

# **SLOVENSKI STANDARD**

## **SIST-TS CEN/TS 16819:2016**

**01-januar-2016**

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### **Poštne storitve - Škatle za pakete za končno uporabo - Tehnične značilnosti**

Postal services - Parcel boxes for end use - Technical features

Postalische Dienstleistungen - Paketboxen für den Endverbrauch - Technische Merkmale

Services postaux - Boîtes à colis pour utilisation finale - Caractéristiques techniques

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**Ta slovenski standard je istoveten z: CEN/TS 16819:2015**

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#### **ICS:**

03.240	Poštne storitve	Postal services
55.160	Zaboji. Škatle. Plastični zaboji	Cases. Boxes. Crates

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TECHNICAL SPECIFICATION  
SPÉCIFICATION TECHNIQUE  
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**CEN/TS 16819**

October 2015

ICS 03.240

English Version

**Postal services - Parcel boxes for end use - Technical features**

Services postaux - Boîtes à colis pour utilisation finale -  
Caractéristiques techniques

Postalische Dienstleistungen - Paketboxen für den  
Endverbrauch - Technische Merkmale

This Technical Specification (CEN/TS) was approved by CEN on 26 June 2015 for provisional application.

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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 16819:2015) has been prepared by Technical Committee CEN/TC 331 “Postal services”, the secretariat of which is held by NEN.

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## 1 Scope

This Technical Specification describes the technical features of parcel boxes for end use. This covers technical features such as size of parcels, ergonomics and safety, corrosion and water penetration resistance and security of delivery.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1670, *Building hardware - Corrosion resistance - Requirements and test methods*

EN 13724:2013, *Postal services - Apertures of private letter boxes and letter plates - Requirements and test methods*

EN 60529, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13724:2013 and the following apply.

### 3.1

#### **parcel box**

receptacle intended to receive parcel delivered by postal and/or parcel operators

### 3.2

#### **parcel box components**

all parts supplied by the manufacturer of the parcel boxes

### 3.3

#### **access door**

opening through which a parcel is delivered

### 3.4

#### **casing**

enclosure receiving the parcels delivered excluding the box door

### 3.5

#### **door**

generally flat, whose purpose is to cover and/or seal an opening

Note 1 to entry: Doors can open inwards or outwards.

### 3.6

#### **parcel**

packed item with name and address of the recipient to be delivered by a postal and/or parcel operator

### 3.7

#### **parcel reception area**

complete area inside a parcel box where a parcel of the size XS can be placed

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**3.8****gauge parcel**

parcel used to test the clear delivery of parcels

**3.9****lock mechanism**

locking device which is operated mechanically, electronically or by other means

**3.10****delivery floor level**

floor level on the delivery side of the parcel box

**3.11****receiving floor level**

floor level on the receiving side of the parcel box

**3.12****theft prevention**

protection against the theft of parcels

**4 Classification, designation and coding****4.1 Parcel box types**

- iTeh STANDARD PREVIEW**  
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- a) Parcel box, dedicated to one receiver – limited to one delivery at the same time.
- b) Parcel box, dedicated to one receiver –not limited to one delivery at the same time.
- c) Parcel box, shared by several receivers – limited to one delivery at the same time.
- d) Parcel box, shared by several receivers – not limited to one delivery at the same time.

**4.2 Parcel sizes**

Eight parcel sizes are identified. The dimensions correspond to the maximum parcel sizes. Dimensions are given in Annex A.

The manufacturer shall supply information with the box which parcel sizes fit inside the box.

**4.3 Corrosion resistance**

Three grades of corrosion are identified according to EN 1670:

- a) Corrosion grade 0;
- b) Corrosion grade 3;
- c) Corrosion grade 4.

**4.4 Security**

Six grades of security are identified (see 5.6.2):

- a) Security grade 1;
- b) Security grade 2;



- c) Security grade 3;
- d) Security grade 4;
- e) Security grade 5;
- f) Security grade 6.

## 5 Requirements

### 5.1 General requirements

The test methods that shall be used to meet these requirements are described in Clause 6.

All items shall be installed in accordance with the manufacturer's fixing instructions as supplied with the product.

### 5.2 Components

Fixing instructions shall be supplied with each individual product enabling the correct installation in accordance with this Technical Specification.

### 5.3 Dimensions

#### 5.3.1 Parcel box dimensions

The parcel box shall allow parcels of the maximum sizes described in Annex A to fit inside the box.

Eight parcel sizes are identified. Maximum dimensions of each parcel are given in Annex A.

#### 5.3.2 Gauge parcel

It shall be possible to push gauge parcels through the opening door without damaging it. It shall be possible to empty gauge parcels from a parcel box without damaging it.

The gauge parcels shall have the dimensions described in Annex A and shall be made of inflexible material, with a tolerance of  ${}^0_{-3}$  mm.

### 5.4 Ergonomics and safety

#### 5.4.1 Installation height of the box and lock

##### 5.4.1.1 General

The installation height of the box and lock shall form part of the installation instruction. Failure to comply with the installation requirements shall result in non-conformity with this Technical Specification.

##### 5.4.1.2 Parcel box (informative)

See Annex B for details.

##### 5.4.1.3 Opening device

If more than 4 parcel boxes are fitted together, 30 % of them shall have their opening device (e.g. lock, door handle) at a height between 900 mm and 1 300 mm.

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If there is a need the parcel boxes with their opening device (e.g. lock, door handle) at a height between 900 mm and 1 300 mm shall be used by handicapped people. A handicapped people symbol, see Figure 1, can be put on these boxes.

Depending on the features of the locking mechanism the parcel box shall fulfil one of the three equivalent requirements.



**Figure 1 —Handicapped people symbol**

This information shall be included in the installation instructions.

#### 5.4.2 Safety

##### 5.4.2.1 Protection against injury

All components that will be reached when normally inserting or removing a parcel shall not have sharp edges.

##### 5.4.2.2 Child protection

Parcel boxes for parcels of size XL or larger shall not be airtight and shall also fulfil the following child protection requirements. All holes and openings that allow the air to pass through shall not create other problems like finger entrapment.

Depending on the features of the locking mechanism, the manufacturer shall fulfil one of the following requirements:

- 1) Locking of the door without additional manual operation from the outside

Parcel boxes shall be equipped with an emergency opening to ensure that the door can be opened from the inside in any locking condition. It shall be possible to open the door from the inside using a force of no more than 8 N. This can be realized by a handle, push button or other solutions which ensures opening from the inside. Such controlled processes could be executed by children from a certain age. Therefore, children up to an age of 3 years are exempted from this requirement. A warning for parents shall be added on a label inside the parcel box and in the documentation: *WARNING FOR PARENTS! Risk of entrapment and suffocation, do not let your children play with the parcel box.*

There should be means to ensure that the opening mechanism is not in complete darkness, e.g. by a light source or a light-transmissive aperture which lets pass as much light as an opening of min. 7 cm<sup>2</sup>.

Air supply to survive inside the box shall be ensured. A total cross section area, e.g. gaps or round holes to the outside of 10 cm<sup>2</sup> shall be provided. It shall be ensured that the air supply is sufficient in any possible assembly the manufacturer shows in his assembly instructions.

The smallest dimension of the cross section area shall not be smaller than 1 mm in order not to avoid the automatic air exchange by convection.

A warning for parents shall be added on a label inside the parcel box and in the documentation: *WARNING FOR PARENTS! Risk of entrapment and suffocation, do not let your children play with the parcel box.*

The following warning shall be added on a label outside the parcel box and in the documentation if the parcel box opens to the front: *WARNING! Do not leave anything in front of the door!*

The following warning shall be added on a label outside the parcel box and in the documentation if the parcel box opens from above: *WARNING! Do not leave anything on top of the parcel box!*

## 2) Locking of the door only with an additional operation

When closing the door, blocking of it shall only be possible with an additional manual operation from the outside of the parcel box.

## 3) Others

A system which prevents by design a child from being locked in a parcel box. This shall be fulfilled even if the door is left open after operation.

### 5.4.3 Fire protection regulations

The component materials and the location and/or installation of parcel boxes within any building shall be in accordance with the requirements for fire protection in staircases and access routes provided for rescue operations as laid down in the relevant planning laws and building regulations.

NOTE It is advisable to refer to national legal and administrative regulations.

## 5.5 Corrosion and water penetration

### 5.5.1 General

Corrosion resistance shall be in accordance with EN 1670.

### 5.5.2 Water penetration

Requirement regarding resistance to water penetration shall be in accordance with 5.6.2 of EN 13724:2013 or IPX3 as described in EN 60529. The manufacturer can choose the test he prefers.

## 5.6 Security

### 5.6.1 Security requirements

The requirements in this clause are intended to make the theft of parcels more difficult.

### 5.6.2 Security door and locks

Components shall have adequate strength to resist mechanical forces in accordance with security grade:

- a) Grade 1 shall resist a force of 150 N;
- b) Grade 2 shall resist a force of 220 N;
- c) Grade 3 shall resist a force of 300 N;