

English Version

**Postal services - Packaging for boxable items -  
Characteristics for packaging of small and light weight  
items to be delivered into the consumer's letterbox**

Services postaux - Emballage pour la livraison de colis  
dans la boîte aux lettres - Caractéristiques d'emballage  
pour les marchandises petites et légères, destinées à  
être livrées dans les boîtes aux lettres des destinataires

Postalische Dienstleistungen - Verpackungen für  
briefkastenfähige Sendungen - Eigenschaften von  
Verpackungen für kleine und leichte Waren, die in den  
Briefkasten des Verbrauchers zugestellt werden

This Technical Specification (CEN/TS) was approved by CEN on 14 September 2020 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## European foreword

This document (CEN/TS 17523:2020) has been prepared by Technical Committee CEN/TC 331 “Postal services”, the secretariat of which is held by NEN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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## Introduction

Ecommerce led to raising volumes of commercial postal items. Postal items containing documents are letters, whereas postal items containing goods are parcels or small packets.

This document refers to EN 13724 “Postal services - Apertures of private letter boxes and letter plates - Requirements and test methods” and furthermore takes in consideration that there still are millions of consumer’s letterboxes with a smaller aperture than defined in EN 13724.

This document addresses Ecommerce related delivery needs and challenges. It serves as a guidance for large, medium and small online merchants, benefiting in sending small and light weight items as boxable postal items to the consumer’s letterbox, using existing letter mail networks, with the advantage a successful first delivery attempt:

- reducing packaging material;
- stacking the packages;
- supporting advanced automation for packaging.

International postal statistics show that some 80 % of addressed parcels generated by Ecommerce today weight less than two kilograms. The most common weight category with 31 % is 200 g to 500 g. The value of some 39 % is below 25 €. The majority of households (68 %) prefer to have the goods delivered to their homes.

The top six product categories bought cross-border in 2018 were clothing (31 %), consumer electronics (21 %), health and beauty (17 %), jewellery and watches (11 %), books, music and media (10 %) and sport and leisure (10 %).

Consumers are frustrated by failed delivery messages such as “sorry we missed you” messages. Even more frustrating is it when the parcel contains something that could easily have been popped through the private letterbox if it had been appropriately packed.

The key players in the Ecommerce supply chain are e-retailers (incl. manufacturers), postal companies and consumers.

Concerning their parcel volumes, e-retailers can be clustered in 4 groups:

- global e-retailers;
- regional e-retailers;
- small e-retailers;
- consumers, who ship goods privately sold.

E-retailers pack each consignment to meet the needs of the product and of the postal delivery logistics. In order to speed up and ease the workflow, e-retailers try to standardize their “ideal” packaging allowing protective, cheap and easy packaging and enabling returns. Unfortunately, such company specific solutions too often result in “over-packaging” and “void space”, causing waste of valuable resources.

E-retailers who manage right-size packaging of postal items see substantial cuts in their own cost by reducing both operational and shipping costs, saving storage space, cutting labour cost and order administration, and significantly cutting assembly and packing times. Standardized packaging for postal return services is of strategic importance to the Ecommerce market.

A survey in 2017 revealed that 25,6 % of consumers received items delivered in boxes or parcels that were far too large. 15 % of the boxes or parcels used too much packaging. 22,8 % of consumers expressed frustration at receiving items in packaging that had become ripped or damaged during transit, risking damage to or loss of the contents of the parcel. Twenty % of packaging was not a good fit for the product. 7 % of consumers stated that products arrived damaged as a result of inappropriate packaging. 19,8 % felt that the packaging was insufficient to protect the content, risking damage.

The postal operators act in a delivery market which has become particularly vibrant: consumers are demanding low cost and fast delivery, e-retail giants are wielding greater market power, and global integrators are muscling in on B2C delivery. Leveraging trusted brands, strong expertise and nationwide networks, postal operators are looking to grow their share of both domestic and cross-border markets. There is a continuous annual two digits increase of the number of parcels and a parallel increase of the number of private receivers. Main issues for the postal operators are the quality and number of drivers, the problems with deliveries into pedestrian zones during limited hours, double-delivery because of the consumer's absence and void-space.

"Letterboxable" packaging of postal items fulfils market needs:

- the letterboxable postal items will fit through a customer's letterbox;
- first time delivery means less cost for the post and fewer emissions as there are no second or third delivery attempts, no need for customers to collect parcels from postal outlets, courier depots or parcel shops, leading to less impact on the environment;
- the possibility of stacking parcels reduces the space needed in warehouses and delivery vans and thus can improve the workflow at e-retailers and posts;
- standards make it easier for automation, as manufactures adapt their solutions to a larger base of standardized item dimensions;
- the reduction of packaging material and the use of environmentally friendly packaging materials reduce the effect of CO<sub>2</sub> in the atmosphere.

This document is in line with the legal European framework for packaging and packaging waste which is designed to prevent the production of packaging waste and promote the reuse, recycling and other forms of recovering of packaging waste, instead of its final disposal, thus contributing to the transition towards a circular economy:

- waste management in the European Union should be improved, with a view to protecting, preserving and improving the quality of the environment, protecting human health, ensuring prudent efficient and rational utilization of natural resources, promoting the principles of the circular economy, enhancing the use of renewable energy, increasing energy efficiency, reducing the dependence of the Union on imported resources, providing new economic opportunities and contributing to long-term competitiveness. The more efficient use of resources would also bring substantial net savings for Union businesses, public authorities and consumers, while reducing total annual greenhouse gas emissions;
- as the amount and type of packaging used generally depends on choices made by the producer rather than the consumer, extended producer responsibility schemes should be established.

The letterbox standard EN 13724 was defined in connection with the envelope category "C". This is a local German standard [DIN 678-1:1998-1 Envelopes – Part 1: Sizes] but the main size category in Europe for large format envelopes.

## 1 Scope

This document covers physical properties and characteristics for the packaging for small and light weight postal items to be delivered into the consumer's letterbox. It covers the main design features for the packaging of letterboxable postal items, notably the sizes and stacking as well as postal and environmental requirements.

This document is targeted to e-retailers and postal operators.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13724, *Postal services — Apertures of private letter boxes and letter plates — Requirements and test methods*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1 boxable postal items

postal items which can be delivered into a consumer's letter box, either EN 13724 compliant or with smaller aperture

### 3.2 consumer's letterbox

receptacle into which mail is delivered at the domicile of the addressee

### 3.3 Ecommerce

activity of buying or selling of products on online services or over the internet

### 3.4 e-retailers

retailers who sell or buy on online services or over the internet

### 3.5 kraft paper

paper or paperboard (cardboard) produced from chemical pulp in the kraft process

Note 1 to entry: Pulp produced by the kraft process is stronger than that made by other pulping processes.

### 3.6 over-packaging

situation where the size of the packaging is a multiple of the products size, leading to too much material used for packaging