

Client
Holy Monastery of Axion Estin

Date
22 August 2025

Planning

Transport

Urban Design

Waste Management

Waste Management Plan

Proposed Mixed Use Development

7 Hartington Street, Northcote VIC

ratio:

ratio.com.au

Project
7 Hartington Street, Northcote VIC

Prepared for
Holy Monastery of Axion Estin

Our reference
19797W-R01F04

Directory path <https://ratioconsultants1.sharepoint.com/sites/19797W/Shared Documents/General/9.Reports/19797W-R01F04.docx>

Version	Date	Issue	Prepared by	Checked by
R01F01	25/07/2025	Town Planning v1	W Psiwa & M Fairlie	M Fairlie
R01F02	1/08/2025	Town Planning v2	W Psiwa & M Fairlie	M Fairlie
R01F03	15/08/2025	Town Planning v3	W Psiwa & M Fairlie	M Fairlie
R01F04	22/08/2025	Town Planning v4	W Psiwa & M Fairlie	M Fairlie

Ratio Consultants Pty Ltd

This work is copyright. Apart from any use as permitted under Copyright Act 1968, no part may be reproduced without written permission of Ratio Consultants Pty Ltd.

Disclaimer: neither Ratio Consultants Pty Ltd nor any member or employee of Ratio Consultants Pty Ltd takes responsibility in anyway whatsoever to any person or organisation (other than that for which this report is being prepared) in respect of the information set out in this report, including any errors or omissions therein. Ratio Consultants Pty Ltd is not liable for errors in plans, specifications, documentation or other advice not prepared or designed by Ratio Consultants Pty Ltd.

Table of Contents

Section	Page No.
1. Introduction	4
1.1. Project Details	4
1.2. Report Purpose	7
1.3. Report Limitations	7
1.4. Applicable Standards and References	7
2. Operational Waste Management Guide	8
2.1. Recycling Victoria: A New Economy	8
2.2. Guide for Residents (Townhouses & Apartments)	9
2.3. Guide for Staff (Heritage Commercial, ELC & Theatre)	11
2.4. Facilities Management Responsibilities	13
2.5. Waste Management Plan Communication Strategy	13
2.6. Waste Management Plan Revisions	14
3. Waste Volume Assessment	15
3.1. Residential Waste Volume Assessment	15
3.2. Commercial Waste Volume Assessment	19
4. Waste Equipment and Storage Details	24
4.1. Residential Waste Equipment and Storage Requirements	24
4.2. Commercial Waste Equipment and Storage Requirements	26
4.3. Residential Bin Room Layouts	28
4.4. Commercial Bin Room Layouts	34
5. Waste Collection Details	38
5.1. Residential Waste Collection Requirements	38
5.2. Commercial Waste Collection Requirements	40
5.3. Waste Collection Arrangements	42
6. Design Standards	44

6.1. Bin Room Design Requirements	44
6.2. Chute System Design Requirements	44
6.3. Bin Colour and Signage Requirements	45
6.4. Residential Internal Waste Receptacle Requirements	46
6.5. Commercial Internal Waste Receptacle Requirements	46
7. Contact Information	47

Appendices

Appendix A : Chute System Specifications

1. Introduction

1.1. Project Details

Site Address

7 Hartington Street, Northcote VIC

Local Council

Darebin City Council: (Phone: 03 8470 8888)

Planning Application Number

To be assigned

Summary of Development Components

Building A (Heritage)

Residential

Waste Source	Quantity
1-bedroom Apartment	4
3-bedroom Apartment	9
Total	13

Commercial – Main Building

Level	Waste Source	Operational Days (per week)	Floor Area / Quantity
Lower Ground	Makers Space	7	488.8 m ²
Lower Ground	Hotel Lobby	7	139.7 m ²
Lower Ground	Hotel Lounge	7	63.9 m ²
Ground	Bookstore	7	168.1 m ²
Ground	Church	7	528.1 m ²
Ground	Function Space	7	147.6 m ²
Ground	Hotel Room	7	9 Beds
Level 1	Hotel Room	7	9 Beds
Level 1	Ballroom	7	288.2 m ²
Level 1	Church Office / VIP Area	7	258.2 m ²
Level 2	Office	7	143.3 m ²

Level 2	Hotel Room	7	5 Beds
---------	------------	---	--------

Commercial – Café

Level	Waste Source	Operational Days (per week)	Floor Area / Quantity
Lower Ground	Café	7	158.2 m ²

Building B (Townhouses)

Eastern

Waste Source	Quantity
3-bedroom Townhouse	10
Total	10

Western

Waste Source	Quantity
3-bedroom Townhouse	12
Total	12

Building C (Apartments)

Northern Apartments

Waste Source	Quantity
1-bedroom Apartment	3
2-bedroom Apartment	3
3-bedroom Apartment	16
Total	22

Southern Apartments

Waste Source	Quantity
1-bedroom Apartment	3
2-bedroom Apartment	4
3-bedroom Apartment	18
Total	25

Building D (ELC & Theatre)

Level	Waste Source	Operational Days (per week)	Floor Area (m ²)
Ground	Theatre	7	808
Level 1	Theatre	7	283
Level 1	ELC Classrooms	7	300
Level 2	Theatre	7	197
Level 2	ELC Classrooms	7	189
Total			1,777

Refer to the Architectural Plans submitted with the Town Planning Application (prepared by KUD) for a copy of the floorplans reviewed in the preparation of this Waste Management Plan.

1.2. Report Purpose

This Waste Management Plan has been prepared to accompany the Town Planning Application for the proposed development.

This Waste Management Plan establishes an effective waste management system that is compatible with the design of the development and compliant with national, state, and local policies / best practice guidelines. This Waste Management Plan will form a document that achieves effective communication of the waste management system so that waste system managers and users can be properly informed of its design and the roles and responsibilities involved in its implementation.

1.3. Report Limitations

Waste management arrangements during the construction and fit-out stages of the development, and on-going operation and monitoring of the waste management arrangements for the development following the occupation of the development, are outside the scope of this Waste Management Plan.

1.4. Applicable Standards and References

Relevant policies and guidelines considered as part of the preparation of this Waste Management Plan include:

- Australian Government – National Waste Policy: Less Waste, More Resources (2018).
- Australian Standards:
 - AS 4123.1-7 (Mobile Waste Containers).
 - AS 1668.2 (Odour).
 - AS 2890.2 (Parking Facilities).
 - AS 5377:2013 (E-waste).
 - AS 4736-2006 & AS 5810-2010 (Biodegradable plastics).
 - AS 4564-2012 (Composts).
 - AS 1319 (Safety signs).
- Environment Protection Act 2017.
- Environment Protection Regulations 2021.
- Disability Discrimination Act 1992.
- Victorian Government – Recycling Victoria: A New Economy (2020).
- Sustainability Victoria – Better Practice Guide for Waste Management and Recycling in Multi-Unit Developments (2019).
- EPA Victoria – Noise Control Guidelines (2021).
- Darebin City Council – Waste Management Guidelines (2021).

2. Operational Waste Management Guide

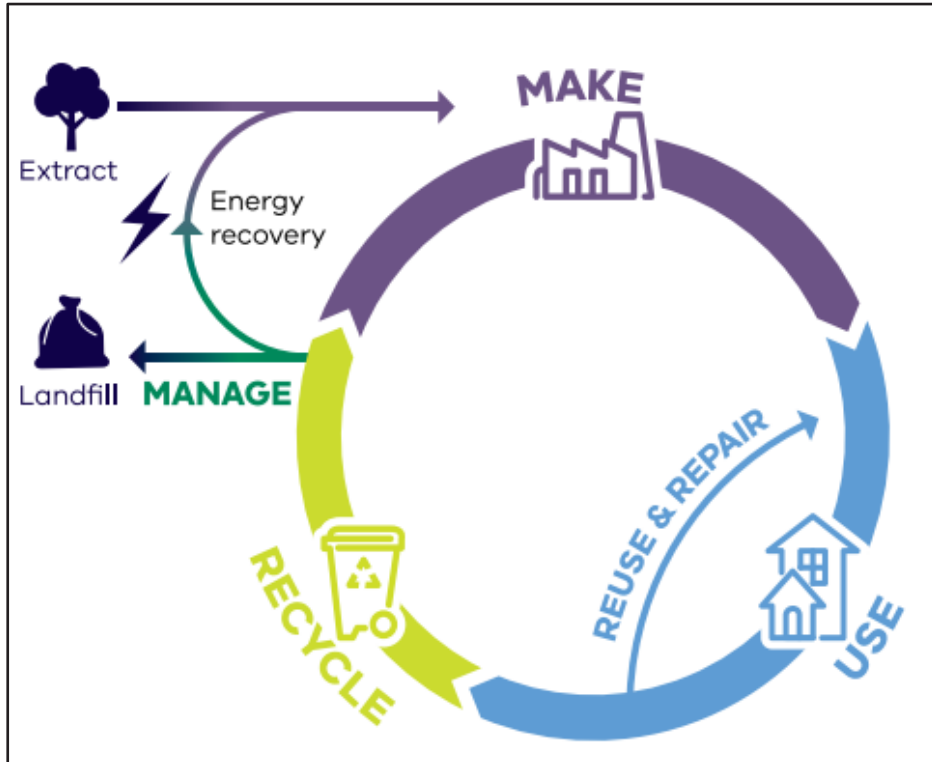
2.1. Recycling Victoria: A New Economy

The Victorian Government's Recycling Victoria: A New Economy was released in 2020 and sets out strategies to reduce the amount of waste generated in Victoria and increase the amount of materials for recycling and reprocessing to reduce damage to the environment caused by waste.

Ongoing education and dedicated ongoing management services are critical factors in encouraging users to continue to use the services and systems as intended. The future Occupiers of the development shall promote the above strategy where practicable and encourage users to participate in minimising the impact of waste on the environment. In particular, consideration should be made to the circular economy as shown in Figure 2.1 below.

A circular economy continually seeks to reduce the environmental impacts of production and consumption, while enabling economic growth through more productive use of natural resources.

Figure 2.1: The Circular Economy



Source: Recycling Victoria: A New Economy

2.2. Guide for Residents (Townhouses & Apartments)

To ensure residents are aware of their responsibilities with regard to waste management, Facilities Management shall provide an information package to all new residents that includes the following information:

- A copy of this Waste Management Plan.
- Methods and techniques for waste reduction and minimisation.
- Information regarding waste collection days and requirements.
- Student responsibilities with regard to bin usage, storage, and collection.
- Student responsibilities with regard to litter and waste removal from the common property.

The proposed disposal methodology for each waste stream expected to be generated is outlined as follows:

General Waste

- Residents of all townhouses and apartments within the site shall dispose of general waste into an appropriately sized receptacle, stored internally within their kitchen area.
- Residents shall empty full general waste receptacles into the general waste collection bins provided within their assigned bin room.
- Residents should ensure that general waste is placed within tied bags prior to disposal into the general waste collection bins.

Organics

- Residents of all townhouses and apartments within the site shall dispose of organics (food waste) into an appropriately sized receptacle, stored internally within their kitchen area.
- Residents shall empty full organics receptacles into the organics collection bins provided within their assigned bin room.
- If bagged, residents must ensure that organics is placed within contractor-approved compostable bags prior to disposal into the organics collection bins.

Recycling

- Residents of all townhouses and apartments within the site shall dispose of recycling (commingled excluding glass) into an appropriately sized receptacle, stored internally within their kitchen area.
- Residents shall empty full recycling receptacles into the recycling collection bins provided within their assigned bin room.
- Resident should ensure that bottles, cans, and containers are rinsed, cardboard is flattened, and lids/packaging are separated, prior to disposal into the recycling collection bins.
- Residents must ensure that recycling is loose and unbagged prior to disposal into the recycling collection bins.

Glass

- Residents of all townhouses and apartments within the site shall dispose of glass into an appropriately sized receptacle, stored internally within their kitchen area.
- Residents shall empty full glass receptacles into the glass collection bins provided within their assigned bin room.
- Resident should ensure that bottles and jars are rinsed, and lids are separated, prior to disposal into the glass collection bins.
- Residents must ensure that glass is loose and unbagged prior to disposal into the glass collection bins.

Hard Waste & E-waste

- Residents of the apartments and townhouses shall take any hard waste and e-waste items to the dedicated storage area provided within their assigned bin room.
- Facilities Management shall be responsible for organising hard waste and e-waste to be collected by a private contractor on an as-required basis.
- E-waste is prohibited under Victorian law from being disposed of into landfill-bound bins.

2.3. Guide for Staff (Heritage Commercial, ELC & Theatre)

To ensure staff are aware of their responsibilities with regard to waste management, Facilities Management shall provide an information package to all staff that includes the following information:

- A copy of this Waste Management Plan.
- Methods and techniques for waste reduction and minimisation.
- Information regarding waste collection days and requirements.
- Retail tenant responsibilities with regard to bin usage, storage, and collection.
- Retail tenant responsibilities with regard to litter and waste removal from the common property.

The proposed disposal methodology for each waste stream expected to be generated is outlined as follows:

General Waste Disposal

- Staff associated with the heritage (commercial), ELC, and theatre components shall dispose of general waste into appropriately sized receptacles, stored internally at the point of generation (kitchen, BOH, breakout, activity room, public office/admin areas etc.).
- Staff and/or appointed cleaners shall empty full general waste receptacles into the general waste collection bins provided within the appropriate bin room.
- Staff and/or cleaners should ensure that general waste is placed within tied bags prior to disposal into the general waste collection bins.

Organics Disposal

- Staff associated with the heritage (commercial), ELC, and theatre components shall dispose of organics (food waste) into appropriately sized receptacles, stored internally at the point of generation (kitchen, BOH, breakout, activity room, public, office/admin areas etc.).
- Staff and/or appointed cleaners shall empty full organics receptacles into the organics collection bins provided within the appropriate bin room.
- If bagged, staff and/or cleaners must ensure that organics is placed within contractor-approved compostable bags prior to disposal into the organics collection bins.

Recycling Disposal

- Staff associated with the heritage (commercial), ELC, and theatre components shall dispose of recycling (commingled) into appropriately sized receptacles, stored internally at the point of generation (kitchen, BOH, breakout, activity room, office/admin areas etc.).
- Staff and/or appointed cleaners shall empty full recycling receptacles into the recycling collection bins provided within the appropriate bin room.
- Staff and/or cleaners should ensure that bottles, cans, and containers are rinsed, and lids/packaging are separated, prior to disposal into the recycling collection bins.
- Staff and/or cleaners must ensure that recycling is loose and unbagged prior to disposal into the recycling collection bins.

Paper and Cardboard Disposal

- Staff associated with the heritage (commercial), ELC, and theatre components shall dispose of paper and cardboard (unsoiled) into appropriately sized receptacles, stored internally at the point of generation (kitchen, BOH, breakout, activity room, office/admin areas etc.).
- Staff and/or appointed cleaners shall empty full paper and cardboard receptacles into the paper and cardboard collection bins provided within the appropriate bin room.
- Staff and/or cleaners should ensure that cardboard is flattened and/or broken into smaller pieces prior to disposal into the paper and cardboard collection bins.
- Staff and/or cleaners must ensure that paper and cardboard is loose and unbagged prior to disposal into the paper and cardboard collection bins.

Hard Waste & E-waste

- Staff associated with the heritage (commercial), ELC, and theatre components shall take any hard waste and e-waste items to the dedicated storage area provided within the appropriate bin room.
- Facilities Management shall be responsible for organising hard waste and e-waste to be collected by a private contractor on an as-required basis.
- E-waste is prohibited under Victorian law from being disposed of into landfill-bound bins.

2.4. Facilities Management Responsibilities

Facilities Management shall be responsible for the following:

- Ongoing management of the waste management systems, including the maintenance of all bin rooms and associated equipment and components, to the satisfaction of all waste system users and the relevant authority, and in accordance with the manufacturer's specifications.
- Engaging and managing the private waste collection contractor(s).
- Publishing and distributing information to ensure that all waste system users are familiar about the waste management systems.
- Informing all waste system users that bagged recycling, glass, and paper and cardboard is not permitted.
- Informing all waste system users that any bags used for disposing of organics must be made from a contractor-approved material.
- Informing all waste system users that e-waste is prohibited under Victorian law from being disposed of into landfill-bound bins.
- Developing and implementing adequate safe operating procedures (including the preparation of Safe Work Method Statements).
- Labelling/numbering the bins according to the property address to protect them from theft and vandalism.
- Servicing all public and communal areas through sweeping and removal of litter on a regular basis.
- Arrange and manage the disposal of common garden organics via a landscaping contractor.
- Preventing overfilled bins by keeping lids closed.
- Ensuring that bins are not removed from the site.
- Ensuring that all bin rooms and associated equipment and components are provided as per the design requirements outlined in Section 6 of this report.

2.5. Waste Management Plan Communication Strategy

Facilities Management shall ensure that all waste systems users are informed about the development's waste management systems, including where and how to correctly dispose of each waste stream. It is highly recommended that this Waste Management Plan is electronically provided to all residents, staff, cleaners, and contractors.

Facilities Management (in conjunction with the waste collection contractor) shall provide educational material to inform all waste system users about the development's waste management system and advise all waste system users how to correctly separate and dispose of each waste stream with care, to minimise waste sent to landfill and reduce the contamination of recyclables.

2.6. Waste Management Plan Revisions

From time to time, due to changes in legislative requirements, changes in the development's needs and/or waste patterns (such as waste composition, volume, or distribution), or to address unforeseen operational issues, Facilities Management shall be responsible for coordinating the necessary Waste Management Plan revisions, including (on an as-required basis):

- A waste audit and new waste management strategy.
- Revision of the waste system (bin size / quantity / waste streams / collection frequency / update of equipment).
- Revision of the services provided by the waste collection contractor(s).
- Re-education of users.
- Any necessary statutory / regulatory requirements / approvals.

3. Waste Volume Assessment

3.1. Residential Waste Volume Assessment

The residential waste generation rates specified within Darebin City Council's *Waste Management Guidelines 2021* are considered appropriate to undertake a waste volume assessment for the residential components of the proposed development. These rates are outlined below:

1-Bedroom Units

- General Waste: 60 L/unit/week
- Organics: 25 L/unit/week
- Recycling: 80 L/unit/week
- Glass: 24 L/unit/week

2-Bedroom Units

- General Waste: 80 L/unit/week
- Organics: 40 L/unit/week
- Recycling: 100 L/unit/week
- Glass: 30 L/unit/week

3-Bedroom Units

- General Waste: 80 L/unit/week
- Organics: 45 L/unit/week
- Recycling: 120 L/unit/week
- Glass: 36 L/unit/week

Applying the above residential waste generation rates, the waste volume estimates for the residential components of the proposed development are outlined in Tables 3.1 and 3.2 below.

Table 3.1: Residential General Waste & Organics Volume Estimates

Development Component	Waste Source	Quantity	General Waste Generation Rate (L/Unit/Week)	General Waste Volume (L/Week)	Organics Generation Rate (L/Unit/Week)	Organics Volume (L/Week)
Building A (Heritage - Residential)	1-bedroom Apartment	4	60	240	25	100
	3-bedroom Apartment	9	80	720	45	405
	Total	13	-	960	-	505
Building B (Eastern Townhouses)	3-bedroom Townhouse)	10	80	800	45	450
	Total	10	-	800	-	450
Building B (Western Townhouses)	3-bedroom Townhouse	12	80	960	45	540
	Total	12	-	960	-	540
Building C (Apartments - Northern)	1-bedroom Apartment	3	60	180	25	75
	2-bedroom Apartment	3	80	240	40	120
	3-bedroom Apartment	16	80	1,280	45	720
	Total	22	-	1,700	-	915
Building C (Apartments - Southern)	1-bedroom Apartment	3	60	180	25	75
	2-bedroom Apartment	4	80	320	40	160
	3-bedroom Apartment	18	80	1,440	45	810

	Total	25	-	1,940	-	1,045
--	--------------	-----------	----------	--------------	----------	--------------

Table 3.2: Residential Recycling & Glass Volume Estimates

Development Component	Waste Source	Quantity	Recycling Generation Rate (L/Unit/Week)	Recycling Volume (L/Week)	Glass Generation Rate (L/Unit/Week)	Glass Volume (L/Week)
Building A (Heritage - Residential)	1-bedroom Apartment	4	80	320	24	96
	3-bedroom Apartment	9	120	1,080	36	324
	Total	13	-	1,400	-	420
Building B (Eastern Townhouses)	3-bedroom Townhouse	10	120	1,200	36	360
	Total	10	-	1,200	-	360
Building B (Western Townhouses)	3-bedroom Townhouse	12	120	1,440	36	432
	Total	12	-	1,440	-	432
Building C (Apartments - Northern)	1-bedroom Apartment	3	80	240	24	72
	2-bedroom Apartment	3	100	300	30	90
	3-bedroom Apartment	16	120	1,920	36	576
	Total	22	-	2,460	-	738
	1-bedroom Apartment	3	80	240	24	72

Building C (Apartments - Southern)	2-bedroom Apartment	4	100	400	30	120
	3-bedroom Apartment	18	120	2,160	36	648
	Total	25	-	2,800	-	840

3.2. Commercial Waste Volume Assessment

The commercial waste generation rates specified within Sustainability Victoria's *Waste Management and Recycling in Multi-Unit Developments: Better Practice Guide* are considered appropriate to undertake a waste volume assessment for the commercial components of the proposed development. These rates are outlined below:

Café

- General Waste: 300 L/100m²/Day
- Recycling: 200 L/100m²/Day

Note: to allow for the separation of organics from the general waste stream, and paper and cardboard from the recycling stream, an **80 : 20** split shall be adopted for **general waste : organics** and a **50 : 50** split shall be adopted for **recycling : paper and cardboard**.

Shops (Non-Food)

- General Waste: 50 L/100m²/Day
- Recycling: 50 L/100m²/Day

Note: to allow for the separation of paper and cardboard from the recycling stream, a **50 : 50** split shall be adopted for **recycling : paper and cardboard**.

Licensed Club

- General Waste: 50 L/100m²/Day
- Recycling: 50 L/100m²/Day

Note: to allow for the separation of paper and cardboard from the recycling stream, a **50 : 50** split shall be adopted for **recycling : paper and cardboard**.

Office

- General Waste: 10 L/100m²/Day
- Recycling: 10 L/100m²/Day

Note: to allow for the separation of paper and cardboard from the recycling stream, a **50 : 50** split shall be adopted for **recycling : paper and cardboard**.

Hotel Rooms

- General Waste: 5 L/Bed/Day
- Recycling: 5 L/Bed/Day

Note: to allow for the separation of organics from the general waste stream, and paper and cardboard from the recycling stream, an **80 : 20** split shall be adopted for **general waste : organics** and a **50 : 50** split shall be adopted for **recycling : paper and cardboard**.

Childcare

- General Waste: 350 L/100m²/Week
- Recycling: 350 L/100m²/Week

Note: to allow for the separation of organics from the general waste stream, and paper and cardboard from the recycling stream, an **80 : 20** split shall be adopted for **general waste : organics** and a **50 : 50** split shall be adopted for **recycling : paper and cardboard**.

Applying the above commercial waste generation rates (with modifications to allow for waste stream separation as noted), the waste volume estimates for the commercial components of the development are outlined in Tables 3.3 and 3.4 below.

Table 3.3: Commercial General Waste & Organics Volume Estimates

Development Component	Waste Source	Floor Area / Number of Beds	Operational Days (per week)	General Waste Generation Rate (L/100m ² /Day)	General Waste Volume (L/Week)	Organics Generation Rate (L/100m ² /Day)	Organics Volume (L/Week)
Building A (Heritage – Commercial, Main Building)	Makers Space	488.4 m ²	7	50	1,709	-	-
	Hotel Lobby	139.7 m ²	7	10	96	-	-
	Hotel Lounge	63.9 m ²	7	50	224	-	-
	Bookstore	168.1 m ²	7	50	588	-	-
	Church	528.1 m ²	7	50	1,848	-	-
	Function Space	147.6 m ²	7	50	517	-	-
	Hotel Room	9 Beds	7	4	252	1	63
	Hotel Room	9 Beds	7	4	252	1	63
	Ballroom	288.2 m ²	7	240	4,842	60	1,210
	Church Office / VIP Area	258.2 m ²	7	10	181	-	-
	Office	143.3 m ²	7	10	100	-	-
	Hotel Room	5 Beds	7	4	140	1	35
	Total	-	-	-	10,751	-	1,336
Building A (Heritage – Commercial, Café)	Café	158.2 m ²	7	240	2,658	60	664
	Total	-	-	-	2,658	-	664
Building D (ELC & Theatre)	Theatre	808 m ²	7	10	566	-	-
	Theatre	283 m ²	7	10	198	-	-
	ELC Classrooms	300 m ²	7	280	840	70	210
	Theatre	197 m ²	7	10	138	-	-
	ELC Classrooms	189 m ²	7	280	529	70	529
	Total	1,662 m²	-	-	2,271	-	342

Table 3.4: Commercial Recycling and Paper & Cardboard

Development Component	Waste Source	Floor Area / Number of Beds	Operational Days (per week)	Recycling Generation Rate (L/100m ² /Day)	Recycling Volume (L/Week)	Paper & Cardboard Generation Rate (L/100m ² /Day)	Paper & Cardboard Volume (L/Week)
Building A (Heritage - Commercial)	Makers Space	488.4 m ²	7	25	855	25	855
	Hotel Lobby	139.7 m ²	7	5	49	5	49
	Hotel Lounge	63.9 m ²	7	25	112	25	112
	Bookstore	168.1 m ²	7	25	294	25	294
	Church	528.1 m ²	7	25	924	25	924
	Function Space	147.6 m ²	7	25	258	25	258
	Hotel Room	9 Beds	7	2.5	158	2.5	158
	Hotel Room	9 Beds	7	2.5	158	2.5	158
	Ballroom	288.2 m ²	7	100	2,017	100	2,017
	Church Office / VIP Area	258.2 m ²	7	5	90	5	90
	Office	143.3 m ²	7	5	50	5	50
	Hotel Room	5 Beds	7	2.5	88	2.5	88
	Total	-	-	-	5,052	-	5,052
Building A (Heritage - Commercial, Café)	Café	158.2 m ²	7	100	1,107	100	1,107
	Total	-	-	-	1,107	-	1,107
Building D (ELC & Theatre)	Theatre	808 m ²	7	5	283	5	283
	Theatre	283 m ²	7	5	99	5	99
	ELC Classrooms	300 m ²	7	175	525	175	525
	Theatre	197 m ²	7	5	69	5	69
	ELC Classrooms	189 m ²	7	175	331	175	331

	Total	1,662 m²	-	-	1,307	-	1,307
--	--------------	----------------------------	----------	----------	--------------	----------	--------------

4. Waste Equipment and Storage Details

4.1. Residential Waste Equipment and Storage Requirements

The waste equipment and storage requirements for the residential components of the proposed development are outlined in Table 4.1 below.

Table 4.1: Residential Waste Equipment and Storage Requirements

Development Component	Waste Stream	Bin Size (L)	Quantity	Height per bin (mm)	Width per bin (mm)	Depth per bin (mm)	Footprint (m ²)
Building A (Heritage - Residential)	General Waste	240	3	1060	585	730	1.28
	Organics	240	2	1060	585	730	0.85
	Recycling	240	3	1060	585	730	1.28
	Glass	240	1	1060	585	730	0.43
	Hard Waste & E-waste	2sqm Storage Area	1	1000	2000	1000	2.00
	Total Footprint Required Excluding Circulation (m²)						
Building B (Townhouses - Eastern)	General Waste	1,100	1	1330	1240	1070	1.33
	Organics	240	2	1060	585	730	0.85
	Recycling	660	2	1200	1260	780	1.97
	Glass	240	2	1060	585	730	0.85

	Total Footprint Required Excluding Circulation (m²)						5.00
Building B (Townhouses - Western)	General Waste	1,100	1	1330	1240	1070	1.33
	Organics	240	3	1060	585	730	1.28
	Recycling	1,100	2	1330	1240	1070	2.65
	Glass	240	2	1060	585	730	0.85
	Hard Waste & E-waste	2sqm Storage Area	1	1000	2000	1000	2.00
	Total Footprint Required Excluding Circulation (m²)						8.12
Building C (Apartments - Northern)	General Waste	1,100	2	1330	1240	1070	2.65
	Organics	240	4	1060	585	730	1.71
	Recycling	1,100	3	1330	1240	1070	3.98
	Glass	240	4	1060	585	730	1.71
	Hard Waste & E-waste	2sqm Storage Area	1	1000	2000	1000	2.00
	Total Footprint Required Excluding Circulation (m²)						12.05
Building C (Apartments - Southern)	General Waste	1,100	2	1330	1240	1070	2.65
	Organics	240	5	1060	585	730	2.14
	Recycling	1,100	3	1330	1240	1070	3.98
	Glass	240	4	1060	585	730	1.71
	Hard Waste & E-waste	2sqm Storage Area	1	1000	2000	1000	2.00
	Total Footprint Required Excluding Circulation (m²)						12.48

4.2. Commercial Waste Equipment and Storage Requirements

The waste equipment and storage requirements for the commercial components of the proposed development are outlined in Table 4.2 below.

Table 4.2: Commercial Waste Equipment and Storage Requirements

Development Component	Waste Stream	Bin Size (L)	Quantity	Height per bin (mm)	Width per bin (mm)	Depth per bin (mm)	Footprint (m ²)
Building A (Heritage - Commercial, Main Building)	General Waste	1,100	5	1330	1240	1070	6.63
	Organics	240	3	1060	585	730	1.28
	Recycling	1,100	3	1330	1240	1070	3.98
	Paper and Cardboard	1,100	3	1330	1240	1070	3.98
	Hard Waste & E-waste	1sqm Storage Area	1	1000	1000	1000	1.00
	Total Footprint Required Excluding Circulation (m²)						
Building A (Heritage - Commercial, Café)	General Waste	1,100	1	1330	1240	1070	1.33
	Organics	240	1	1060	585	730	0.43
		120	1	930	480	545	0.26
	Recycling	660	1	1200	1260	780	0.98
	Paper and Cardboard	660	1	1200	1260	780	0.98
	Total Footprint Required Excluding Circulation (m²)						
Building D (ELC & Theatre)	General Waste	1,100	3	1200	1260	780	2.95
	Organics	240	2	1060	585	730	0.85
	Recycling	1,100	2	1330	1240	1070	2.65

Paper and Cardboard	1,100	2	1330	1240	1070	2.65
Hard Waste & E-waste	1sqm Storage Area	1	1000	1000	1000	1.00
Total Footprint Required Excluding Circulation (m²)						10.11

4.3. Residential Bin Room Layouts

The proposed bin room layouts for the residential components of the proposed development are shown in Figures 4.1 to 4.5 below.

Figure 4.1: Bin Room Layout - Building A (Heritage - Residential)

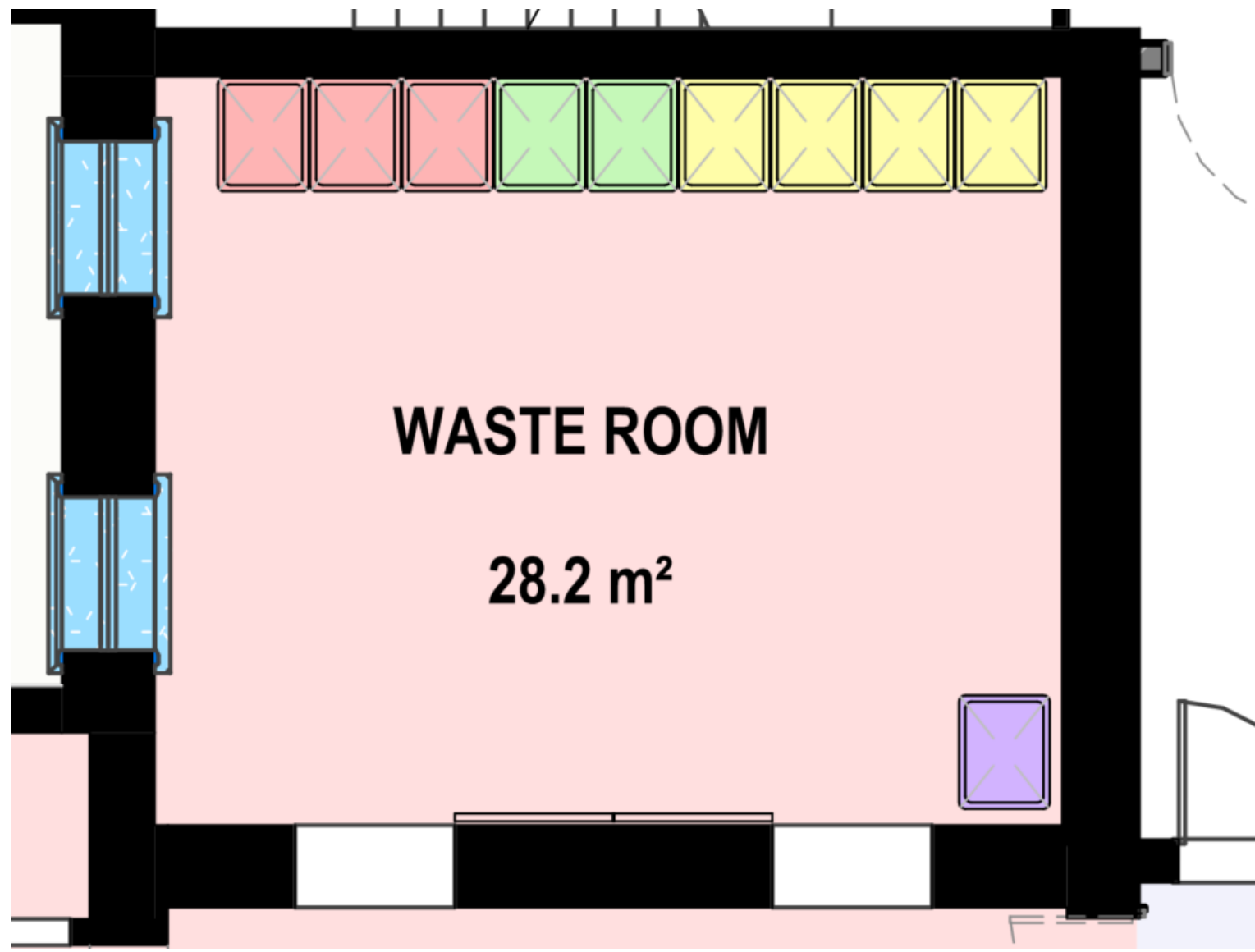


Figure 4.2: Bin Room Layout - Building B (Eastern Townhouses)

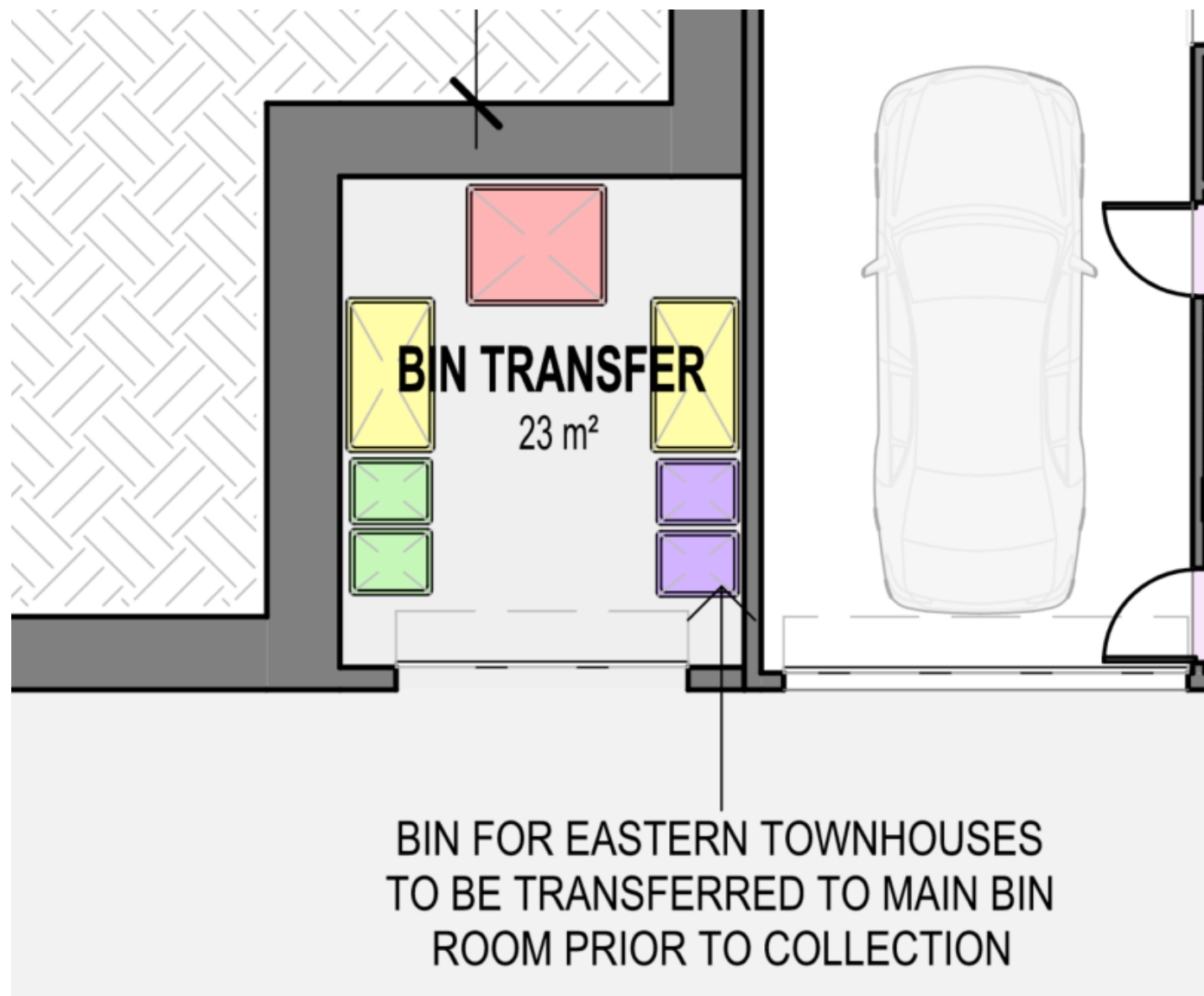


Figure 4.3: Bin Room Layout - Building B (Western Townhouses)

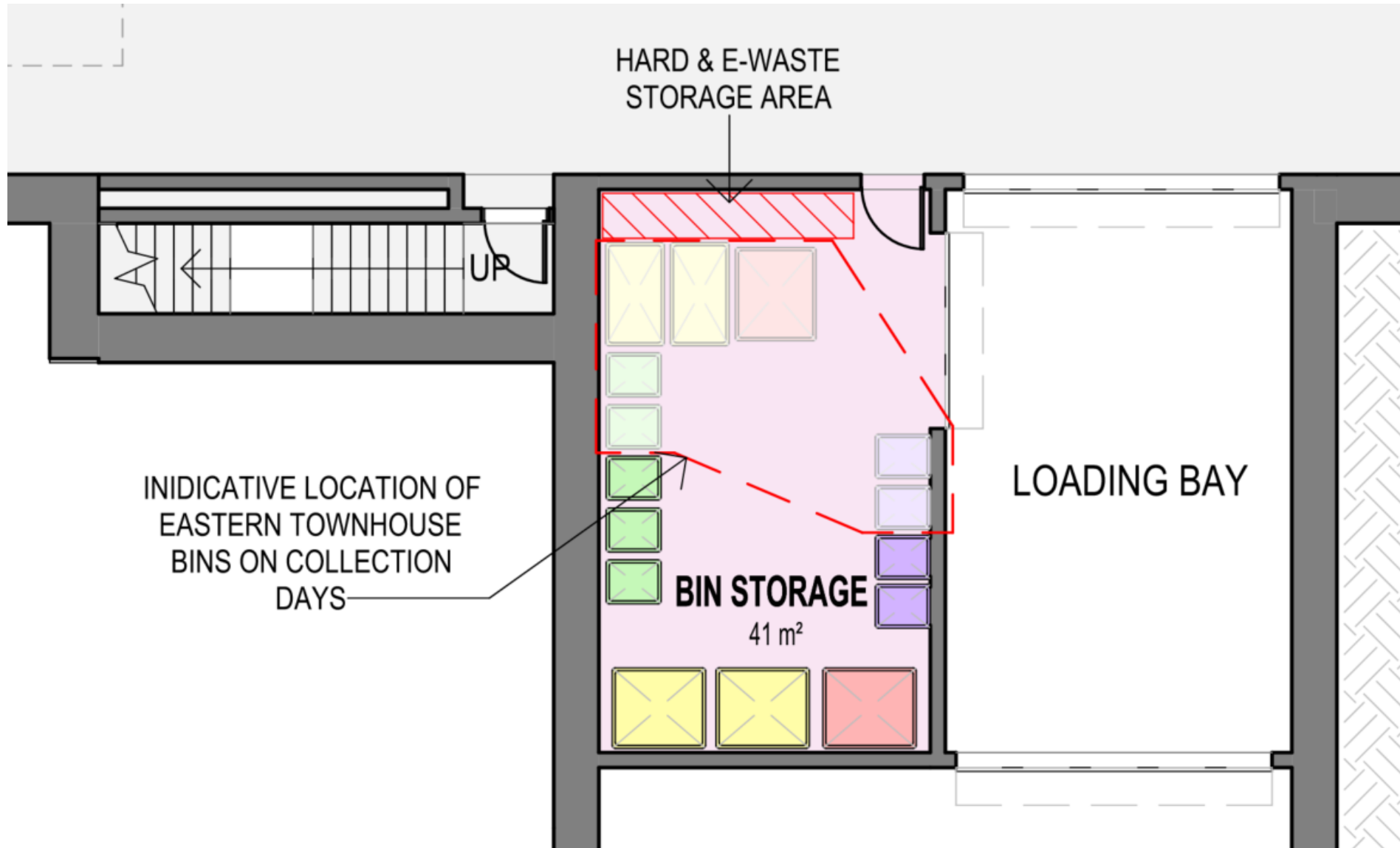


Figure 4.4: Bin Room Layout - Building C (Apartments - Northern)

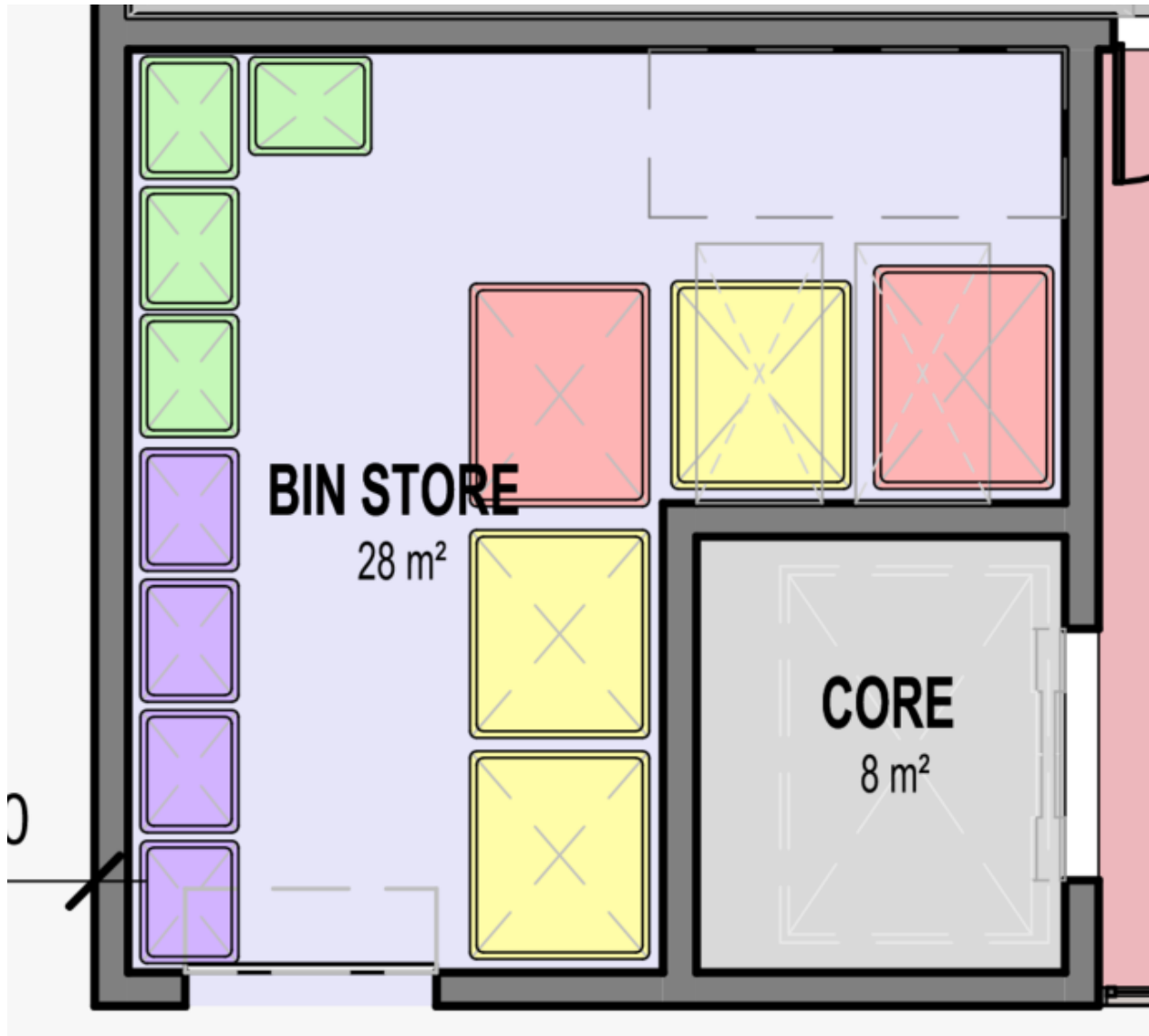
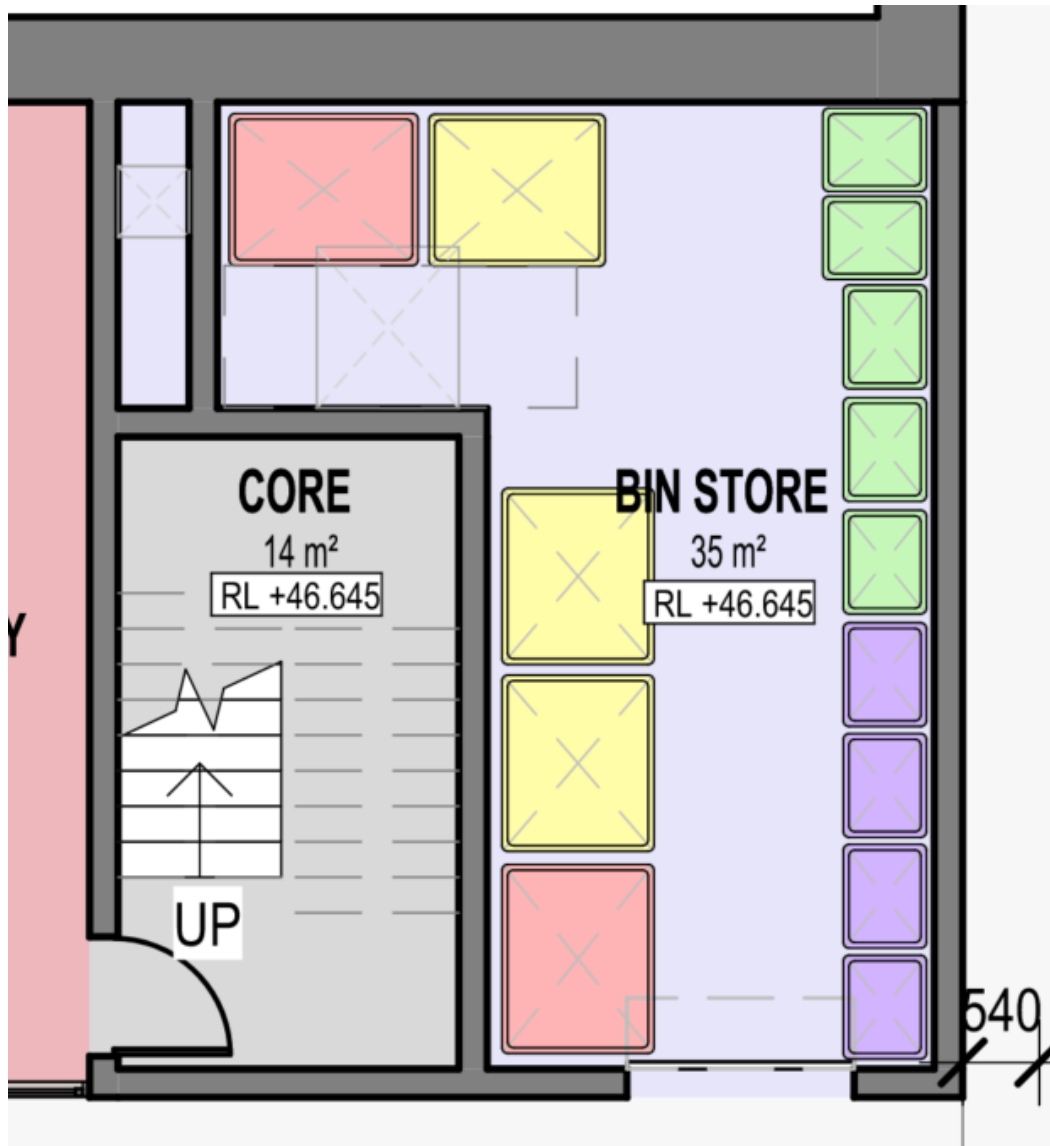


Figure 4.5: Bin Room Layout - Building C (Apartments - Southern)



4.4. Commercial Bin Room Layouts

The proposed bin room layouts for the commercial components of the proposed development are shown in Figures 4.5 to 4.7 below.

Figure 4.5: Bin Room Layout - Building A (Heritage - Commercial, Main Building)

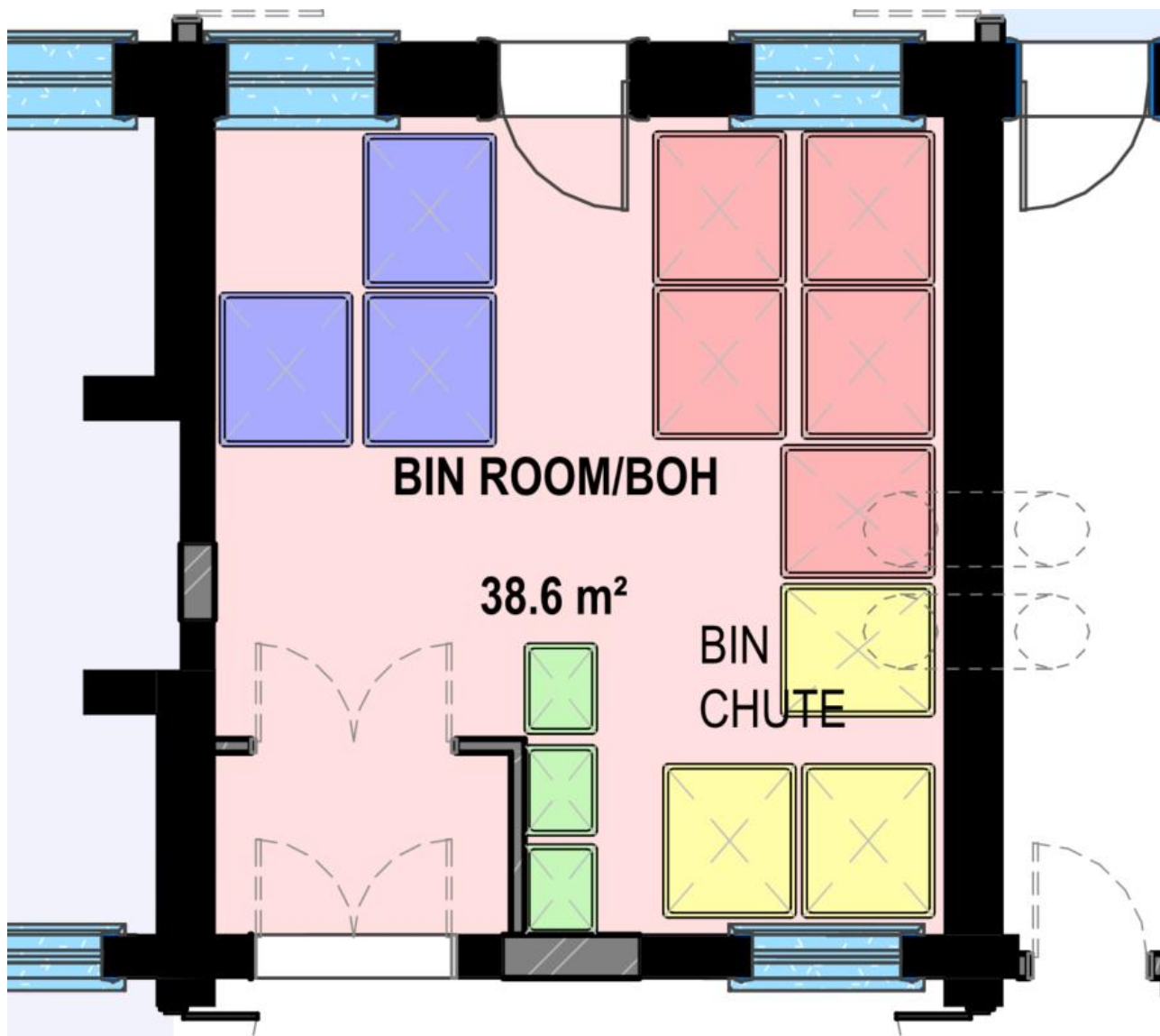


Figure 4.6: Bin Room Layout - Building A (Heritage - Commercial, Café)

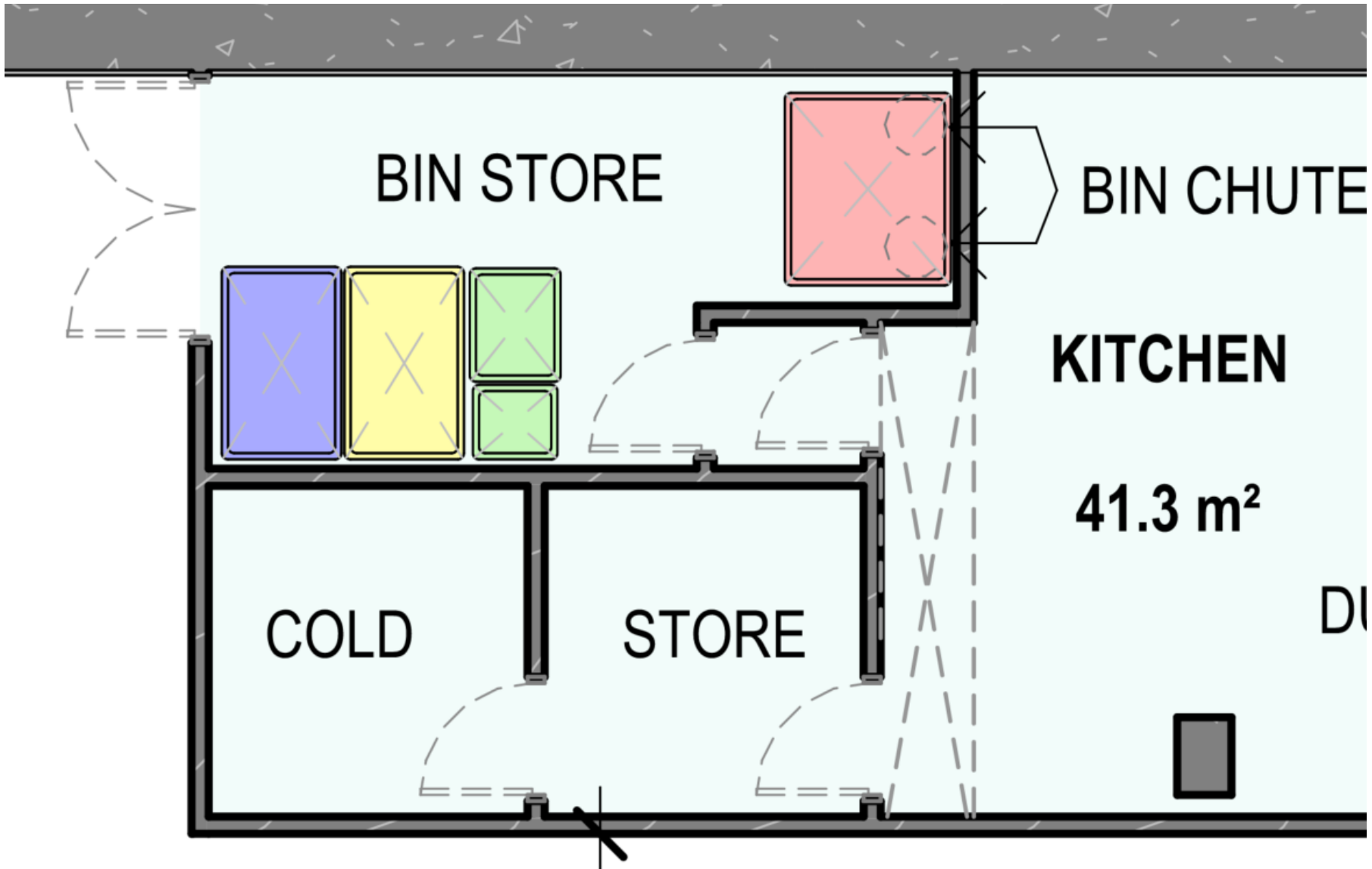
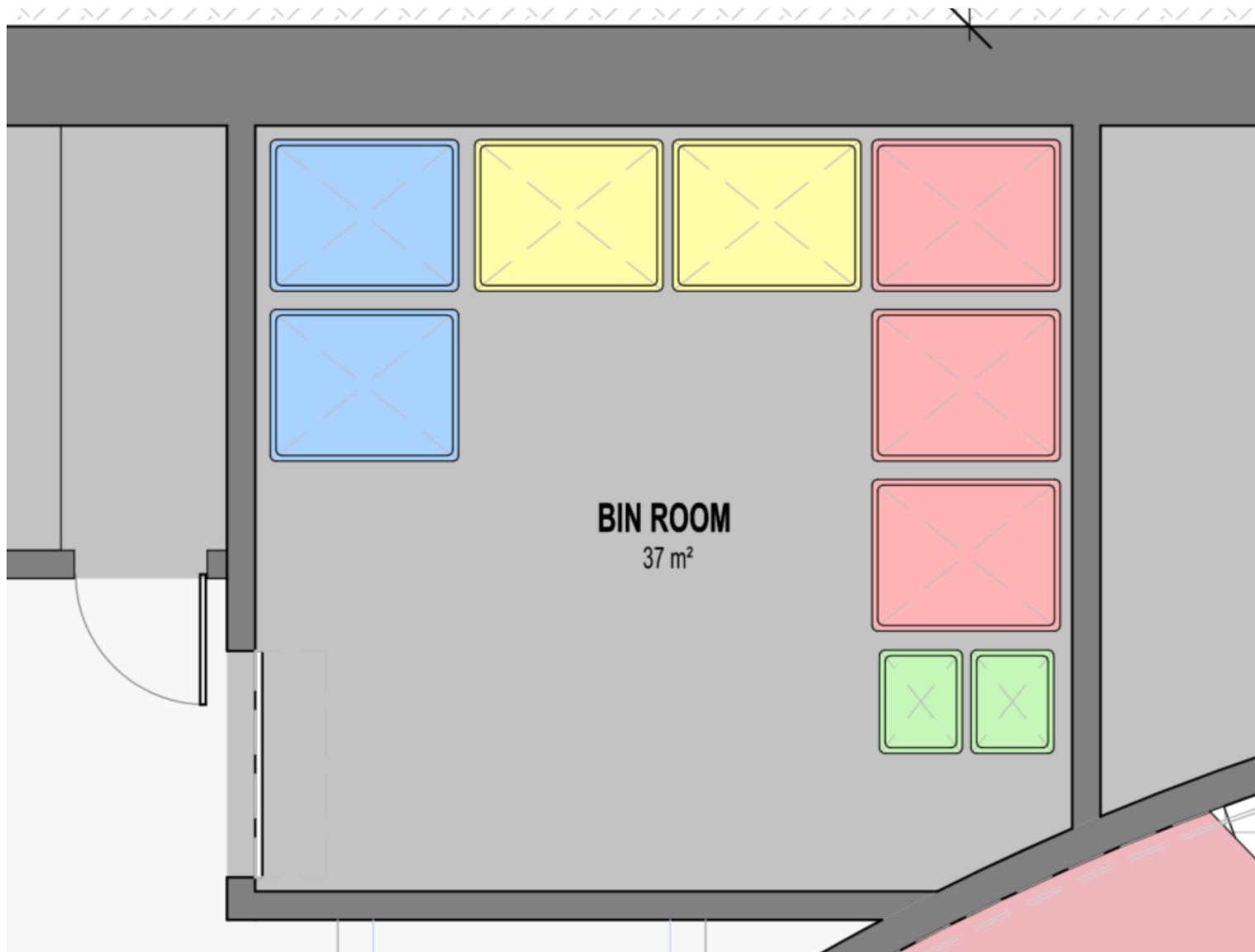


Figure 4.7: Bin Room Layout - Building D (ELC & Theatre)



5. Waste Collection Details

5.1. Residential Waste Collection Requirements

The waste collection requirements for the residential components of the proposed development are outlined in Table 5.1 below.

Table 5.1: Residential Waste Collection Requirements

Development Component	Waste Stream	Volume (L/Week)	Bin Size (L)	Quantity	Collection Frequency (per Week)	Capacity (L/Week)
Building A (Heritage - Residential)	General Waste	960	240	3	2	1,440
	Organics	505	240	2	2	960
	Recycling	1,400	240	4	2	1,920
	Glass	420	240	1	2	480
	Hard Waste & E-waste	-	2sqm per Collection		As Required	-
Building B (Townhouses - Eastern)	General Waste	800	1,100	1	1	1,100
	Organics	450	240	2	1	480
	Recycling	1,200	660	2	1	1,320

	Glass	360	240	2	1	480
Building B (Townhouses - Western)	General Waste	960	1,100	1	1	1,100
	Organics	540	240	3	1	720
	Recycling	1,440	1,100	2	1	2,200
	Glass	432	240	2	1	480
	Hard Waste & E-waste	-	2sqm per Collection		As Required	-
Building C (Apartments - Northern)	General Waste	1,700	1,100	2	1	2,200
	Organics	915	240	4	1	960
	Recycling	2,460	1,100	3	1	3,300
	Glass	738	240	4	1	960
	Hard Waste & E-waste	-	2sqm per Collection		As Required	-
Building C (Apartments - Southern)	General Waste	1,940	1,100	2	1	2,200
	Organics	1,045	240	5	1	1,200
	Recycling	2,800	1,100	3	1	3,300
	Glass	840	240	4	1	960
	Hard Waste & E-waste	-	2sqm per Collection		As Required	-

5.2. Commercial Waste Collection Requirements

The waste collection requirements for the commercial components of the proposed development are outlined in Table 5.2 below.

Table 5.2: Commercial Waste Collection Requirements

Development Component	Waste Stream	Volume (L/Week)	Bin Size (L)	Quantity	Collection Frequency (per Week)	Capacity (L/Week)
Building A (Heritage – Commercial, Main Building)	General Waste	10,751	1,100	5	2	11,000
	Organics	1,336	240	3	2	1,440
	Recycling	5,052	1,100	3	2	6,600
	Paper and Cardboard	5,052	1,100	3	2	6,600
	Hard Waste & E-waste	-	1sqm per Collection		As Required	-
Building A (Heritage – Commercial, Café)	General Waste	2,658	1,100	1	2-3	2,200-3,300
	Organics	664	240	1	2	720
			120	1	2	
	Recycling	1,107	660	1	2	1,320
	Paper and Cardboard	1,107	660	1	2	1,320
Building D (ELC & Theatre)	General Waste	2,271	1,100	3	1	3,300
	Organics	342	240	2	1	480
	Recycling	1,307	1,100	2	1	2,200
	Paper and Cardboard	1,307	1,100	2	1	2,200

	Hard Waste & E-waste	-	1sqm per Collection	As Required	-
--	----------------------	---	---------------------	-------------	---

5.3. Waste Collection Arrangements

The waste collection arrangements for the proposed development are outlined below and in Table 5.3.

Waste Collection Service Provider

Waste collection sitewide shall be performed by a private waste collection contractor, to be arranged by Facilities Management.

Waste Collection Responsibilities

Facilities Management shall be responsible for transferring the collections bins from the bin rooms to the assigned collection points prior to contractor arrival and returning the collection bins to their respective bin room once collection is complete.

The waste collection contractor shall be responsible for transferring the collection bins to the rear of the waste vehicle for emptying and returning the emptied bins to their original placement locations after collections is complete.

Waste Collection Swept Path Assessments

Swept path assessments have been prepared using Autodesk Vehicle Tracking Software, demonstrating that the nominated waste collection vehicle can access the site, conduct waste collection from the nominated waste collection points, and enter/exit the site/buildings in a forward direction (refer to the Traffic Impact Assessment report prepared by Ratio Consultants for the swept path assessments).

Waste Collection Times

Waste collection shall be undertaken in accordance with *EPA Noise Control Guidelines*, as outlined below:

- Between 6:30am and 8:00pm Monday to Saturday; and
- Between 9:00am and 8:00pm Sunday and public holidays.

Further to the above, waste collection should be restricted to off-peak AM and PM commuter periods to minimise disruption to vehicles accessing and circulating the site (i.e. between 10:00am and 3:00pm on weekdays).

Table 5.3: Waste Collection Locations and Vehicle Requirements

Development Component	Collection Location	Vehicle Size	Vehicle Travel Height Clearance	Vehicle Operational Height Clearance
Building A (Heritage - Residential)	Building A Lower Ground Loading Dock	6.4-metre-long rear loader	2.2 metres	Up to 2.5 metres
Building A (Heritage - Commercial)				
Building A (Heritage - Commercial, Café)	Building A Basement Carpark Aisle			
Building B (Townhouses - Eastern)	Building B Basement Loading Dock			
Building B (Townhouses - Western)				
Building C (Apartments - Northern)	Building C Basement Carpark Aisle			
Building C (Apartments - Southern)				
Building D (ELC & Theatre)	Building D Basement Carpark Aisle			

6. Design Standards

6.1. Bin Room Design Requirements

All bin rooms shall be designed to meet the following requirements:

- Designed to comply with Building Code of Australia (BCA) and all relevant Australian Standards.
- Allow storage of all collection bins on site at all times.
- Allow easy access to bins for all waste system users.
- Allow direct and convenient transfer of bins to/from the collection point.
- Appropriately screened to prevent unsightly impacts on amenity.
- Provided with artificial light to enable waste system users to dispose of waste safely and appropriately.
- Sized to accommodate all waste arising on the premises together with any associated waste management equipment
- Concrete (or similar) floor finished to a smooth, even surface, covered at the intersection of walls and plinths.
- Ventilated in accordance with the requirements of the Building Code of Australia and AS1668.2.
- Ventilation openings protected against flies and vermin.
- Provided with tight-fitting doors.
- Provided with adequate bin washing facilities (wall-mounted hot and cold mixing tap with floor graded to wastewater drain with litter trap) in accordance with the relevant authority requirements.

6.2. Chute System Design Requirements

Chute systems (if provided) shall be provided in accordance with the following requirements:

- Designed in accordance with the manufacturer's specifications.
- Designed to have deviation angles of no more than 45 degrees (ideally no more than 22.5 degrees from the vertical axis for recycling chutes).
- Designed to comply with Building Code of Australia (BCA) and all relevant Australian Standards.
- Designed to achieve minimum fire rating requirements of the BCA and/or Building Surveyor and fitted with fire sprinklers and any other safety devices as required by the manufacturer or certifier of the system.
- Residential chute intake rooms (if provided) designed to be DDA compliant.

– Chutes shall terminate directly into 660L or 1100L bins.

Specifications for a suitable chute system are attached to Appendix A.

6.3. Bin Colour and Signage Requirements

It is recommended that all collection bins are provided in the following colours:

- General waste collection bins: dark green or black body and red lid.
- Organics collection bins: dark green or black body and lime green lid.
- Recycling collection bins: dark green or black body and yellow lid.
- Glass waste collection bins: dark green or black body and purple lid.
- Paper and cardboard collection bins: dark green or black body and light blue lid.

All collection bins shall be provided with Sustainability Victoria or equivalent signage (visit: <https://www.sustainability.vic.gov.au/recycling-and-reducing-waste/waste-systems-in-residential-commercial-and-industrial-buildings/waste-signage>).

6.4. Residential Internal Waste Receptacle Requirements

Internal waste receptacles for the residential components of the proposed development should meet the following requirements:

- General waste: large enough to hold at least 2 days' worth of waste, but no larger than 25 litres.
- Organics: large enough to hold at least 2 days' worth of organics (~10 litres).
- Recycling: large enough to hold at least 2 days' worth of recycling, but no larger than 25 litres.
- Glass: large enough to hold at least 2 days' worth of glass (~10 litres).

6.5. Commercial Internal Waste Receptacle Requirements

Internal waste receptacles for the commercial components of the proposed development should meet the following requirements:

- No larger than 60 litres for each waste stream, to ensure ease of manual handling when being emptied into the collection bins.
- If receptacles are required to be larger than 60 litres, a bin lifter will need to be provided within the respective bin room for emptying into the larger collection bins.

7. Contact Information

Table 7.1 below includes a complimentary listing of contractors and equipment suppliers. The Project Principal shall not be obligated to procure goods / services from these companies. Ratio Consultants does not warrant or make representations for the goods / services provided by these contractors and suppliers.

Table 7.1: Contractors and Supplier Details

Service	Contractor/ Supplier	Phone	Website
Private Waste Collection Contractor and/or Bin Supplier	Cleanaway	13 13 39	www.cleanaway.com.au
	CSC Waste & Recycling	1300 499 927	www.cscwaste.com.au
	iDump	1300 443 867	www.idump.com.au
	JJ Richards	03 9794 5722	www.jjrichards.com.au
	Premier Waste	1300 219 001	www.premierwaste.com.au
	SUEZ	13 13 35	www.suez.com.au/en-AU
	Veolia	132 955	www.veolia.com/anz
	Wastewise Environmental	1300 550 408	www.wastewise.com.au
	Sulo Australia	1300 364 388	www.sulo.com.au
Chute System Supplier	Wastech Engineering	1800 465 465	www.wastech.com.au
Bin Washing	The Bin Butlers	1300 788 123	www.thebinbutlers.com.au
	Calcorp Services	1800 225 267	www.calcorpservices.com.au
	Kerbside Clean-A-Bin	03 9830 7381	www.kerbsidecleanabin-srp.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au
Odour Control	Eco-Safe Technologies	1300 135 039	www.eco-safe.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au
E-Waste Collection	Tech Collect	1300 229 837	www.techcollect.com.au

Appendix A : Chute System Specifications

Waste Chute Systems

Waste and Recycling Chute and Disposal Systems
Product Guide

 1800 465 465
 www.wastech.com.au
 info@wastech.com.au
 Wastech Engineering

Welcome to your complete guide to Wastech Waste Management Systems and Chutes range

Company Profile	3
Smoothubes™ Plastic Chutes	4
Smartubes™ Diverter	6
Discharge Room Equipment	8

Technical Specifications

Smoothubes™ Plastic Chutes Specifications	10
Smoothubes™ Chute Assembly Specifications	12
Bin Feed System Examples	13
Diverter Example Room Layouts	14

Optional Parts & Accessories	16
Service & Support	17



Company Profile

We are an Australian design, engineering and manufacturing company that services the waste management and resource recovery sectors across Australia and New Zealand.

Our extensive product range and end-to-end service offerings support a diverse range of businesses big and small, and governments local to federal, that are seeking technology-enabled solutions to effectively manage waste and resources and drive efficiency.



We have been at the forefront of Australian engineering innovation for more than 25 years and continuously strive to improve our products and services through investment in research and development, adoption of best-practice design and the procurement of high-quality technology and materials. We implement a quality-focused, lean manufacturing model in design and production so that we can reduce wastage and unnecessary use of materials.

Our commitment to sustainability also extends to our energy consumption with all our products fabricated using power sourced from our own 85kw solar array. This efficient product development process means we can pass savings onto customers while also helping the environment.

Customer Centric.

Dedicated and experienced teams for every product

When commissioning new equipment, our engineers and technicians work with our customers until the equipment is fully operational and they know how to use it. We work as one team to get the job done.

Proudly Australian.

On-site and local manufacturing capabilities

Our organisation has grown to become an award-winning and highly respected Australian manufacturing and engineering company committed to creating and supporting local jobs. With a local workforce of more than 100 people, we maintain a deep inhouse capability with Australia-wide operations.

Trusted. Reliable.

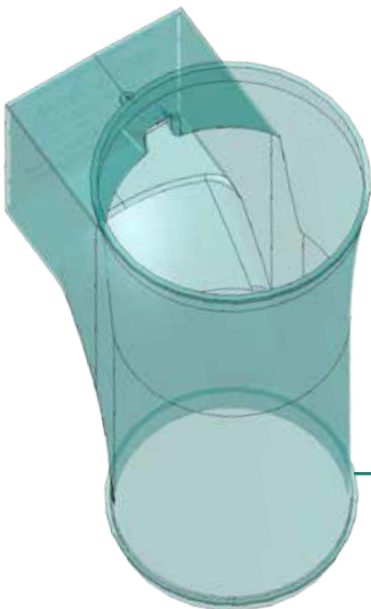
On-time project delivery backed by 24/7 service and support

Our service and support team operates out of dedicated facilities to maintain a high level of service. Our qualified technicians can attend all sites to service, repair and refurbish all products in the industry.

Smoothtubes™ Plastic Chutes

Introducing Wastech’s very own super smooth plastic Waste Chute system offering 80% less friction than steel, allowing for quieter and smoother waste disposal, whilst being a more cost effective solution.

Pioneering the design of Australia’s first plastic chutes, Wastech’s Smoothtubes™ Chutes system offers:



- ✓ Superior industrial grade plastic(LLDPE)
- ✓ Superior acoustic properties
- ✓ Low density, flexible material
- ✓ Corrosion proof
- ✓ Australian designed and developed
- ✓ Made from recycled* Polyethylene
- ✓ Offers less unrestricted continuous flow
- ✓ Self cleaning smooth internal surface

Recommended configuration/installation options are:



Single Chute System



Dual Chute System



Triple Chute System

For more detailed specifications on Single, Dual and Triple chute systems, please refer to page 14.



Innovative Design

The Smoothtubes™ modular design caters for any application without the need to custom build sections. The innovative slip-joint assembly system significantly reduces installation time.

Smoothtubes™ also offer UV and impact resistance while weighing less than 15kg per section.



Builder Friendly

- Easy installation by offering:
- In-built block-off panels that seal the chute until installation of the loading doors is complete. This helps to ensure no usage or damage can occur during construction and installation.
 - Self supporting modular sections with built in mounts.
 - Lightweight for easy handling.



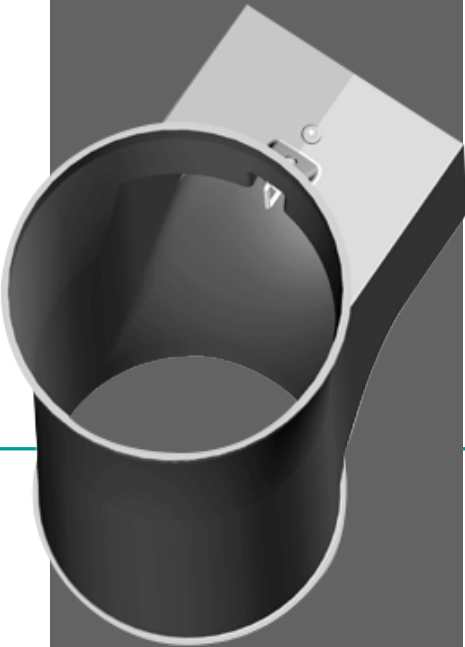
Cleaner & Quieter

- Smoothtubes™ are designed to be cleaner whilst eliminating noise by:
- Offering crevice free joints with no sharp angles eliminating collection of any waste particles.
 - Closed cell, non-porous material repelling grime, bacteria, odour and liquid.



Fact!

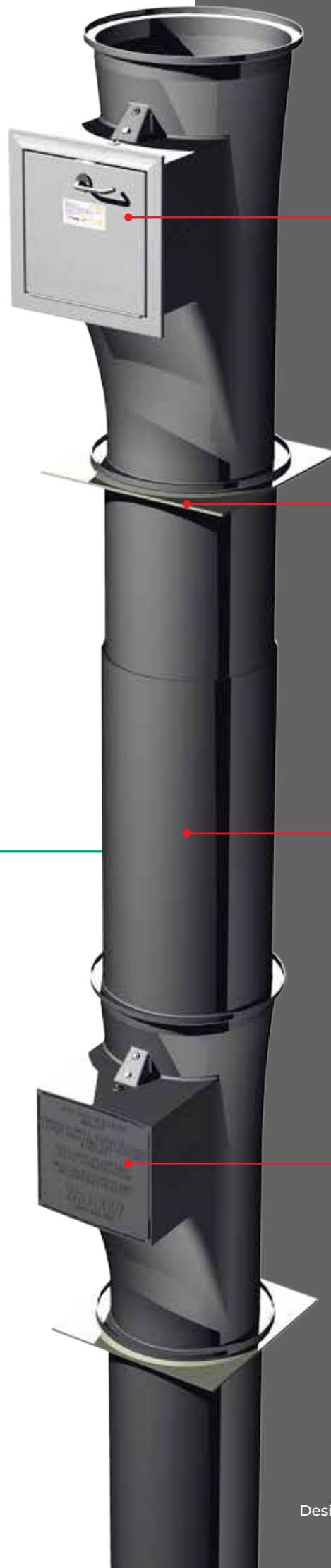
Wastech pioneered the plastic chute system with Smoothtubes[™] and have successfully manufactured, delivered and installed over 2000 waste chute major commercial projects Australia wide!



Contact Us

A large range of options are available including Steel chutes and custom built solutions.

To arrange a detailed discussion, contact a Waste Management consultant today on 1800 465 465.



Stainless Steel fire rated door. (AS1530)

Floor mounts supported by Embelton NRD isolation mounts

Lightweight self supporting chute modular section.

In-built installation block off panel.

For detailed specifications, please refer to page 12.



Smoothtubes™ Diverter

A smart, space saving, single chute diverter system for both waste and recycling.

Designed for use with a single chute waste disposal system, the Smarttubes™ diverter provides a simple and efficient method for disposing of multiple waste streams while saving valuable building space.

Smarttubes™ is an intelligent system that is simple to use for residents and building managers alike. The door control panel allows residents to easily select their desired waste stream, while the advanced web-based dial in system allows building managers to control the chute from anywhere within the building through wifi access!



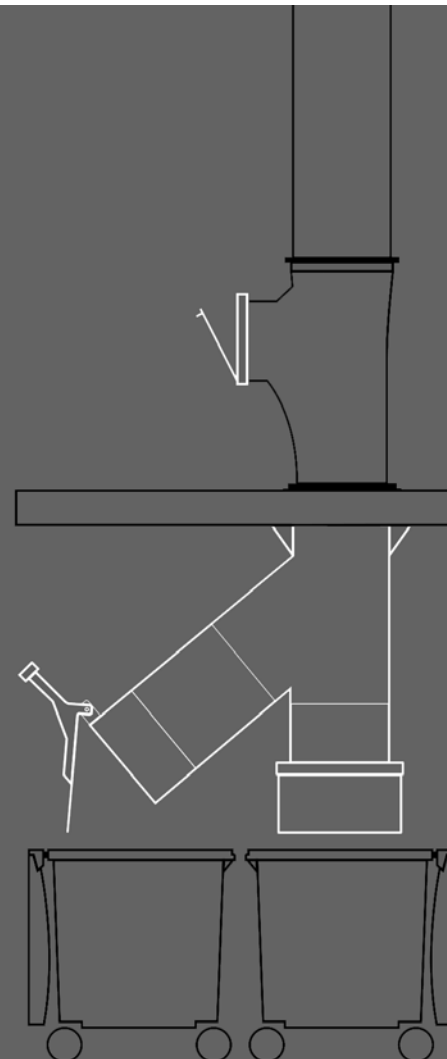
Wifi Dial-In

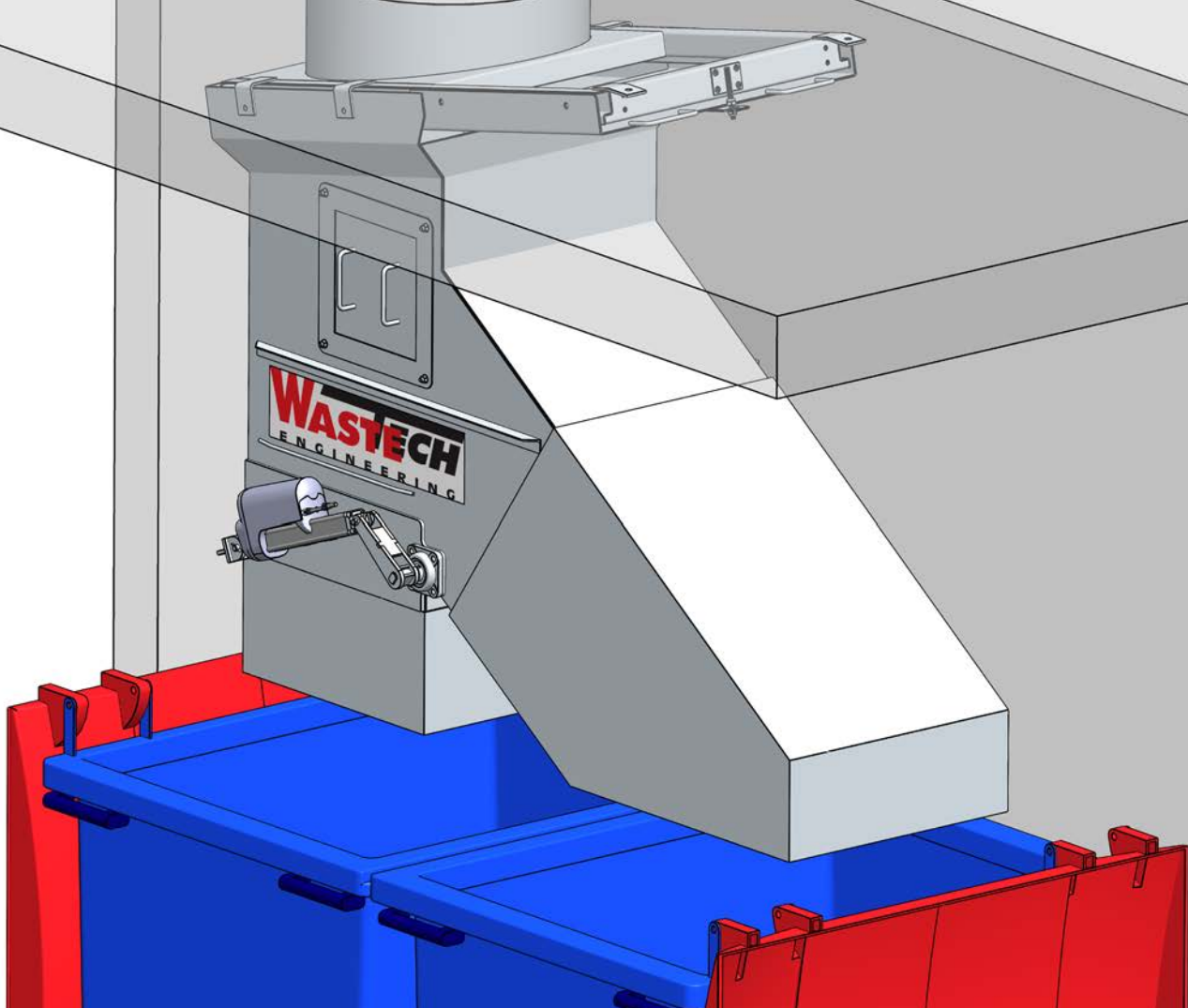
The Smarttubes™ single chute diverter systems allow for web based, wifi dial-in. This enables the user to lock individual or sets of doors, lock out of all doors for maintenance, or setting of the programmable timer. (i.e. disposal only allowed between 6am and 12am).



Programmable & Remote Lock-Out

The Smarttubes™ system is fully programmable, allowing building managers to lock out specific levels or even the entire system for maintenance. Additionally, the system can be used to enforce a building disposable curfew via a programmable timer.





Easy Installation & Maintenance

The electric actuator of the Smarttubes™ system eliminates the need for expensive hydraulics and results in lower lifetime maintenance costs. The electric motor also allows for lower power requirements, only requiring one standard 240V outlet.

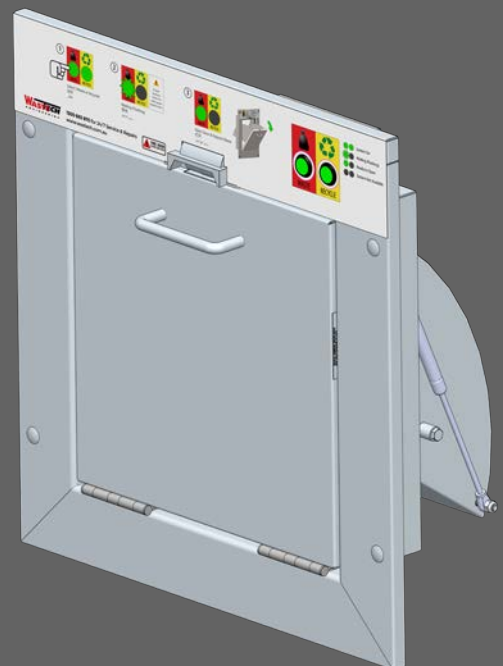


Simplified Operation

1. Select waste stream (waste or recycling).
2. Wait* - Diverter arm will move to the appropriate position.
3. Open - Chute door unlocks for disposal.

To ensure correct disposal, the chute door will only open for one waste stream at any stage of operation.

Smarttubes™ Door Control Panel



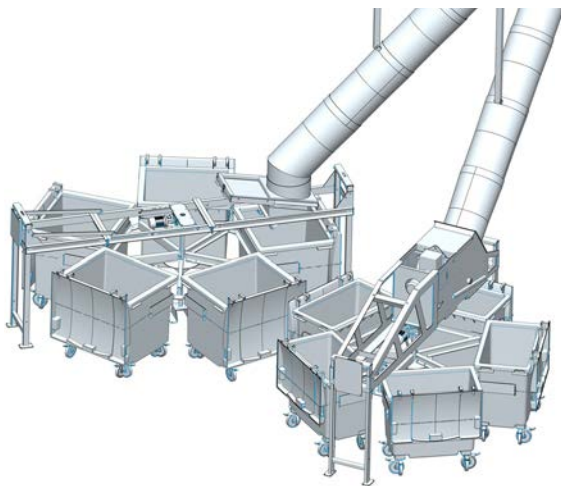
Discharge Room

Introducing Wastech Chute compactors designed for efficient waste disposal for multi-story or multi-level buildings.

Binpac™ Compactor

Introducing an extremely quiet and fast, hydraulic free, state-of-the-art compactor, designed to handle high volumes of even the most diverse garbage types with ease.

Running costs are minimised, while maintenance and cleaning is kept simple and safe.



- Low power drive motor
- Self cleaning compact drum
- Compact profile
- Large access panels
- Jam sensor switch
- Light weight bin cradles
- Configurable control box mount

Bin feed system compatible



Compaction Ratio	2:1 to 10:1 (dependant on waste types.)
Construction	5mm to 10mm Grade 250 M/Steel
Chamber Dimensions	N/A
Waste Capacity	N/A
Power Requirements	240V / 10A GPO
Hydraulic Specs	N/A
Compaction Force	680kg
Waste Bin Qty	4x660ltr and 4x1100ltr Bins
Electric Control	PLC Control with Electronic Cycle
Service	Hydraulic Free 24 Hour Service
Warranty	12 months (terms & conditions apply)

Automatic Bin feed Systems

Designed for use with or without a Compactor, Wastech Automatic Bin Feed Systems help save time by automatically rotating through your bins as they are filled. Once the system detects the bin is full, it will automatically cycle to the next available empty bin using a powered carousel or conveyor machine system.

Smart alert options are available.

For more information, contact a Wastech waste consultant on 1800 465 465.



Equipment

Eco-pack Compactor

Engineered for working installation within tight space restrictions, the economical Eco-pack is a hydraulic based compactor offering high packing force to help eliminate potential OH&S issues and bin damage.



2:1 to 10:1 (dependant on waste types.)

5mm and 20mm Grade 350 High Tensile Steel

560 x 600mm

80 ltr/sec per 15 second cycle = 20m³/hr

415V / 20A / 5 Pin power point

12 Lpm Pump / 5.5kW Motor

62kn or 6.3 tonnes force @ 14Mpa

On Carousel System: Multiple Configurations Available

PLC Control with Electronic Cycle

Comprehensive fixed price service available

12 months (terms & conditions apply)

- High compaction reducing bins required in floor space
- Robust high tensile steel construction
- Quiet and efficient hydraulic system
- Continually sealed door
- Suits all bin sizes
- Suits both carousel or linear bin feed systems
- Waste is compacted inside the compactor unit and not the bin
- No bin damage



Carousel System

Ideal for rooms with tighter space, this system rotates bins in a circular cycle system.



Conveyor System

Ideal for rooms with longer, narrower space, this system rotates bins in a linear cycle system.

SmoothtubesTM Plastic Chutes

Chute Construction

Nominal Internal Diameter: Garbage 530mm

Material LLDPE (linear low density polyethylene). Internal surface is closed cell, ultra smooth finish that resists waste residue build up, odour, blockages, corrosion and liquid. +Fire hazard property tests in accordance with BCA Clause C1.10 and Specification C1. 10 in complying with Australian Standard AS1530.4-2014 by Warrington Fire Research (Aust) Pty Ltd.

Material Thickness: Chute tubes 5mm nominal.

Mounts: Designed to be flexible and smoke seal at every level.

Noise & Vibration Prevention: Acoustic lagging is not necessary. Refer to #acoustic report. Isolation is provided at every level under the floor mounts. Flexible mount is isolated from concrete using polyurethane sealant that is acoustically rated.

Ventilation: 200mm diameter galvanised steel ventilation fan and discharge cowl assembly. The fan is supplied with 240 volt single phase plug and lead. The cowl assembly comes complete with dektite flashing. The vent is connected to the top of the chute by a flexible duct.

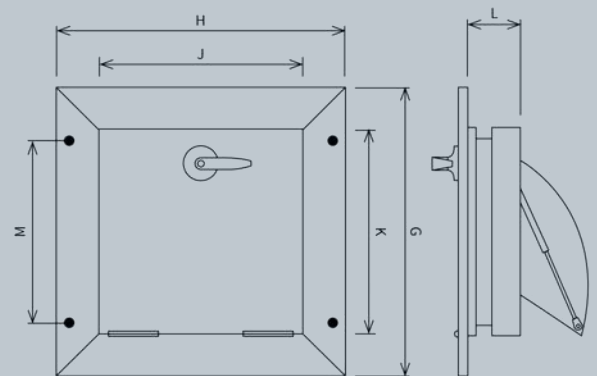
Loading throat door: SmoothtubesTM Loading Throats are molded within the chute tube creating a smooth flowing entry to reduce impact noise and minimise blockages. Loading doors -304 grade Stainless Steel with a fire block core, door frame sealed to wall using fire sealant. Compliance to Australian Standards AS1530.4-2014 (FRL:-/120/30). Doors are self closing. Key locks are supplied standard for Linen doors, Garbage and recycling doors. Fire sprinklers are installed in every loading throat ready for connection to fire services by others.

De lector: The discharge of the chute has a 3 or 5mm thick Galvanised Steel deflector, set at 45 degrees (min) for discharge directly into a bin. The deflector is fitted with a fire activated fusible link close-off door which can be manually overridden, to close the chute for bin changes. For garbage discharge into an EcoPack Compactor the fire door is not required as the Compactor isolates the chute at all times.

Installation

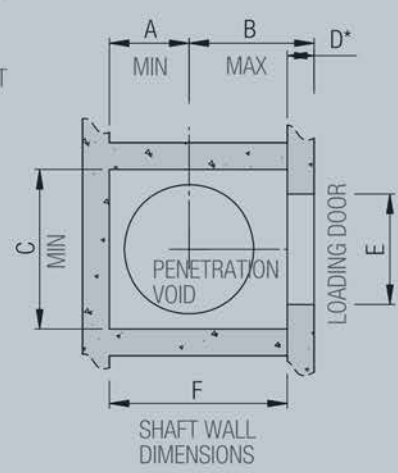
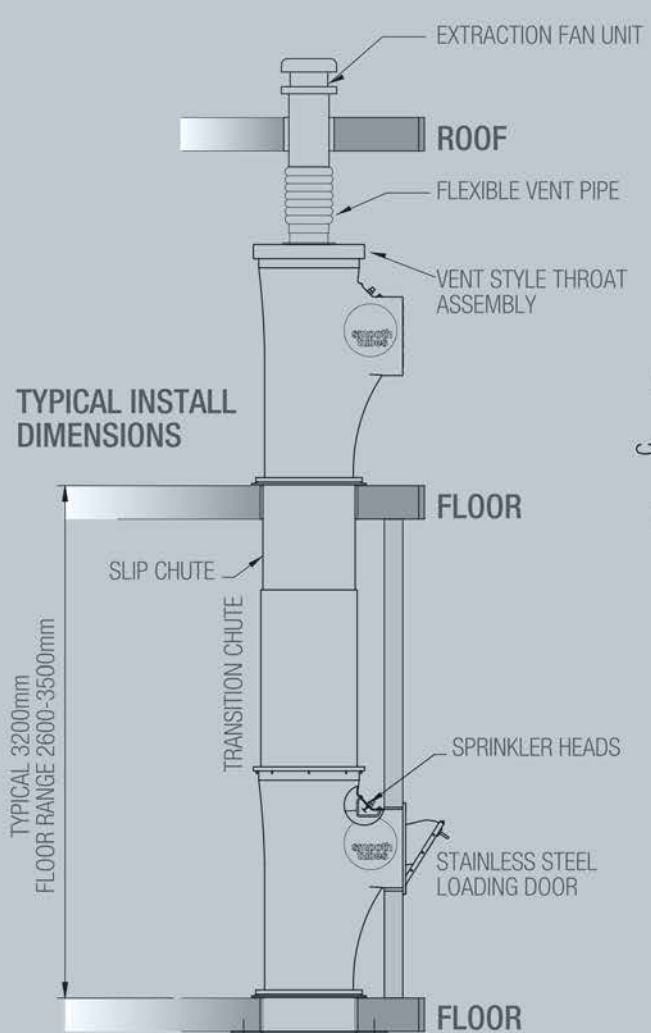
Chute sections weigh no more than 15kg each allowing easy transport and installation by hand without reliance on Tower Cranes. Bricking up instructions are detailed on the front panel of every loading throat, which stays fitted until installation of loading door to prevent unauthorised use and potential damage from building rubble.

Chute Door Dimensions



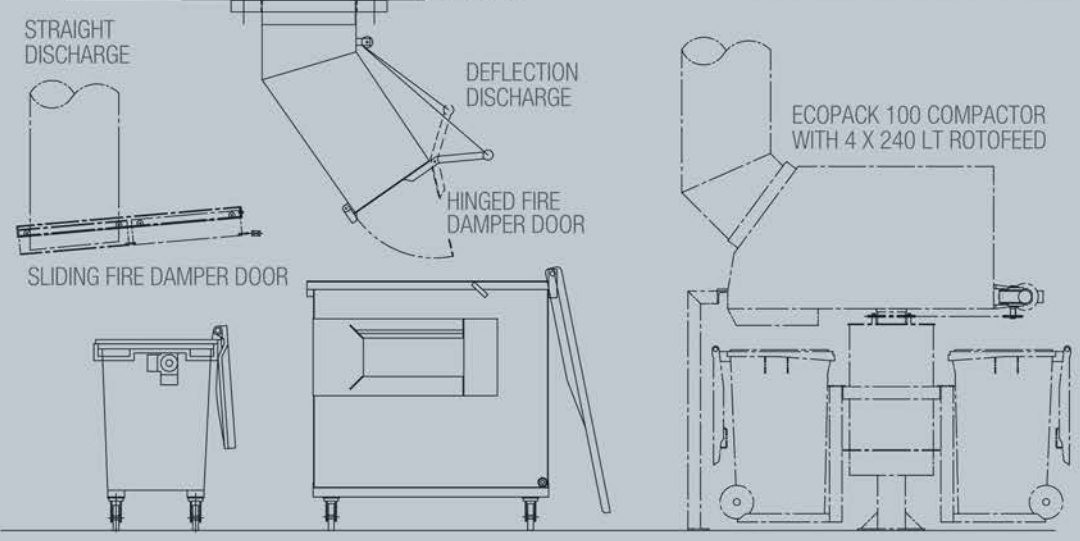
Dimensions

Label	Waste Door	Linen Door	Recycling Door
G	603mm	573mm	603mm
H	603mm	573mm	603mm
J	435mm	432mm	432mm
K	435mm	432mm	432mm
L	110mm	110mm	110mm
M	380mm	380mm	380mm



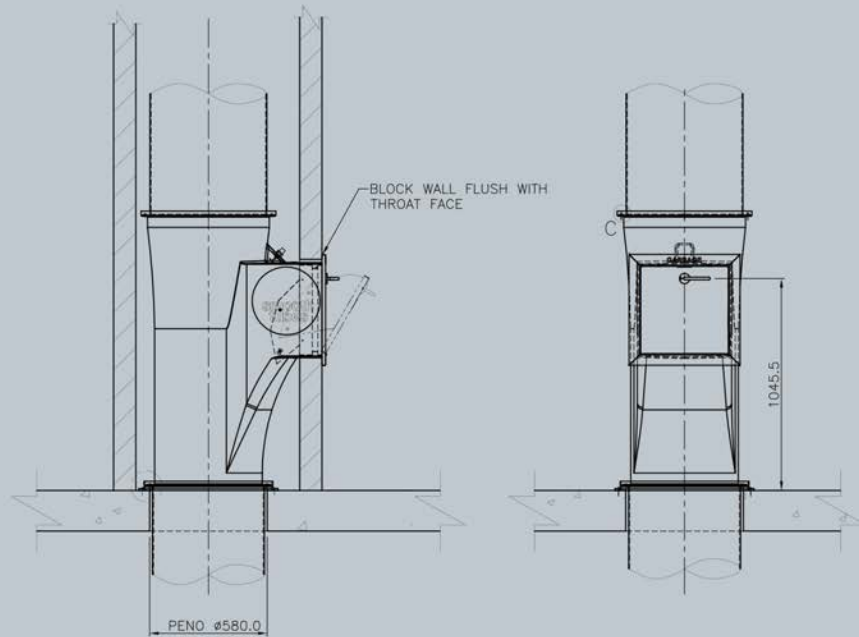
Label	Waste / Linen Chute	Smarttubes
A	357mm	397mm
B	560mm	610mm
C	715mm	795mm
D	110-140mm	110-140mm
E	470mm	505mm
F	808mm	808mm

*See installation notes for more information.

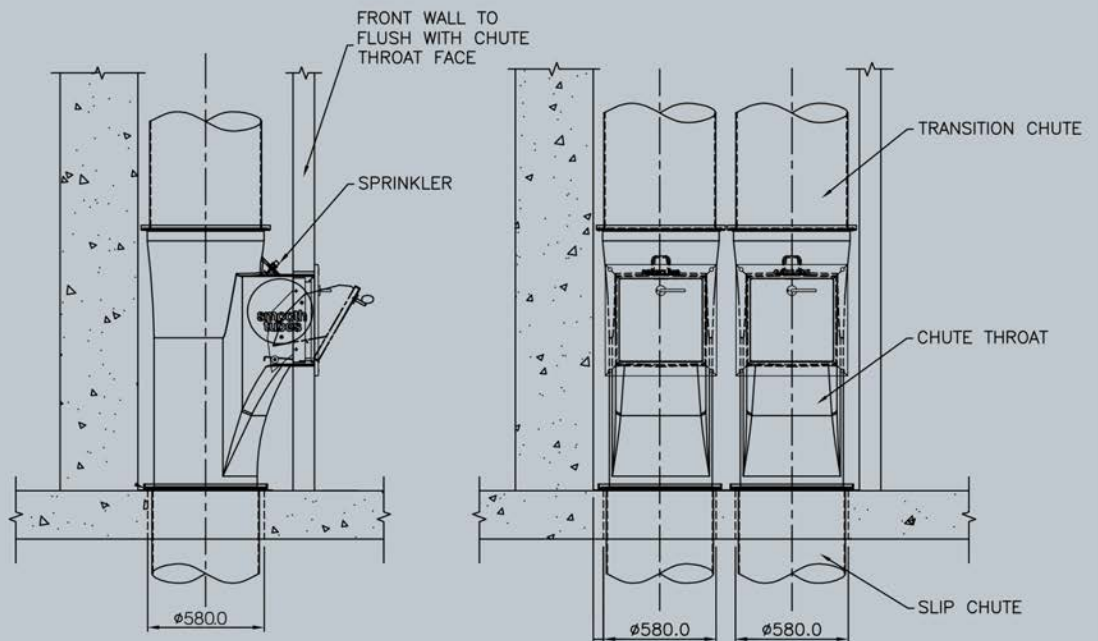


Smoothtubes™ Chute Assembly

Single Chute
Assembly
Example

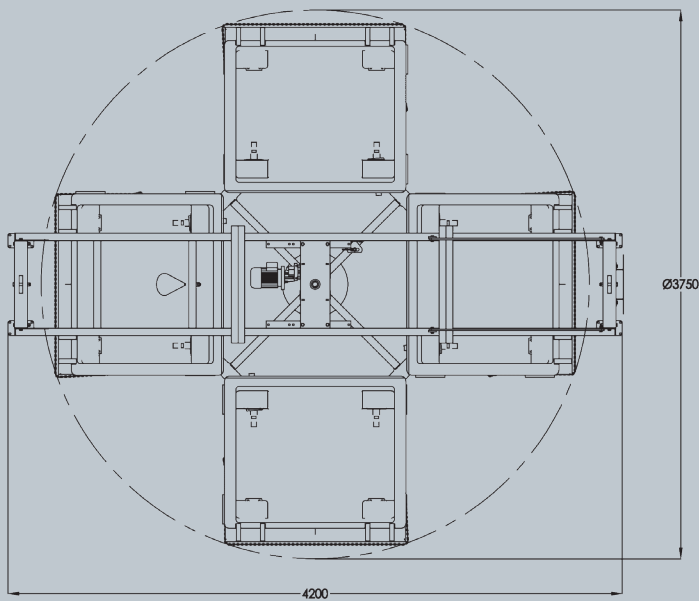


Dual Chute
Assembly
Example

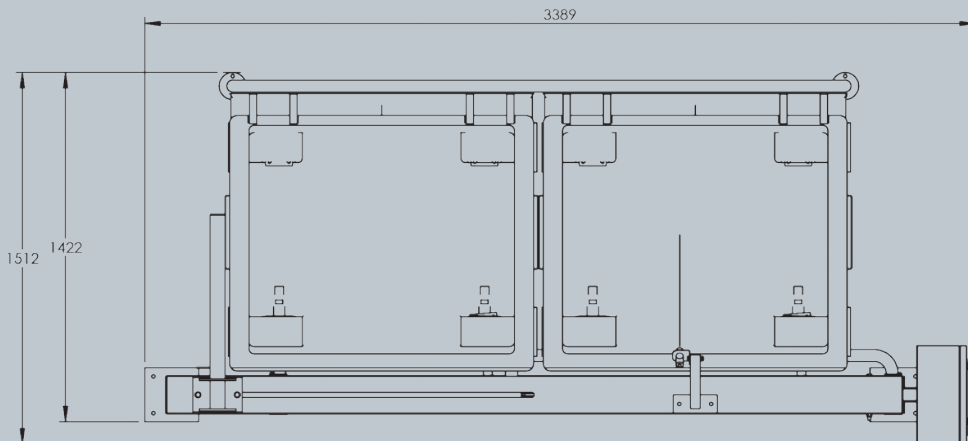


Bin Feed System Examples

Carousel Bin Feed System Examples

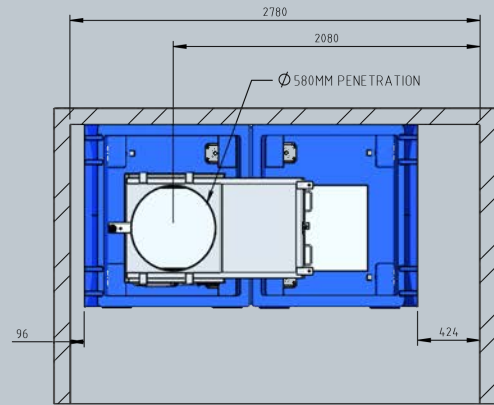
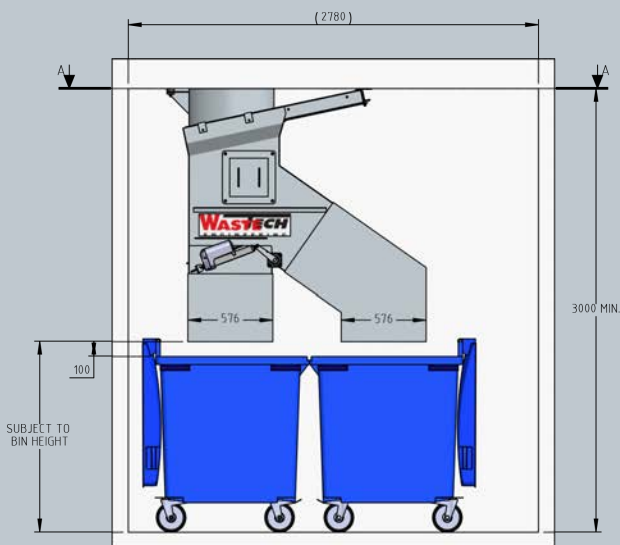


Conveyor Bin Feed System Example



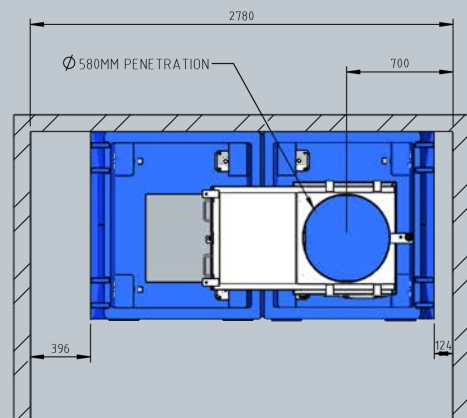
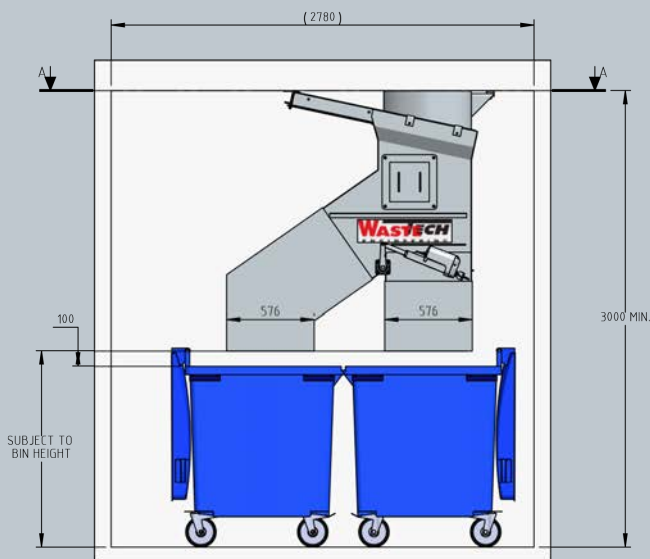
Diverter Example Room Layouts

Standard Configuration 1



SECTION A-A

Standard Configuration 2



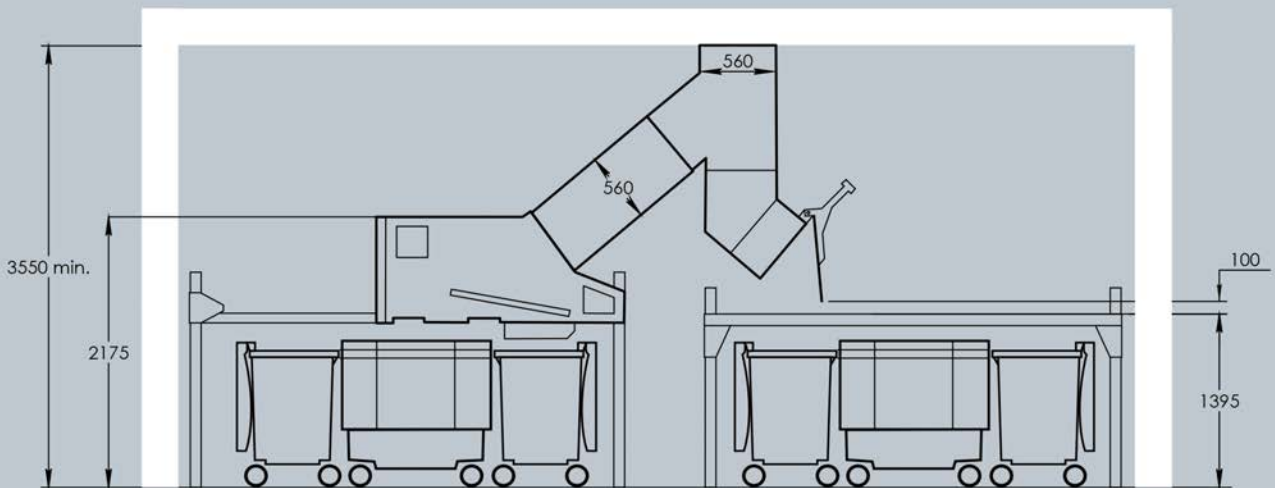
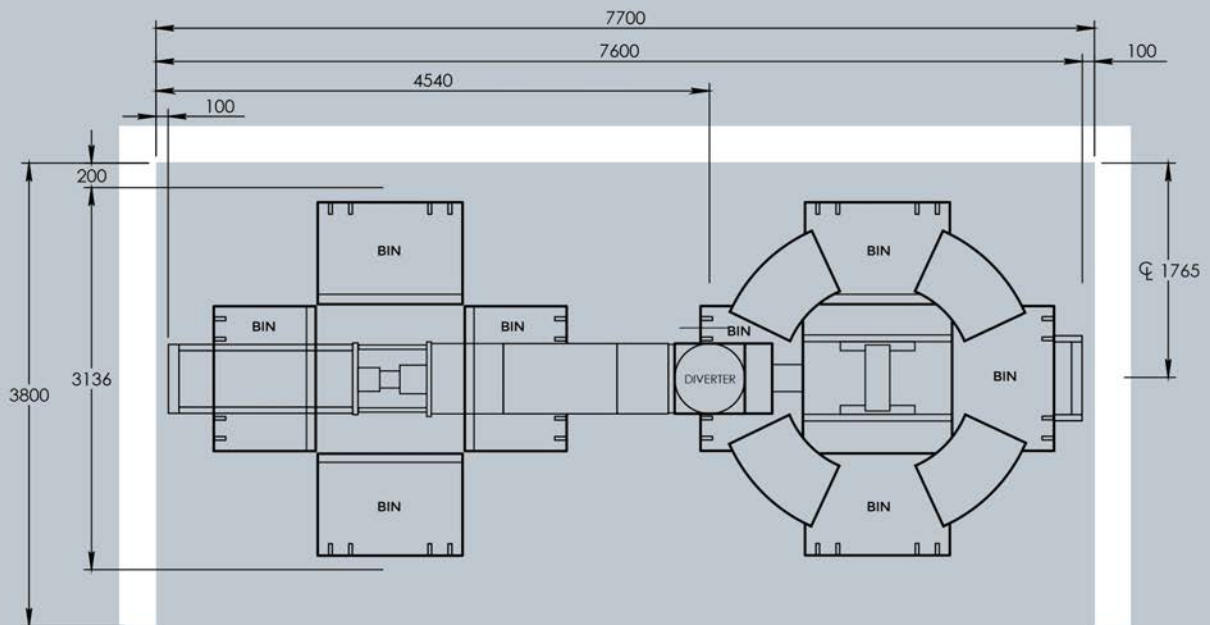
SECTION A-A

Design Guides

The following are standard installation spacings and requirements solely intended to assist in the design of refuse rooms and chute systems. These are intended as guides only and do not constitute a complete site specific design. Bin arrangements and compacting options vary significantly and are unique to each site.

Please contact Wastech for a formal assessment of your site and for further options.

Carousel Feed System Configuration: Ecopac & Bin Carousel



Optional Parts & Accessories

Wastech offer a large range of additional spare parts and accessories to suit all your needs including:



Penetration Ring

Reusable circular steel mandrel for builder to set out and form floor penetrations.



Flushing Spray

19mm diameter brass flushing spray head fitted to the top of the chute. Supplied complete with fire rate access door for maintenance.



Mounting Brackets

Site-specific brackets to suit oversized penetrations, large building shafts or wall-mounting.



Collector Bins

Plastic or steel collector bins available in all industry sizes.



Automatic Bin Feed Systems

Automatic bin feed systems available in Carousel and Conveyor layouts options.



Odour Control Systems

A range of different products designed to control odour of Waste Chute systems.



Manual Bin Handling Equipment

Wastech offers a range of optional equipment to assist with safe and easy handling of your bins.



Equipment & Bin Monitoring System

Bin full notifications via email
Bin monitoring systems.

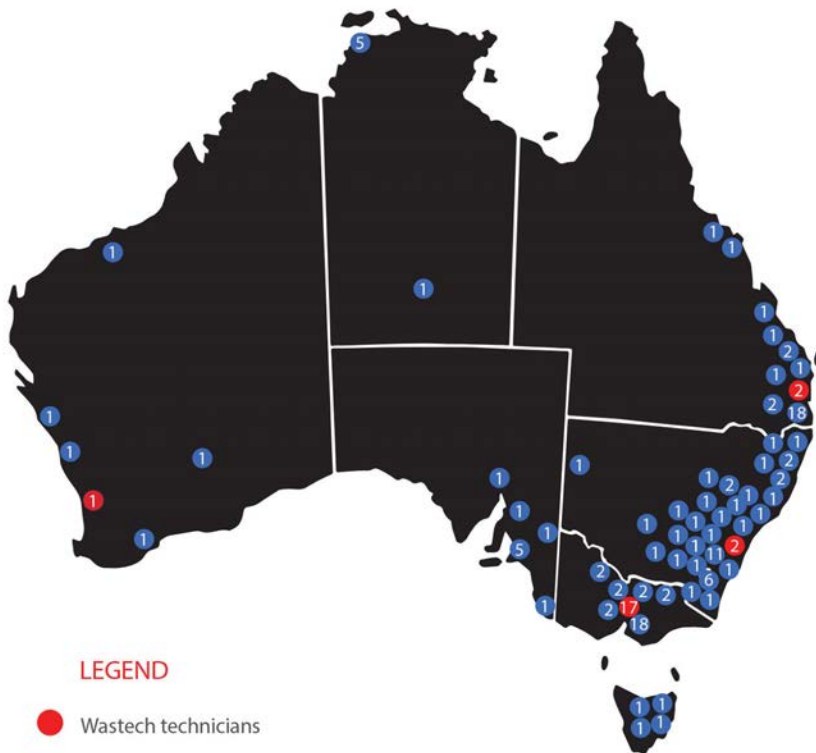
24/7 Service & Support

**4 HOURS A DAY, 7 DAYS A WEEK,
365 DAYS A YEAR**

Our skilled technicians operate around-the-clock Australia-wide and can attend on-site to service, repair and refurbish all products in the industry. Our national 24/7 service centres also provide breakdown response, refurbishments and preventative maintenance support.

Our own Cloud Based Service and Support Network (CBSSN) makes the tracking of equipment, scheduled servicing and inspections streamlined, simple and efficient. A full history for every single unit ensures the job is done right, with reports available at the touch of a button.

Each of our technicians has the ability to remotely access our CBSSN system directly via iPad. All the details of the service or breakdown are provided in full to the technician before they even reach the site; reducing your costs and downtime. Nation-wide, every minute of every day, Wastech have you covered.



LEGEND

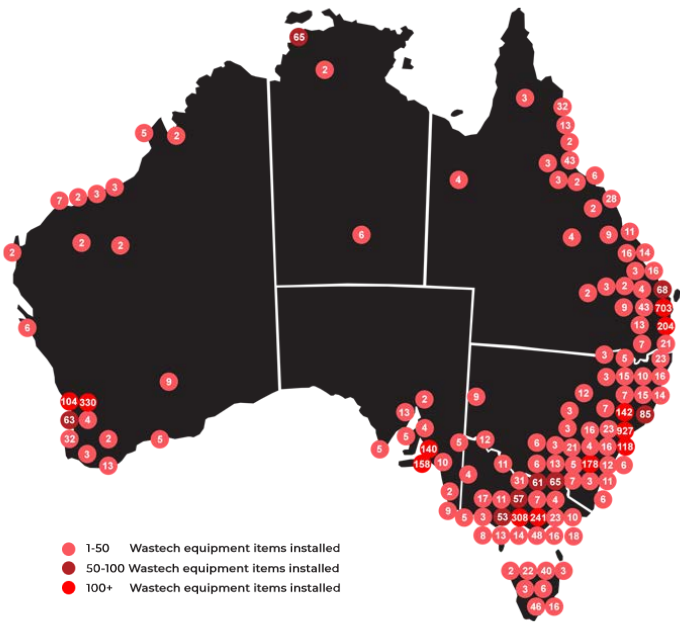
- Wastech technicians
- Contracted technicians

A VAST NETWORK OF TECHNICIANS

We have 20 Wastech technicians supported by a network of over 130 contract technicians, servicing more than 11,000 balers, compactors, MRFs and Transfer Stations nationally



**For 24/7 Service, Simply Call
1300 665 870**



VIC Head Office

33 Wedgewood Drive,
Hallam VIC 3803
info@wastech.com.au

Service Branch Locations

VIC

29 Technology Circuit,
Hallam VIC 3803
service@wastech.com.au

QLD

Unit 2, 50 Raubers Road,
Banyo QLD 4014
service@wastech.com.au

WA

Unit 1, 2 Trade Road,
Malaga WA 6090
service@wastech.com.au

NSW, SA, NT, TAS, ACT

1300 665 870
service@wastech.com.au



1800 465 465
www.wastech.com.au