

Bulky Household Waste Solutions

FACT SHEET

RESIDENTIAL FLAT BUILDING WASTE
COLLECTION INFRASTRUCTURE

Overview

Bulky household wastes generated by residential flat buildings typically comprise of polystyrene, cardboard boxes, large and small e-waste items and furniture. Solutions available to better manage these wastes include four-wheeled bulk bins, storage cages (on wheels or pallets) and skip bins. Equipment available for reducing the size of the waste items includes balers, compactors and mobile hot compress polystyrene machines.



Bulk Recycling Bins, North Sydney

Technical Information

- Four-wheeled bulk bins are available in steel and plastic, between 660 litres up to 1700 litres, and are typically used for bulky cardboard boxes, polystyrene and metals
- Indicative footprints (in square metres) for four-wheeled bulk bins range from 0.86 to 2.21
- Storage cages are available in steel, are available at a range of capacities and can be custom built. Cages are typically used for e-waste items
- Roll on, roll off and palletised storage cage options are available
- Skip bins are available at capacities of 1 to 6 cubic metres and are typically used furniture and large quantities of bulky household packaging waste.
- Skip bins typically need to be lifted collected by a skip-carrying lorry or crane
- Indicative footprints (in square metres) for skip bins range from 1.4 to 3.8
- Volume reduction equipment associated with bulky household wastes include balers and compactors (for cardboard and soft plastics), and include mobile options
- A range of polystyrene volume reducing equipment (e.g. hot compress units) are also available, including some mobile options
- Councils should specify bulky household waste storage requirements within their development control plans (DCPs). A minimum space of 8 square metres for every 50 units should be allowed for in building designs.

Suitable Building Types

Best suited to residential flat buildings which have sufficient maneuvering room to store bulk bins in order to facilitate the separation and collection of bulky wastes. Requires collection by heavy rigid vehicles / specialised vehicles.

Education Needs

Residential education to target:

- Increased communication between building managers / caretakers and residents to determine council pick up schedules and to maximise segregation of waste materials, including recycling
- Transfer of bulky household wastes from residential apartments to designated storage areas according to building management procedures, and not to the kerbside unless compliant with council services
- Disposal of bulky household wastes separately to chute systems / standard garbage and recycling bins

This project is a NSW EPA Waste Less, Recycle More initiative funded from the waste levy.

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Case Studies

The **Como Building in Riverwood** comprises of 4 residential tower buildings and 200 units. The waste management system, requires that residents carry their waste and recycling down to the central waste room which is attached to the car park area. The waste room is about 84 m² in size. Bulk bins and storage cages are provided for the collection of polystyrene and bulky cardboard boxes, e-waste and metals, and clothing.

A mixed-used development in **Harris Street, Ultimo**, consists of a total of 133 units as well as some retail and commercial premises. The building features collection bins and services for mobile phones, household batteries, fluorescent lights, e-waste and used clothing. Two 660 L bins are provided for e-waste and these are collected every two or three months, reducing instances of dumped waste and scavenging of e-waste from bins.



Source: Jacobs

Packaging, Clothing and E-waste Recycling

Strengths

- Provision of bulky household waste storage provides an important safeguard against residents illegally dumping bulky waste on the footpath (which is a particular problem around residential flat buildings due to the high numbers due to the high frequency of residents moving in and out)
- Facilitates the separation of bulky household wastes and recyclables for collection
- Decreases contamination of standard garbage and recycling bins with items such as e-waste
- Reduces bin storage capacity needs for standard garbage and recycling.

Weaknesses

- Requires regular monitoring by building caretakers and upfront education to ensure residents use bulk bins correctly
- Work health and safety controls must be implemented should wheeled bulk bins require transfer greater than 5 metres
- Ramps along bin transfer pathways should not exceed a gradient of 1:30
- Requires a minimum doorway width of 1.5 metres to allow for easy movement of large waste items in and out of the room.

Compliance

- Wheeled bulk bins must comply with Australian Standard *AS4123.6-2006 Mobile waste containers*
- Adequate space is required for storage of bulky household wastes and bins. A lesser space provision is likely to lead to a greater incidence of illegal dumping at the kerbside
- Bulky waste storage areas must be located close to and at the same level as the collection point for ease of access.

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