

Responsible Resource Management

Responsible

Credit: 4

Points: Nil. This is a *Minimum Expectation*.

Outcome

Operational waste and resources can be separated and recovered in a safe and efficient manner.

Criteria

There are two pathways available in this credit: a 'Performance Pathway' that relies on specialised waste management solutions, or a 'Prescriptive Pathway' that outlines specific best practice requirements.

Prescriptive Pathway: Facilities

- The building is designed for the collection of separate waste and resource streams.
- The building provides a dedicated and adequately sized waste and resource storage area.
- The building ensures safe and efficient access to waste and resource storage areas for both occupants and waste and resource collection contractors.

Performance Pathway: Specialist Plan

- A waste professional prepares and implements an Operational Waste Management Plan (OWMP) for the project in accordance with best practice approaches and this is reflected in the building's design.

Minimum Expectation

Nil

Additional information

Stage implementation

Strategy	Brief	Concept	Design	Tender	Construction	Handover	Use
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Synergies with other credits

- None

Sustainable Development Goals

- Goal 11 (Sustainable Cities and Communities)
- Goal 12 (Responsible Construction and Production)
- Goal 13 (Climate Action)

Relevant reporting initiatives

- None

Requirements

Minimum Expectation

Prescriptive Pathway: Facilities

The project must comply with **all three** of the following criteria

- Collection of Waste Streams
- Dedicated Waste Storage Area
- Sign-off by qualified waste auditor or waste specialist

OR

Performance Pathway: Specialist Plan

The project must comply with the two following criteria:

- Preparation and Implementation of Operational Waste Management Plan (OWMP)
- Prepared by qualified waste auditor or waste specialist.

Collection of Waste Streams

The building must provide bins or storage containers to building occupants to enable them to separate their waste. These bins must be labelled and easy to access, and evenly distributed throughout the building. They must also allow for separating the following as a minimum:

- General waste going to landfill
- Recycling streams to be collected by the building's waste collection service, including:
 - paper and cardboard
 - glass
 - plastic
- One additional waste stream identified by the project team. This may include collecting any of the following waste types: organics, e-waste, batteries etc.

Any other single waste stream that is expected to represent more than 5% of total annual operational waste and resources (by volume) must also be included where there is collection and processing solutions available.

Refer guidance section for further information about comingled collection.

Dedicated Waste Storage Area

A dedicated area, or areas, for the storage and collection of the applicable waste streams must be provided. The storage area must be sized to accommodate all bins or containers, for all applicable waste streams, for at least one collection cycle. The calculations used to demonstrate that the area provided is adequately sized to handle the recyclable waste streams specified must be based on:

- Forecasted waste generated by occupants
- Collection frequency for each waste stream

The calculations for waste generation rates must be based on figures outlined within third-party best practice guidelines. See *Guidance* for more information.

The storage area(s) must have efficient and safe access by collection vehicles. This includes driveway access to the building, appropriate height clearances, any onsite roads and loading docks, and the storage areas themselves providing safe and easy access for bins to be emptied into collection vehicles.

Sign-off by Waste Specialist and/or Contractor

A waste specialist and/or contractor must sign-off on the designs to confirm they are adequately sized and located for the safe and convenient storage and collection of the waste streams identified.

Preparation and Implementation of Operational Waste Management Plan (OWMP)

OWMPs can influence the amount of waste recycled and generated by occupants, tenants and visitors. For the purposes of this credit, the OWMP must be developed for implementation at the site and building level, and be applicable to the Green Star project boundary. OWMPs are usually implemented by building owners or operators.

The OWMP must be developed by a qualified waste auditor. As a minimum, the OWMP must:

- Identify the site boundary, the waste streams relevant to the project, and the individual roles responsible for delivering and reviewing the OWMP;
- Set diversion from landfill targets and/or targets for reducing total materials generation (general waste materials and recyclable/reusable materials), as well as monitoring and measurement procedures for waste and recycling streams by weight;
- Outline methods for encouraging the separation of waste streams, such as bins, storage areas, or recycling facilities in public areas as required;
- Identify storage areas for all waste streams and outline best practice safety and access requirements for their collection;
- Identify safe methods for vehicle access and transfer of waste; and
- Incorporate a review process to assess the success of the OWMP and make improvements, based on operational experience.

Prepared by Qualified Waste Auditor or Waste Specialist

A qualified waste auditor or waste specialist is defined as one of the following:

- An auditor holding Environmental Management Systems Auditor certification issued by Exemplar Global (formerly RABQSA Inc.) or
- An auditor employed by a waste management organisation, possessing a minimum of three years' experience, working in waste auditing in the built environment, with specific experience in conducting commercial audits in line with guidelines issued by council/national waste authorities; or
- A waste auditor or waste specialist, working for a consultant, building owner or contractor, possessing a minimum of three years' experience developing Operational Waste Management Plans

Submission content

Submissions for this credit must contain:

- **Submission form**
- **Evidence** to support claims made in the submission

Recommended evidence:

- Site Plan and/or architectural plans highlighting the location of relevant waste facility areas, demonstrating:
 - Collection of waste streams
 - Dedicated waste storage area
 - Access to waste storage area
 - Layout of equipment and bin storage
- Calculations used to demonstrate that the dedicated waste storage area provided is adequately sized

- Details on how the dedicated waste collection areas meet best practice guidelines, in line with third-party best practice guidelines

Alternate documentation can also be used by project teams to demonstrate compliance.

The recommended evidence listed above is applicable to the as built submission. See the *Design Assessment* section in the Introduction for more information on submitting evidence for the Design assessment.

The key requirement is that evidence is provided to support each claim made within the Submission form.

Guidance

Off-site recycling

Where recyclable waste is taken off-site to be sorted and hence equipment for the different recyclable waste streams will not be provided, the building must demonstrate that the waste will be sorted into the streams required by the credit through a contract for the waste to be removed and sorted.

Third-party best practice guidelines

The City of Sydney's Guidelines for Waste Management in New Developments is a recognised third-party best practice guideline that may be used to calculate waste generation rates and justify access arrangements. Alternative guidelines may be used provided they achieve similar or better outcomes.

Collecting waste streams – commingled recycling

Waste streams may be collected in separate bins or in the same bin where commingled recycling is available. Commingled recycling is permissible to the extent that is accepted by the waste collection service. For example, if glass and plastic are collected as commingled recycling, then paper and cardboard are still required to have a separate recycling bin or container.

Vehicle access

Project teams should consider height clearance for vehicle access and operation.

Fitout scope

Project teams may use a Tenancy Fitout Guide, Model Lease Clauses, and supply contract for bins or storage containers to demonstrate compliance for cold shell or excluded tenancy spaces. Any fitout works within the scope of the rating must meet the requirements for *Minimum Expectation*.

Definitions

General waste materials

Includes all waste streams not clearly identified as being recyclable / reusable materials and resources

Recyclable / reusable materials

Materials that can reused or be made into new products to prevent them from being sent to landfill.

Supporting information

The following resources support this credit:

- City of Sydney's Guidelines for Waste Management in New Developments, available at: https://www.cityofsydney.nsw.gov.au/_data/assets/pdf_file/0009/307269/Guidelines-for-Waste-Management-in-New-Developments.pdf