

B-cycle Container Protocols

Published 1 October 2022

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REF: B-cycle Container Protocols 20220928.docx

1. Purpose of these protocols

The B-cycle Container Protocols (the Protocols) establish minimum requirements and best practices for the design and selection of used battery collection containers, used by B-cycle accredited Participants. Aside from section 1.6, these Protocols do not apply to containers whose primary purpose is to store batteries at aggregation or processing sites, e.g., large battery storage containers.



Container risk assessment and safety is a core requirement for all container systems used by the accredited B-cycle Participants.

BSC is authorised by the ACCC and accredited by the Australian Government, and as such, has a responsibility to ensure safe practices across the collection and recycling network. This is essential for ensuring that the Scheme operates in an effective, efficient, safe, and transparent manner. BSC acknowledges that containers are owned by the accredited B-cycle Drop off point or Collector, and that BSC has no legal responsibility in their management. However, we recognise the need to provide guidance to improve safety and reduce risks.

1.1 Intent

The requirements have been established in consultation with industry, to:

- + protect the community and environment during:
 - + collection
 - + storing
 - + transport
 - + receiving used batteries
- + ensure the highest safety levels.
- + ensure the highest safety levels
- + minimise risks from incidents, such as:
 - + theft
 - + child access
 - + build-up of pressure
 - + fire and burns
 - + poisoning
 - + other emergency circumstances.

1.2 Continual improvement of container requirements

The Protocols shall be reviewed on a regular and ad hoc basis, to ensure that they remain relevant and best practice. Any changes to this document will be made in consultation with industry. BSC will provide at least 30 days' notice to impacted Accredited Participants. BSC welcomes feedback from Accredited Participants, based on changing circumstances and emerging best practice.

2. General requirements

BSC has identified general design considerations that apply to all containers. All containers used in the B-cycle network must meet the following requirements.

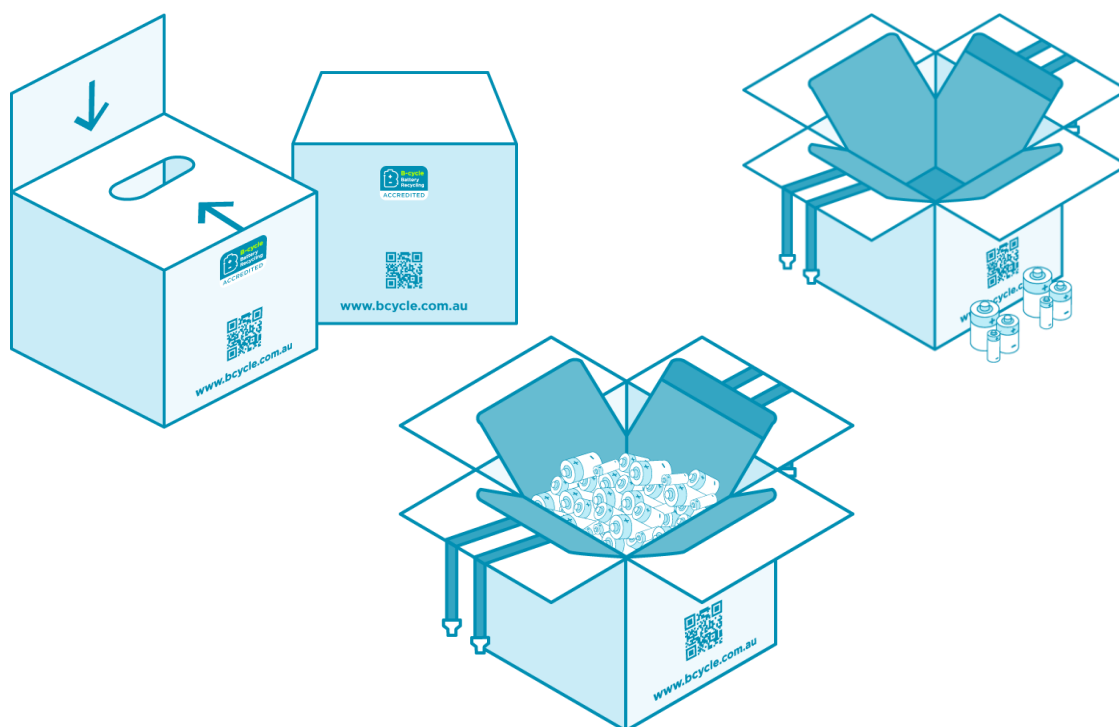
Issue	Container design requirements
Risk Assessment	<ul style="list-style-type: none"> + Container design and selection has been informed by an assessment of associated risks (such as those listed in Section 1.1).
Compliance	<ul style="list-style-type: none"> + The container has been designed to meet legal requirements for safety, transport, and quality standards.
Flame resistance	<ul style="list-style-type: none"> + The container has been designed to prevent or contain fire.
Closure	<ul style="list-style-type: none"> + To ensure safe transport, the container can be sealed or locked once it is filled, or designed to prevent: <ul style="list-style-type: none"> + the removal of batteries + child or animal access + or theft.
Labelling	<ul style="list-style-type: none"> + If designed for storage only, the container includes required labels, to ensure that auditors or regulators can confirm its contents and accumulation start date. If designed for transport, the container has been designed to allow for required labels in accordance with all Australian Dangerous Goods (ADG) requirements.
B-cycle branding	<ul style="list-style-type: none"> + The container visibly displays: <ul style="list-style-type: none"> + a B-cycle logo in accordance with the B-cycle Style Guide + BSC website: www.bcycle.com + QR Code (optional).
Safety messaging	<ul style="list-style-type: none"> + Safety instructional messaging is encouraged as best practice e.g., taping batteries to prevent short circuit and contact details for the poison's hotline. + For containers designed for button cell batteries, safety messaging to communicate the importance of taping of button cell batteries to prevent swallowing or risk of ingestion.

Please contact BSC if you have questions or would like assistance in designing appropriate labelling, branding or safety messaging.

3.Container-specific requirements

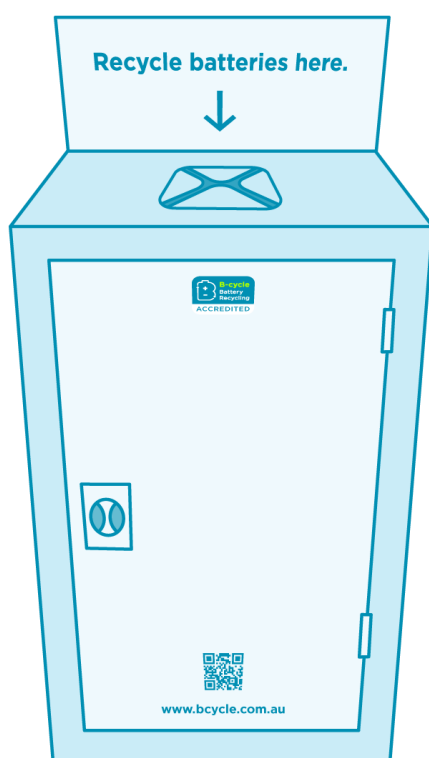
3.1 Small containers for private collection or post-back, with capacity under 15 kg

Issue	Container design requirements
General requirements	+ Meet all general requirements above.
Chain of custody	+ Ensure a chain of custody for post-back, including tracking and verification to meet evidentiary requirements e.g., the collection container must be labelled with the customer's name and contact details.
Security	+ Ensure secure transport for tracking and safety purposes. Containers are to be sealed and signed for at the time of pick-up.



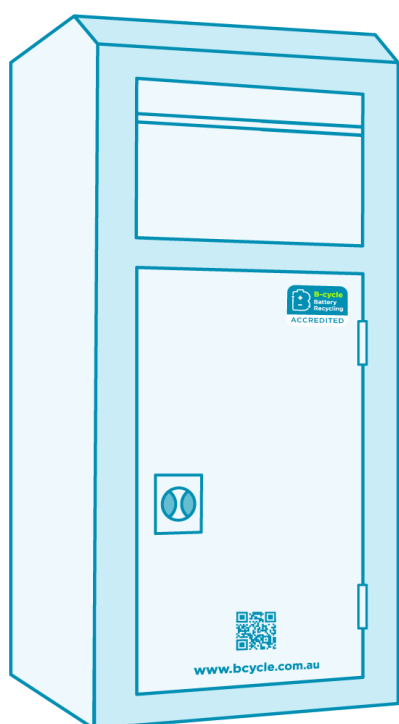
3.2 Public collection containers (e.g. retail) with capacity of 15-30 kg

Issue	Container design requirements
General requirements	+ Meet all general requirements above.
Security	+ Prevent access to collected batteries (e.g., by using a one-way valve or tamper-proof closure).
Public safety	+ Containers are designed to prevent pressure build-up and ensure secure movement during transport (e.g., container is sealable once full).
Best Practice	+ Container monitors heat, weight, or both.



3.3 Large containers (e.g., for use in transfer situations) with capacity over 30 kgs

Issue	Container design requirements
General requirements	<ul style="list-style-type: none"> + Meet all general requirements above.
Safety & risk reduction	<ul style="list-style-type: none"> + Containers are designed to: <ul style="list-style-type: none"> + prevent pressure build-up and allow for ventilation (e.g., perforated or ventilated lid) + ensure materials do not contribute to fire feedstock + ensure secure movement and reduced spill risk during transport (e.g., a sealable container).
Best practice	<ul style="list-style-type: none"> + Place on a pallet for manoeuvrability. + Do not store next to hazardous or flammable materials. + Container has a double-wall construction or insulated panels.



3.4 Other containers (e.g., aggregation points, transport, storage)

Issue	Container design requirements
General requirements	<ul style="list-style-type: none"> + Meet all general requirements above.
Safety & risk reduction	<ul style="list-style-type: none"> + Containers are designed to: <ul style="list-style-type: none"> + prevent pressure build-up and allow for ventilation (e.g., perforated or ventilated lid) + ensure materials do not contribute to fire feedstock + ensure secure movement and reduced spill risk during transport (e.g., a sealable container).
Best practice	<ul style="list-style-type: none"> + Container has a double-wall construction or insulated panels.



4. Container maintenance and handling

In addition to ensuring that container infrastructure meets the highest health, safety, and environmental standards, it is equally important to maintain containers and collection locations.

B-cycle Collectors must establish documented procedures and/or service agreements to ensure that B-cycle Drop off points are properly serviced.

At a minimum, this requires that bins are:

- + kept in good condition
- + do not have damage or defects that may have the potential to cause harm to the community, users or the environment
- + regular servicing to prevent overflowing batteries and ensure that containers remain fit for purpose and appropriate.

5. Container location on-site

5.1 With evidence of chain of custody

Information regarding placement and location of B-cycle at Drop off points, including guidance on how to safely maintain containers is found in the Drop off Points Code of Practice.

6. Appendix 1

6.1 Packaging standards for reclosable and non-closable packaging

It is recommended that smaller containers consider the standards for reclosable and non-closable packaging. These will further guide design briefs and ensure the highest levels of community safety.

Table 1: Industry standards with acceptable child resistant packaging compliance testing requirements.

Standards applicable for reclosable and non-reclosable packaging	Applicable clauses
1. AS 5808-2009 Child-resistant packaging—Requirements and testing procedures for non-reclosable packages for non-pharmaceutical products.	Clause 3.2.1
2. EN 862:2016 Packaging—Child resistant packing—Requirements and testing procedures for non-reclosable packages for non-pharmaceutical products.	Clause 3.2.1
3. ISO 28862:2018 Packaging—Child-resistant packaging—Requirements and testing procedures for non-reclosable packages for non-pharmaceutical products.	Clause 4.2.1
4. AS 1928-2007 Child-resistant packaging—Requirements and testing procedures for reclosable packages.	Clause 4.3.1
5. ISO 8317-2015 Child-resistant packaging—Requirements and testing procedures for reclosable packages.	Clause 3.3.1
6. USA: 16 CFR §1700 Poison Prevention Packaging Standard.	paragraphs 1700.15(a) and (b) (1) and section 1700.20.