhead clearance height for a rear lift garbage collection truck is 3.5m. Attached drawing DA04 rev A, provided by Meriton Apartments, confirms sufficient area is provided for the collection vehicle turning circle and swept path along Johnson Street to the collection point at building F.

6. RESIDENTIAL WASTE HANDLING EQUIPMENT

The following waste handling equipment is recommended:

Garbage Chute: 530mm diameter galvanised steel or Smoothubes® chute serving all apartment levels, as supplied by Wastech Engineering (or equivalent).

Quantity required thirteen (13);

Building A – one (1) chute

Building B – one (1) chute

Building C – one (1) chute

Building D – two (2) chutes

Building E – two (2) chutes

Building F – four (4) chutes

Building G – two (2) chutes

Bin Lifter: A "Liftezy" bin lifter, as supplied by Wastech Engineering or equivalent, to enable transfer of recyclables from 120 litre bins into 660 litre collection bins

Quantity required = thirteen (13)

One per refuse room located at Carpark 2 Level

Note: to be operated by building manager only

6.1 Residential Waste Calculations

Building A		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.68	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	1	
Spare Bins required	1	
Garbage Total bins required	2	

RECYCLING		
Weekly Recycling Volume	0.84	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	1	
Spare Bins required	1	
Recycling Total bins required	2	

Building B		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.68	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	1	
Spare Bins required	1	
Garbage Total bins required	2	

RECYCLING		
Weekly Recycling Volume	0.84	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	1	
Spare Bins required	1	
Recycling Total bins required	2	

Building C		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.68	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	1	
Spare Bins required	1	
Garbage Total bins required	2	

RECYCLING		
Weekly Recycling Volume	0.84	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	1	
Spare Bins required	1	
Recycling Total bins required	2	

Building D - Lift 1		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	2.16	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	1.08	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	2	
Spare Bins required	1	
Recycling Total bins required	3	

Building D - Lift 2		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	2.16	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	1.08	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	2	
Spare Bins required	1	
Recycling Total bins required	3	

Building E - Lift 1		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.92	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	0.96	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	2	
Spare Bins required	1	
Recycling Total bins required	3	

Building E - Lift 2		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.92	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	0.96	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	2	
Spare Bins required	1	
Recycling Total bins required	3	

Building F - Lift 1		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.92	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	0.96	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	2	
Spare Bins required	1	
Recycling Total bins required	3	

Building F - Lift 2		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.84	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	0.92	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	1	
Spare Bins required	1	
Recycling Total bins required	2	

Building F - Lift 3		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.84	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	0.92	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	1	
Spare Bins required	1	
Recycling Total bins required	2	

Building F - Lift 4		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	1.84	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	0.92	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	1	
Spare Bins required	1	
Recycling Total bins required	2	

Building G - Lift 1		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	2.24	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	1.12	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	2	
Spare Bins required	1	
Recycling Total bins required	3	

Building G - Lift 2		
GARBAGE		
Weekly Garbage Volume (Uncompacted)	2.16	cubic metres
Bin Type	1100	litre
Frequency of collection	1	per week
Bins required for collection (volume / bin capacity)	2	
Spare Bins required	1	
Garbage Total bins required	3	

RECYCLING		
Weekly Recycling Volume	1.08	cubic metres
Bin Type	660	litre
Frequency of collection	1	per week
Bins required for collection	2	
Spare Bins required	1	
Recycling Total bins required	3	

7. BIN SUMMARY

7.1 Refuse Rooms

Building A Refuse Room

1100 litre Garbage bins	1
Spare 1100 litre Garbage bins	1
660 litre Recycling bins	1
Spare 660 litre Recycling bins	1
TOTAL BINS REQUIRED	**4**

Building B Refuse Room

1100 litre Garbage bins	1
Spare 1100 litre Garbage bins	1
660 litre Recycling bins	1
Spare 660 litre Recycling bins	1
TOTAL BINS REQUIRED	**4**

Building C Refuse Room

1100 litre Garbage bins	1
Spare 1100 litre Garbage bins	1
660 litre Recycling bins	1
Spare 660 litre Recycling bins	1
TOTAL BINS REQUIRED	**4**

Building D - Lift 1 Refuse Room

1100 litre Garbage bins	2
Spare 1100 litre Garbage bins	1
660 litre Recycling bins	2
Spare 660 litre Recycling bins	1
TOTAL BINS REQUIRED	**6**

Building D - Lift 2 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**2**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**6**

Building E - Lift 1 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**2**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**6**

Building E - Lift 2 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**2**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**6**

Building F - Lift 1 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**2**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**6**

Building F - Lift 2 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**1**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**5**

Building F - Lift 3 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**1**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**5**

Building F - Lift 4 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**1**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**5**

Building G - Lift 1 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**2**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**6**

Building G - Lift 2 Refuse Room

1100 litre Garbage bins	**2**
Spare 1100 litre Garbage bins	**1**
660 litre Recycling bins	**2**
Spare 660 litre Recycling bins	**1**
TOTAL BINS REQUIRED	**6**

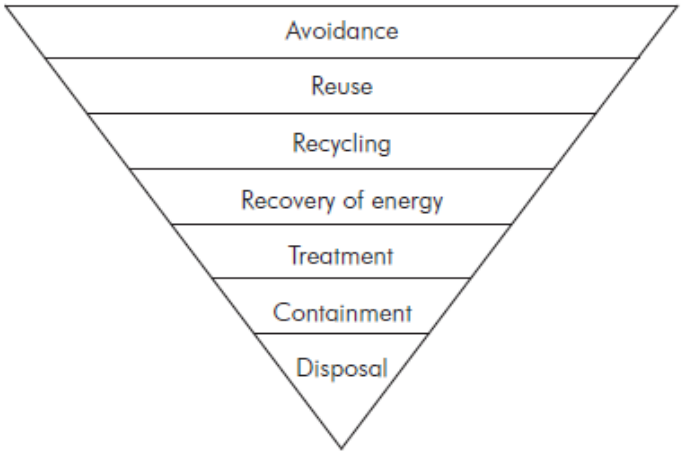
7.2 Bins Presented For Collection

All Buildings

1100 litre Garbage bins	**23**
660 litre Recycling bins	**20**
TOTAL BINS PRESENTED	**43**

8. WASTE MINIMISATION STRATEGIES

The operator (Body Corporate) will be responsible for the education of residential tenants in the practices of waste reduction/minimisation to divert waste from landfill. This will be achieved by the following:



- Document and distribute details of the waste management system that is in place on site to all residents
- Distribution of notices to all residents encouraging waste separation
- All bins to be labelled and colour coded stating types of waste that can be deposited i.e. paper/cardboard bins, container recycling bins, garbage bins
- Residential tenants will be provided with a manual, upon residency, detailing items that can be disposed of via the garbage chute in accordance with the manufacturers recommendations
- Any future change to regulatory requirements or to the developments' waste generation rates will require the operator to conduct a waste audit and revise the waste management system that is in place accordingly

9. ADDITIONAL WASTE MANAGEMENT INFORMATION

As bins would be "wheeled" throughout the building, any ramps would require a maximum gradient of 1:14 to meet regulatory requirements. Steps are not permitted.

Items unsuitable for disposal via garbage or recycling bins would need to be disposed of with the assistance of the building manager. This would include: large, heavy, and liquid waste items.

To minimise security, vandalism, odour/visual impact, and health/safety issues, the following shall be implemented:

- Transferring waste and shifting bins shall require the minimum possible manual handling. The operator will assess manual handling risks as per regulatory requirements and provide appropriate documentation to the building manager;
- Signage and usage labels for the garbage and recycling bins will be provided by the operator;
- Bin stores will be secure and vermin proof;
- The bin stores shall be ventilated in accordance with Australian Standard AS 1668.2;
- A bin wash area comprising a tap and floor drain with trap and sewer connection will be located within each bin store;
- The building manager shall keep clean the bin stores, keep bin lids closed and wash bins regularly;
- The operator shall consider providing 660 litre charity/donation bins for the collection of clothing, whitegoods etc to divert waste from landfill. Donation bins would be maintained and collected by the charity organisation;
- A designated hard rubbish collection point shall be provided with a minimum footprint of 2m² to each building for residents to place hard rubbish for collection on specified days;
- The building manager will ensure prompt return of empty bins once collection has occurred;
- The building manager shall prepare operational instructions and an operational health and safety procedure for site staff; and
- A traffic management plan and collection-vehicle safe operation procedure shall be prepared by the operator of the development in consultation with the private collection contractor, when appointed, and submitted to the Pittwater Council for approval prior to collections being performed on site.

10. CONTACT INFORMATION

Pittwater Council
PO Box 882, Mona Vale, NSW, 1660
Ph 9970 1111
mailto:pittwater_council@pittwater.nsw.gov.au

SITA Environmental Solutions
(private waste collector)
201-205 Newton Road, Wetherill Park, NSW 2164
Ph: 9725 3255

Veolia Environmental Services
(private waste collector)
Cnr Unwin and Shirley Streets, Rosehill NSW 2142
Ph: 132 955

VISY Waste Management Integrated Solutions
(private waste collector)
6 Herbert Place, Smithfield, NSW 2164
Ph: 9794 3188

Electrodrive Pty Ltd
(tug manufacturer)
C/o Wastech Engineering

Eco-Safe Technologies
(odour control equipment supplier)
C/o Wastech Engineering

Wastech Engineering Pty. Ltd.
Waste Equipment Designer & Manufacturer
Valerie Collins
National Sales Executive
33 Wedgewood Road, Hallam VIC 3803
Ph 03 8787 1600
valerie@wastech.com.au

WASTE ESTIMATE
Residential

Job:	Building A		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	21			
Garbage (m^3/week uncompacted):	1.68	(Rate/apartment)[1]:		0.080
Commingled Recycling (m^3/week uncompacted):	0.84	(Rate/apartment)[1]:		0.040

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	1.5
Commingled Recyc.	7 days (660 litre bins)	1.3

References/Notes:

1) Better Practice Guide for Waste Management in Multi Unit Dwellings - 2008

Job:	Building B		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	21			
Garbage (m^3/week uncompacted):	1.68	(Rate/apartment)[1]:		0.080
Commingled Recycling (m^3/week uncompacted):	0.84	(Rate/apartment)[1]:		0.040

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	1.5
Commingled Recyc.	7 days (660 litre bins)	1.3

Job:	Building C		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	21			
Garbage (m^3/week uncompacted):	1.68	(Rate/apartment)[1]:		0.080
Commingled Recycling (m^3/week uncompacted):	0.84	(Rate/apartment)[1]:		0.040

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	0.8
Commingled Recyc.	7 days (660 litre bins)	1.3

Job:	Building D - Lift 1		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**27**			
Garbage (m^3/week uncompacted):	2.16	(Rate/apartment)[1]:	0.080	
Commingled Recycling (m^3/week uncompacted):	1.08	(Rate/apartment)[1]:	0.040	

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	1.0
Commingled Recyc.	7 days (660 litre bins)	1.6

Job:	Building D - Lift 2		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**27**			
Garbage (m^3/week uncompacted):	2.16	(Rate/apartment)[1]:	0.080	
Commingled Recycling (m^3/week uncompacted):	1.08	(Rate/apartment)[1]:	0.040	

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	1.0
Commingled Recyc.	7 days (660 litre bins)	1.6

Job:	Building E - Lift 1		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**24**			
Garbage (m^3/week uncompacted):	1.92	(Rate/apartment)[1]:	0.080	
Commingled Recycling (m^3/week uncompacted):	0.96	(Rate/apartment)[1]:	0.040	

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	0.9
Commingled Recyc.	7 days (660 litre bins)	1.5

Job:	Building E - Lift 2		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**24**			
Garbage (m^3/week uncompacted):	1.92	(Rate/apartment)[1]:	0.080	
Commingled Recycling (m^3/week uncompacted):	0.96	(Rate/apartment)[1]:	0.040	

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	0.9
Commingled Recyc.	7 days (660 litre bins)	1.5

Job:	Building F - Lift 1		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**24**			
Garbage (m^3/week uncompacted):	1.92	(Rate/apartment)[1]:	0.080	
Commingled Recycling (m^3/week uncompacted):	0.96	(Rate/apartment)[1]:	0.040	

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	0.9
Commingled Recyc.	7 days (660 litre bins)	1.5

Job:	Building F - Lift 2		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**23**			
Garbage (m^3/week uncompacted):	1.84	(Rate/apartment)[1]:	0.080	
Commingled Recycling (m^3/week uncompacted):	0.92	(Rate/apartment)[1]:	0.040	

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	0.8
Commingled Recyc.	7 days (660 litre bins)	1.4

Job:	Building F - Lift 3		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**23**			
Garbage (m^3/week uncompacted):	1.84	(Rate/apartment)[1]:		0.080
Commingled Recycling (m^3/week uncompacted):	0.92	(Rate/apartment)[1]:		0.040

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	0.8
Commingled Recyc.	7 days (660 litre bins)	1.4

Job:	Building F - Lift 4		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**23**			
Garbage (m^3/week uncompacted):	1.84	(Rate/apartment)[1]:		0.080
Commingled Recycling (m^3/week uncompacted):	0.92	(Rate/apartment)[1]:		0.040

COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	0.8
Commingled Recyc.	7 days (660 litre bins)	1.4

Job:	Building G - Lift 1		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS	**28**			
Garbage (m^3/week uncompacted):	2.24	(Rate/apartment)[1]:		0.080
Commingled Recycling (m^3/week uncompacted):	1.12	(Rate/apartment)[1]:		0.040

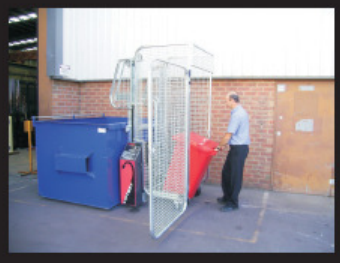
COLLECTIONS	Time Between Collections (days)	No. of Bins Collected
Garbage Disposal	7 days (1100 litre bins)	1.0
Commingled Recyc.	7 days (660 litre bins)	1.7

Job:	Building G - Lift 2		Date:	17-Feb-10
No. OF RESIDENTIAL APARTMENTS		**27**		
Garbage (m^3/week uncompacted):		2.16	(Rate/apartment)[1]:	0.080
Commingled Recycling (m^3/week uncompacted):		1.08	(Rate/apartment)[1]:	0.040

COLLECTIONS	**Time Between Collections (days)**	**No. of Bins Collected**
Garbage Disposal	7 days (1100 litre bins)	1.0
Commingled Recyc.	7 days (660 litre bins)	1.6


PRIVATE PROPERTY
PRIVATE PROPERTY
BUILDING C (5 STOREYs)
BUILDING B (5 STOREYs)
BUILDING E (5 STOREYs)
BUILDING D (5 STOREYs)
BUILDING F (5 STOREYs)
BUILDING G (5 STOREYs)
LOCAL STREET
LOCAL STREET
15m SETBACK
ELEVATED CYCLE WAY
PODIUM PLAN
REFER DA30 PLAN FOR DETAILS AND LEVELS
Meriton Apartments Pty. Ltd.
DA04

"LIFTEZY" Bin Lifter



"LIFTEZY" Bin Lifter

The "LIFTEZY" is a heavy duty designed Bin Lifter for lifting and tipping of MGB Bins of all sizes. Incorporating a unique direct drive system the lifter has minimal moving parts and no Hydraulics making it ideal for high use environments and food manufacturers.

The 'sealed for life' bearings and drive assembly require minimal maintenance for increased working life and reduced operating costs.
A fully enclosed and interlocked safety cage compliments the lifter to provide a safe, durable and reliable Bin Lifter.

The "LIFTEZY" is available in 240v, 415v or rechargeable battery.
Lifters can be fitted with castors or bolted down to suit application.
Interface is available to suit auto starting of compactors or feed conveyors.

Specifications -

Bin Lifter Size (Ltr)	80/120 & 240	660/1000 & 1100
Lifter Lift Capacity (kg)	250	350
Foot Print (mm)	1100 x 1050	1700 x 1500
Weight (kg)	135	195
Voltage (v)	240 & 415	240 & 415
Motor Size (kw)	1.5	1.5
Cycle Time (sec)	24	24
Min. Tip Height (mm)	1200	1200
Max. Tip Height (mm)	6000	6000

WASTECH ENGINEERING

HEAD OFFICE: 03 8787 1600 NSW: 02 9632 1114 QLD: 07 3271 6580

AGENTS ALL STATES - TOLL FREE: 1800 465 465

Email: info@wastech.com.au Web: www.wastech.com.au

120 LITRE CONTAINER

Material

- **Polymer components:**
  - Injection moulded from specially designed HDPE
  - Resistant to decay, frost, heat and chemicals
  - Special UV-stabilisation provides excellent ageing characteristics
- **Corrosion resistant steel axle**
- **Noise reduction:**
  - Quiet-running solid rubber tyres
  - Tight-fitting axle
- **Long service life:**
  - High quality materials
  - Most advanced manufacturing processes
  - Withstands exposure to high mechanical stress levels
- **Recycling:**
  - All container parts are recyclable

Advantages

- Easy to manoeuvre
- Versatile, with a comprehensive accessories range
- Complies with EN840 and AS4123 quality requirements
- Particularly stable due to external position of wheels
- Safe and easy to handle
- Suitable for all DIN lifting equipment
- Double angle rail for greater safety when emptying
- Compatible with identification and weighing systems
- Special ribs prevent containers from becoming jammed when stacked

Imprints and markings

- Manufacturer, year of manufacture, material
- Nominal volume, max permitted total weight
- EN 840 and AS4123 markings
- Individual markings with imprints, hot-foil printing or adhesive labels*
- Customer specific serial numbers if required*

Accessories

- For accessories and special design variations such as lid apertures and locks please refer to the separate accessories sheet for 2-wheeled containers

Quality

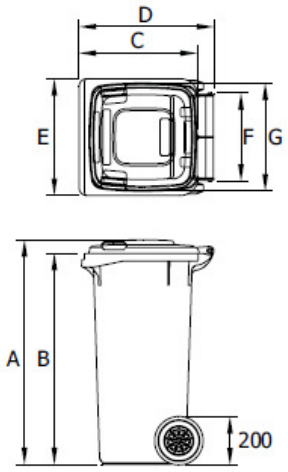
- Certified according to EN840
- Manufactured in accordance with AS4123

Dimensions - Weights - Standards

Nominal volume:	120 litres
Net weight:	approx 9.3 kg
Max load:	48 kg
Permitted total weight:	60 kg

A	930 mm	D	545 mm	G	480 mm
B	870 mm	E	480 mm		
C	480 mm	F	335 mm		

Measurements to be used as a guide only – variations will occur



Colours

- Standard colours: black, nature green, dark green, grey
- Special colours are available on request* – common colours include blue, yellow, red, brown, orange, purple

DIN

SULO

SULO MGB Australia Pty Ltd
123 Wisemans Ferry Road
Somersby NSW 2250
Australia
Tel: +61 (0) 2 - 4348 8188
Fax: +61 (0) 2 - 4348 8128
Internet: www.sulo.com.au
E-mail: info@sulo.com.au

SULO – Queensland Office
11 Argon Street
Sumner Park QLD 4074
Australia
Tel: +61 (0) 7 - 3725 5000
Fax: +61 (0) 7 - 3725 5099

SULO – Victorian Office
1950 Hume Hwy
Campbellfield VIC 3061
Australia
Tel: +61 (0) 3 - 9357 7320
Fax: +61 (0) 3 - 9357 7340

SULO - New Zealand
PO Box 58 962
Greenmount, Manukau City 2141
New Zealand
Tel: +64 9 - 968 2180
Fax: +64 9 - 968 2188

660 litre container

Material

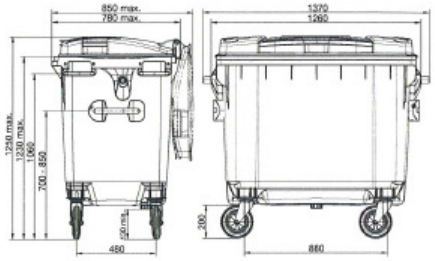
- **Polymer components:**
  - Injection moulded from specially designed HDPE
  - Resistant to decay, frost, heat and chemicals
  - Special UV-stabilisation provides excellent ageing characteristics
- **Corrosion resistant metal components:**
  - All metal components are galvanised
- **Noise reduction:**
  - Quiet-running tyres
- **Long service life:**
  - High quality materials
  - Most advanced manufacturing processes
  - Even if exposed to high mechanical stress levels
- **Recycling:**
  - All container parts are recyclable

Advantages

- Easy handling
- Easy filling
- Easy grip handles on front and sides of lid
- Stable and light weight lid
- Safe manoeuvring
- Easy grip handles on three sides
- Wide handles, easy to use when wearing thick gloves
- User-friendly handles
- Handles available in alternative colours
- Complies fully with EN or RAL quality requirements
- Versatile, with a comprehensive accessories range
- Various wheel assembly configurations for different applications
- Water drainage plug as standard
- Compatible with identification and weighing systems
- Suitable for all lifting equipment in accordance with EN 840
- Rounded lid profile for improved rainwater dispersal

Dimensions and Weights

Nominal volume:	660 litres
Net weight:	ca. 43 kg
Permitted total weight:	310 kg



all dimensions according to EN 840

Colours

- Standard colours: grey, green, blue, yellow, brown, red
- Special colours are available on request
- All additives are cadmium free and environmentally friendly

Imprints and markings

- Manufacturer
- Month and year of manufacture
- Nominal volume, max. permitted total weight
- "No hot ashes" symbol
- Material
- EN 840, RAL markings
- Individual markings with imprints, screen printing, hot-foil printing or adhesive labels

Accessories

- For accessories and special design variations such as lid apertures, locks, towing brackets and fork lift sleeves, please refer to the separate accessories sheet for 4-wheeled containers

SULO

SULO Umwelttechnik GmbH & Co. KG
Bünder Straße 85
D-32051 Herford
Telefon +49 (0) 52 21 598-207
Telefax +49 (0) 52 21 598-579
Internet: www. sulo.com
e-mail: info@sulo.de

1100 Litre Flat Lid Container

Material

- Polymer components:
  - Injection moulded from specially designed HDPE
  - Resistant to decay, frost, heat and chemicals
  - Special UV-stabilisers provide excellent ageing characteristics
- Corrosion resistant steel components
- Noise reduction:
  - Wheel assemblies with solid rubber tyres
- Long service life:
  - High quality materials
  - Excellent manufacturing processes
  - Withstands exposure to high mechanical stress levels
- Recycling:
  - All container parts are recyclable

Design

- Easy handling through the use of ergonomic handles
- Versatile, with a comprehensive accessories range
- In accordance with the safety requirements of EN-840
- Easy grip handles on all sides
- Safe, easy handling, even with heavy loads
- Various wheel assembly configurations for different applications
- Improved water drainage as a result of rounded lids
- Water drainage plug as standard*
- Compatible with identification and weighing systems
- Reinforced base, front and rear panels for greater stability
- Fitted as standard with chip nest in accordance with RAL GZ 951/1
- Easy to clean due to smooth surfaces and rounded internal corners

Accessories

- For accessories and special design variations such as lid apertures, locks and towing brackets, please refer to the separate accessories sheet for 4-wheeled containers

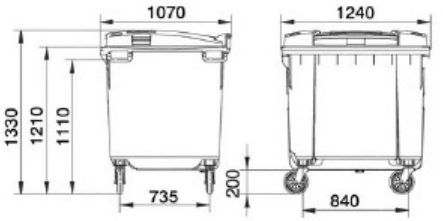
Quality

- Certified according to DIN EN 840 and RAL GZ 951/1
- Constant quality control through manufacturers laboratory as well as independent institutes

Dimensions - Weights - Standards

Nominal volume:	1100 litres
Net weight:	approx. 65 kg
Max. load:	440 kg
Permitted total weight:	510 kg

Measurements to be used as a guide only -variations will occur



Note: Certification and Quality Marks depicted in this brochure are registered to SULO Umwelttechnik GmbH & Co. KG

Colours

- Standard colours: green, blue, yellow
- Special colours are available on request*
- All additives are cadmium free and environmentally friendly

Imprints and markings

- Manufacturer, year of manufacture, material
- Nominal volume, max. permitted total weight
- EN 840, RAL markings
- Individual markings with imprints, hot-foil printing or adhesive labels available on request *

SULO

SULO MGB Australia Pty Ltd
123 Wisemans Ferry Road
Somersby NSW 2250
Australia
Tel: +61 (0) 2 - 4348 8188
Fax: +61 (0) 2 - 4348 8128
Internet: www.sulo.com.au
E-mail: info@sulo.com.au

SULO – Queensland Office
11 Argon Street
Sumner Park QLD 4074
Australia
Tel: +61 (0) 7 - 3725 5000
Fax: +61 (0) 7 - 3725 5099

SULO – Victorian Office
1950 Hume Hwy
Campbellfield VIC 3061
Australia
Tel: +61 (0) 3 - 9357 7320
Fax: +61 (0) 3 - 9357 7340

SULO - New Zealand
PO Box 58 962
Greenmount, Manukau City 2141
New Zealand
Tel: +64 9 - 968 2180
Fax: +64 9 - 968 2188

Specifications >>

SITA Environmental Solutions

Rear Lift Collection System

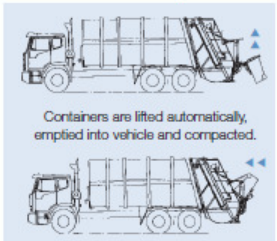
Container Specifications

Plastic (polyethelene)					Metal (galvanised steel)	
Capacity	**120l**	**240l**	**660l**	**1100l**	**1.5m³**	**3.0m³**
Height	0.92m	1.075m	1.235m	1.485m	1.3m	1.3m
Width	0.54m	0.58m	1.36m	1.36m	2.4m	2.4m
Length	0.62m	0.715m	0.765m	1.07m	1.25m	2.25m
Weight	9.5kg	13.5kg	45kg	65kg	300kg	400kg

Vehicle Specifications

Overall length	8.0m
Overall width	2.5m
Height (travel)	3.4m
Height (in operation)	3.4m
Weight (vehicle only)	13.0t
Weight (payload)	9.5t
Turning circle	25.0m

Rear Lift Collection Operation



Containers are lifted automatically, emptied into vehicle and compacted.

Vehicle Safety Features

- On board reversing camera
- Hydraulic valves, lifting gear and doors
- Heated external mirrors
- Reversing lights and beepers

Container Options

- Foot operated lid
- Electronic chip provision
- Wheel locking device
- Divider system
- Size
- Flip top and roll top lids
- Colours (according to national standards) and decals

Container Accessories

- Wheel brakes
- Liners
- Security posts
- Padlocks and chains
- Cart cradle
- Waste ID labels
- Bin lifter

Note Specifications are a guide only. Printed on recycled paper using environmentally friendly soy-based inks.

SITA's Range of Services include Small Business Waste, Commercial Waste, Industrial Waste, Recycling, Product Destruction, Waste Audits, Government, Domestic Waste, Liquid Waste, Medical Waste, Security Disposal, Builders Bins, Temporary Bins and Hygiene Services

Call 13 13 35 or visit sita.com.au

Electrodrive

Electrodrive Waste Bin system

The Waste Bin System is an ideal solution for large facilities with centralised dumping points. Quickly and easily bring your waste bins to the one place for emptying. Safety features include: horn, flashing light, and back off button.

- Features an Electrodrive Tug and a Waste Bin Mover
- Carries up to 4 x 240L wheelie bins
- Easy to manoeuvre with forward and reverse drive
- Customised movers available to suit your facility
- Electric powered: 24V deep cycle, sealed gel cell batteries
- Easily traverses outdoor terrain and is weatherproof
- Equipment training and servicing programs available
- Simple to use, no driver's licence required

Specifications

Waste Bin Mover Dimensions:
Height: 1400
Length: 1600 (2 Bin), 2100 (3), 2600 (4)
Width: 715

Tug Dimensions:
Height: 890
Length: 1450 (filler handle down)
Width: 630
Capacity: 1000kg
Weight: 170kg
Voltage: 24V
Range: 12km