Environmental Protection (Prohibited Plastics and Balloons) Regulations 2018

Guidance on the expanded plastic packaging ban

Purpose

This document provides guidance for manufacturers, distributors, retailers and wholesalers considering the use of expanded plastic packaging, including for fragile and precision products.

It provides guidance about how the Department of Water and Environmental Regulation (the department) will administer the expanded plastic packaging ban under the Environmental Protection (Prohibited Plastics and Balloons) Regulations 2018.

Background

Regulation 17F outlines the ban on expanded plastic packaging and its exceptions, which include packaging for fragile and precision products:

17F. Offence to supply prescribed expanded plastic packaging

(1) A person must not, in the course of conducting a business or undertaking, supply prescribed expanded plastic packaging. Penalty for this subregulation: a fine of $5,000.

(2) Subregulation (1) does not apply to the supply of prescribed expanded plastic packaging if:

(a) the packaging is used to protect an item that is designed to be used for medical or scientific purposes

(b) in the case of moulded packaging – the packaging is used to protect an item that –

(i) weighs 45 kg or more

(ii) has been identified by the manufacturer as being fragile and requiring protective packaging that complies with a standard specified by the manufacturer.

Under Part 1 (3BB) of the Regulations, expanded plastic packaging is defined as follows:

(1) Prescribed expanded plastic packaging means any of the following made wholly or partly from expanded plastic:

(a) loose-fill or void-fill packaging

(b) packaging for a pre-packaged food or drink product other than a non-perishable pre-packaged food product

(c) packaging (moulded packaging) that is moulded to protect a specific item.

(2) Prescribed expanded plastic packaging includes packaging referred to in subregulation (1) that is made wholly or partly from expanded plastic that is biodegradable plastic.

(3) Despite subregulations (1) and (2), prescribed expanded plastic packaging does not include the following:

(a) packaging that is a degradable plastic item

(b) a reusable cooler box

(c) a lid for a reusable cooler box.

Note: From 1 September 2023, a ban applies to the supply of degradable plastic items. This includes expanded plastic packaging that is degradable, i.e. any expanded plastic packaging that contains additives designed to increase the rate of fragmentation.

About the ban

The ban aligns with the direction of the Australian Packaging Covenant Organisation (APCO) moulded expanded polystyrene (EPS) phase-out roadmap (EPS roadmap) while also capturing other expanded plastics. APCO also acknowledges in its EPS roadmap that "expanded polyethylene (EPE) and expanded polypropylene (EPP) are not acceptable as they are even more problematic to recycle than EPS".

Banned from 1 July 2025

From 1 July 2025, the ban applies to moulded or cut expanded plastic packaging in all forms. This includes, but is not limited to EPS, EPE, EPP and ethylene-vinyl acetate (EVA). Only packaged products with a manufacturing date of 1 March 2025 or later will need to comply.

Note: The date of manufacture deadline has been extended to support regulatory transition. Products manufactured after 1 March 2025 will be required to comply with the 1 July 2025 ban commencement unless they are exempt through other means as detailed below.

The ban does **not** apply to:

- flexible foamed plastic wraps and sleeves
- packaging for fragile and precision products
- packaging for products weighing more than 45 kg (excluding the packaging weight)*
- packaging for products where the packaging is a permanent part of the product's carry case or kit
- packaging for a previously purchased product in transit for repair
- 'foam boxes' for fresh produce and bulk cold home or from store-delivered meal services where there is an opportunity for retailer collection and reuse
- packaging retained by a business after the installation of consumer goods by a professional installer
- specialist packaging for medical applications (e.g. organ transport or pharmaceuticals)
- moulded expanded plastic packaging used to repackage repaired goods supplied before the enforcement date
- packaging for the building and construction industry
- packaged products manufactured before 1 March 2025

- packaging sent between businesses as detailed below.

* This exception includes products where the standard base model is over 45 kg, but consumer selection may remove some aesthetic elements that reduce the total product weight below 45 kg, or where there is a shared packaging solution with a lighter weight model.

Business-to-business (B2B) exclusion

The ban only applies to business-to-consumer (B2C) expanded plastic packaging. A business can be considered a consumer when receiving the packaged goods as a consumer for its use. Exceptions are outlined below.

The APCO EPS roadmap defines B2B packaging as:

> Packaging used for the containment, protection, or handling of a product where the end-customer, **prior to the packaging reaching end-of-life**, is a business or institution.

Some businesses may supply the same packaged products for retail purchase to the public as well as for use in workplaces. This would be considered a B2C product. In these instances, an exception to the ban exists if the product is installed by a professional installer, and the moulded expanded plastic packaging is retained by this installer or is retained and disposed of as part of construction or set-up activity.

To support the use of this exception, businesses are encouraged to indicate to installers or product users the appropriate way to handle and dispose of product packaging and whether it should be commonly retained by the installer or business.

Identifying fragile and precision products

Expanded plastic packaging may be used to protect items that the manufacturer has identified as fragile or precision products that require protective packaging that comply with a standard specified by the manufacturer.

The manufacturer does not need to seek an exemption to operate under this provision. The WA supplier or retailer needs to identify basic details on any product packaging that uses expanded plastic, stating its fragility claim, the test type and a contact for the product packaging. If expanded plastic is used, the department expects the manufacturer to be able to provide documentation that demonstrates:

- a decision has been made that the product could be functionally damaged in transit and/or present a safety risk[1] without expanded plastic protective packaging
- the standard of protection that needs to be met, such as Australian Standard transport tests (drop tests, vibration tests or rough handling tests), International Safe Transit Association (ISTA) tests for packaged products, international standard packaging performance tests, or brand owner tests

[1] This includes where expanded plastic may be required for the transport of a dangerous good, in accordance with the Australian Dangerous Goods Code.

- that alternatives to expanded plastic packaging have been explored; if at least two compliant packaging alternatives (e.g. moulded cardboard, hybrid card and air pillows) fail to provide the standard of protection (determined above), this would be sufficient evidence that expanded plastic packaging is required.

Note: Product information obtained when undertaking compliance procedures will always be treated confidentially.

In addition, there are some product types which are identified as fragile due to the nature of their weight and precision equipment. These are listed in Appendix 1. This list will be reviewed as EP-free packaging options increase.

Note: When testing alternative packaging, consider the alternative designs and materials that can be introduced in existing manufacturing processes and transport logistics. For some items, viability of alternative packaging may require further innovation, research and volume prior to becoming comparable to existing process efficiency in an automated factory. Please contact the department to discuss your processes and arrangements.

Hybrid packaging with reduced single-use plastic content is considered the next best approach. However, this is not mandated through regulation.

The State Government will continue to be guided by APCO's work on EPS packaging. In line with WA's waste hierarchy (as outlined in the *Waste Avoidance and Resource Recovery Strategy 2030*), the ban aims to encourage the avoidance and minimisation of expanded plastic packaging. It also supports the use of alternatives such as durable (plastic or other) packaging designed for reuse and packaging that is certified compostable or readily recyclable.

Evidence of compliance for fragile and precision products

Where expanded plastic is deemed necessary for the packaging of a product, retailers, suppliers and distributors are encouraged to seek written confirmation and relevant documentation from manufacturers. Retailers should seek and retain such documentation from 1 July 2025. In keeping with APCO's product stewardship, evidence should also be available on request to identify a means of collection recovery for the consumer.

Fragility testing of alternatives is not intended to be duplicated or repeated for different models or like products. Like-for-like fragility evidence can be used where there is similarity between the design and construction of products. For example, testing for one type of appliance (e.g. a rangehood) would not need to be repeated for all model types. For further information, see Appendix 2, and for information regarding potential exemptions, please contact the department.

Packaging alternatives

To identify options for packaging redesign and suitable alternatives to expanded plastics, more information is available in the following documents:

- Stage 2 ban - Plan for Plastics - Expanded plastic moulded packaging fact sheet
- APCO EPS roadmap (specifically view the checklist and case studies of alternatives)
- WA Plan for Plastics single-use plastic bans 2022–25: Comprehensive guide for business.

Appendix 1: Product types permitted to use non-compliant packaging under a general application of the regulatory exemption for fragile products

- Refrigeration equipment with pre-charged refrigerants
- Air-conditioners with pre-charged refrigerants
- Large mirrors and vases
- Bespoke or one-off sculptural glass and art applications
- Heavier weight electronic appliances as per the class exemption SUP0002/24/1
- Goods manufactured prior to the class exemption expiry on 30 June 2026, and operating under that notice, remained eligible to use expanded plastic packaging.

Note: These classes of products are permitted to use expanded plastic packaging under regulatory exemption for fragile products or the class exemption for heavy electronic goods; hence, the 1 March 2025 manufacturing date does not apply.

Appendix 2: Preparing evidence to demonstrate product fragility

Guidance to support assessment of packaged products and whether they can be identified as fragile, including common examples of evidence to demonstrate outcomes.

Is your product 'fragile' in relation to the expanded plastic regulations?

- If your equipment is within a category listed in Appendix 1 of the expanded plastic guideline it is considered fragile, and no fragility testing is required of the manufacturer.
- If your product needs substantial packaging protection for safe transport and arrival at the end-consumer, and either of the below criteria are met – then no further testing is required:
    - transport testing of viable alternative product packaging has failed to adequately protect the product, and/or
    - alternative effective packaging designs are not viable due to significant changes being required to existing packaging infrastructure or transport logistics.

What does 'viable' mean when you are testing, or considering compliant alternative packaging?

Viable alternative packaging is packaging that is not made with expanded plastic and can be designed, manufactured and shipped with existing manufacturing infrastructure and transport logistics, without significant changes such as a doubling of weight or volume.

Types of evidence for a fragility exemption

How should I test for fragility?

Select alternative ban-compliant packaging materials (e.g. moulded fibre, cardboard, pocketed air, wool) and develop designs that meet your product's packaging needs and align with your manufacturing capabilities and transport logistics. Assess the costs of packaging designs and build pilot packaging that is identified as viable. (If none are deemed viable, prepare evidence for the design concept relating to this non-viability claim. Re-analysis of this claim will be expected every five (5) years. See further details in next section on evidence to retain.)

Select one or more safe-transit packaging tests to evaluate the protective performance of the packaged-product encountering normal stresses in the supply chain. These tests could be partial or general simulation tests, or a real-world test that demonstrates the performance of the packaging product under typical shipping hazards like vibration, rough handling or atmospheric conditions such as those outlined by Test Procedures - International Safe Transit Association (ISTA). Selecting appropriate test methods are at the discretion of the packaging or product manufacturer. They can be undertaken by independent or external laboratories or be completed by the manufacturer or supplier.

Consider testing of a representative lighter product model (RLPM) that can determine if similar but heavier models are too fragile for non-EPP packaging. These RLPM results can provide evidence that heavier or more complex models would not require additional testing. For example, conduct two tests on a packaged lightweight television model, and do not repeat for heavier models unless they are functionally unique, use different materials, and would be expected to pass the same test.

What records should I retain regarding fragile products?

The best way to retain records is to collate a fragility test report. The report would be expected to contain:

- Product brand, model details and any like models that this product test evidence applies.
- A listing of the packaging tests undertaken (see examples below) or description of the method to determine packaging feasibility.
- Description of the alternative packaging materials and design being tested.
- Where applicable, for each test:
    - photographs of the packaged product prior undergoing testing
    - analysis of the protective performance of the packaged product under test, with photographic evidence of packaging performance.
- Where applicable, for each design concept:
    - design description and illustration
    - pre-screening transport test, where applicable
    - analysis to demonstrate non-viability claim.

Evidence of fragility testing could include using a combination of two of the following test types/reports:

- drop test indicating evidence of product damage
- rough handling test
- vibration test
- temperature test
- alternative packaging design concept details with analysis of transport logistic impacts
- comparison of the weight, volume or other dimensional differences between expanded plastic packaging design and non-EPP packaging types and analysis of impacts on supply chain.

Note 1: One test type with two alternative packaging options is acceptable.

Note 2: Superficial damage to a product may be prevented using thin flexible foam wraps or sleeves which are not captured by the Regulations These thin flexible foam wraps are specifically permitted for use to prevent scuffing and scratching of product surfaces from vibrations during transit and to work in combination with compliant fibre alternatives, not replace them.

The department recommends that at least two packaging options are trialled. This would be considered best practice to ensure that you are able to demonstrate that you have adequately considered compliant packaging alternatives.

Retain results and any relevant documentation for the product and its packaging to form the basis for evidence and this can also be noted on the packaging or product manual. The department can review test results or other evidence and confirm suitability or guide corrections. The Regulations do not require this review and provide some flexibility to allow brand owners to consider appropriate tests and packaging options for their products that protect the environment and meet circular economy goals.

We encourage you to continue to review options that move away from difficult-to-manage fragmentable expanded plastic. Whenever expanded plastic is used, please consider methods (such as collection and processing) that reduce the risk of this material being released to the environment.

FAQs

If your product is fragile (as identified in Appendix 1 or through fragility testing), do you need to apply to the Department for an exemption?

No, a formal application is not required. Simply prepare evidence and make available along the supply chain to the retailer for any compliance checks. You may ask the Department to review your evidence.

Who in the supply chain will provide evidence of tested packaging to satisfy a fragility claim?

Evidence can be developed by a manufacturer, supplier, or retailer. The evidence of fragility should be provided to all involved in the supply chain to avoid duplicate testing and can be noted on the packaging or product manual.