



**SLOVENSKI STANDARD**  
**oSIST prEN 1888-1:2017**  
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**Izdelki za otroke - Otroški vozički - 1. del: Športni in globoki vozički**

Child care articles - Wheeled child conveyances - Part 1: Pushchairs and pram body

Artikel für Säuglinge und Kleinkinder - Transportmittel auf Rädern für Kinder - Teil 1: Kinderwagen und Kinderwagenaufsätze

Articles de puériculture - Voitures d'enfant - Partie 1 : Poussettes et landaus

**Ta slovenski standard je istoveten z: prEN 1888-1**

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NORME EUROPÉENNE  
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## Child use and care articles - Wheeled child conveyances - Part 1: Pushchairs and prams

Articles de puériculture - Voitures d'enfant - Partie 1 :  
Poussettes et landaus

Artikel für Säuglinge und Kleinkinder - Transportmittel  
auf Rädern für Kinder - Teil 1: Kinderwagen und  
Kinderwagenaufsätze

This draft European Standard is submitted to CEN members for second enquiry. It has been drawn up by the Technical Committee CEN/TC 252.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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## European foreword

This document (prEN 1888-1:2016) has been prepared by Technical Committee CEN/TC 252 “Child use and care articles”, the secretariat of which is held by AFNOR.

This document is currently submitted to the second CEN Enquiry.

This document will supersede EN 1888:2012.

In November 2014 the European Working Group decided to split EN 1888 standard into different parts to clearly treat in a different way, new products or new functions of wheeled child conveyances.

prEN 1888 is currently composed with the following parts:

- prEN 1888-1, *Child care articles — Wheeled child conveyances— Part 1: Pushchairs and prams*;
- prEN 1888-2, *Child use and care articles— Wheeled child conveyances— Part 2: Pushchairs for heavier children*;
- prEN 1888-3, *Child use and care articles— Wheeled child conveyances— Part 3: Pushchairs intended for sport activities*; and
- prEN 1888-4, *Child use and care articles— Wheeled child conveyances— Part 4: Platforms, seats, benches and other similar items attached to pushchairs*.

EN 1888 therefore becomes EN 1888-1 and is only applicable to *pushchairs* and *prams*. It will be used as a reference in future parts.

In comparison with this EN 1888:2012, the significant technical changes relate to the following issues:

- a) chemical hazards;
- b) hazards from moving parts;
- c) entanglement hazards;
- d) stability of the vehicle;
- e) introduction of a normative annex giving relevant translations for warning sentences;
- f) introduction of an informative annex giving information on the assessment of moving parts of canopies
- g) introduction of an informative Annex G giving information on the arrangement of approval marks for car seats.

## 1 Scope

This European Standard specifies the safety requirements and test methods for *pushchairs and prams*, designed for the carriage of one or more children, up to 15 kg each and additional 20 kg on any integrated platform on which a child can stand.

This European Standard does not cover toys, baby carriers fitted with wheels; *pushchairs and prams* propelled by a motor and *pushchairs and prams* designed for children with special needs.

Where a *pushchair or pram* or any part of the *pushchair or pram* has several functions or can be converted into another function it should comply with relevant standard(s).

## 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 71-1, *Safety of toys — Part 1: Mechanical and physical properties*

EN 71-2:2011+A1:2014, *Safety of toys — Part 2: Safety of toys - Part 2: Flammability*

EN 71-3, *Safety of toys — Part 3: Migration of certain elements*

## 3 Terms and definitions

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

### 3.1 wheeled child conveyance

vehicle designed for the carriage of one or more children which can be manually steered while being pushed or pulled

### 3.2 pushchair

vehicle comprising a *chassis* and one or more *seat units* or *car seats*

Note 1 to entry: Referred to as the “vehicle” for the purpose of this standard

### 3.3 pram

vehicle comprising a *chassis* and one or more *pram bodies*

Note 1 to entry: Referred to as the “vehicle” for the purpose of this standard.

### 3.4 platform

integral part of the vehicle designed to support an additional child in a standing position



**3.5****chassis**

wheeled framework with extended handle(s) for pushing, pulling and steering, designed to accommodate and transport a *pram body* (bodies) or *car seat(s)* or *seat unit(s)* or a combination of these items

**3.6****seat unit**

structure which may or may not be adjustable to achieve a reclining or recumbent position designed to support one or more children

**3.7****car seat**

Child Restraint System (CRS) capable of being anchored in a power-driven vehicle, so designed as to diminish the risk of injury to the wearer, in the event of a collision or of abrupt deceleration of the vehicle, used for children up to 13 kg or 15 months (83 cm)

Note 1 to entry: Child Restraint Systems are covered by UNECE regulations.

Note 2 to entry: Arrangement of approval marks is shown in Annex G.

**3.8****pram body**

structure with essentially vertical and continuous sides and ends with an internal base designed to transport one or more children in a primarily horizontal position

**3.9****protected volume**

volume accessible by the child (occupant) when sitting or lying in the *pushchair* or *pram*, where specific safety requirements are necessary

**3.10****junction line**

intersection of the seat and the backrest

**3.11****restraint system**

system to restrain the child within the vehicle

**3.12****crotch restraint**

device positioned between the child's legs to prevent the child from sliding forwards

**3.13****harness anchorage point**

device suitable for the attachment of an additional child's harness

**3.14****footrest**

support for the feet or a foot, used when sitting

**3.15****shearing hazard**

hazard due to the movement of components relatively one to another resulting in a scissoring action

**prEN 1888-1:2016 (E)****3.16****crushing hazard**

hazard due to the movement of components relatively one to another resulting in a compression action

**3.17****folding system**

assembly of moving parts which enables the vehicle to be changed from an erected position to a folded position and vice versa under the control of the carer

**3.18****locking mechanism**

assembly of components consisting of one or more *locking device(s)* and *one or more operating device(s)*

**3.19****locking device**

mechanical component that maintains part(s) of the vehicle erected in the position of use (e.g. latch(es), hooks, over centre lock...) which could be deactivated or activated by action(s) on the *operating device*

**3.20****operating device**

part of the *locking mechanism(s)* designed to be activated by the carer through one or several positive action(s)

**3.21****automatic locking device**

device that engages with no additional voluntary action by the carer, when the vehicle is erected to its position of use

**3.22****reversible handle**

handle that can be rotated on the *chassis* to change the direction of pushing

**3.23****occupant space**

space enclosed by the surfaces, for example, side and ends or the base, or both, of a *pram body*, *seat unit* or *car seat* that contains the child (occupant) within a *pram* or *pushchair*

**3.24****parking device**

device to maintain the vehicle in a stationary position

**3.25****braking device**

device to reduce the speed of the vehicle

**3.26****carry cot (generic term)**

product consisting of a base, sides, ends and carrying handle(s), within which a child can be laid down and transported by hand(s)

## 4 General requirements and test conditions

NOTE Words in *italics* are defined in Clause 3 (Terms and definitions). Additional information on the background and rationale for various requirements is given in Annex A.

### 4.1 Samples

Tests should be carried out in the order of the clauses given in this standard, unless otherwise stated. Each test shall be carried out only using one vehicle, unless otherwise stated.

Vehicles with multiple places for *pram bodies* and/or *seat units* shall comply with all applicable requirements in any possible arrangement in accordance with the manufacturer's instructions. If a vehicle can be equipped with an additional *seat unit* or *pram body* or group 0/0+ *car seat* supplied or recommended by the manufacturer, the combination shall comply with this draft European Standard.

### 4.2 Principle of the most onerous condition

Unless otherwise stated each test shall be conducted with the vehicle in the most onerous condition for that test in terms of:

- the choice and number of *seat units* and/or *pram bodies* and/or *car seats* attached to the *chassis* stated in the manufacturer's instructions;
- the addition of any additional *seat unit*(s) approved by the manufacturer;
- the use of test masses: for vehicles transporting more than one child, at least one place that a child can occupy shall be loaded with a test mass;
- the loading (or not) of any receptacle designed for carrying additional load(s) allowed for in the instructions or otherwise approved by the manufacturer and the placing (or not) of load(s) in any such facility, up to the maximum mass allowed in the manufacturer's instructions, or 2 kg if nothing is indicated; small pockets fitted onto textile parts are not concerned by this condition;
- the addition (or not) of any other accessories supplied or recommended by the manufacturer for use with the vehicle and with accessories loaded according to the manufacturer's instructions;
- the adjustment of *seat units*, *pram bodies*, handles, *car seats*, and any other adjustable features or accessories, or any other optional arrangement of the vehicle allowed in the manufacturer's instructions or otherwise approved by the manufacturer.

NOTE The heaviest loads do not always produce the most onerous conditions.

### 4.3 Tolerances for test equipment

Unless otherwise stated, the accuracy of the test equipment shall be:

- Forces  $\pm 5$  %;
- masses  $\pm 0,5$  %;
- dimensions  $\pm 0,5$  mm;
- timing  $\pm 1$  s;
- angles  $\pm 0,5^\circ$ .

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## 4.4 Test conditions

The vehicle shall be conditioned at a temperature of  $(23 \pm 5) ^\circ\text{C}$  for at least 2 h prior to tests. All tests shall be carried out at a temperature of  $(23 \pm 10) ^\circ\text{C}$  unless otherwise specified.

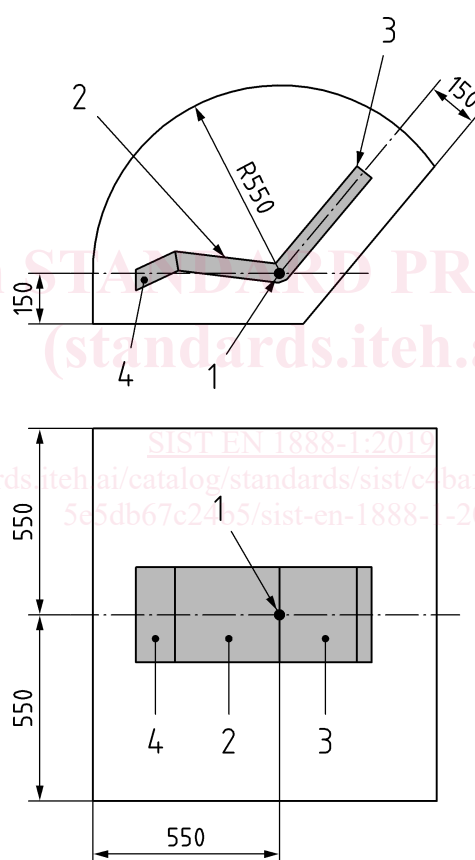
For vehicles fitted with inflatable tyres, the tyre pressure shall be adjusted according to manufacturer's instructions for use before conducting the entire test procedure. If a tyre is punctured during the test procedure, the tyre shall be replaced and the test procedure continued.

## 4.5 Determination of the protected volume

## 4.5.1 Protected volume of seat units

The protected volume of *seat units* shall be determined in accordance with Figure 1 below.

Dimensions in millimetres



## Key

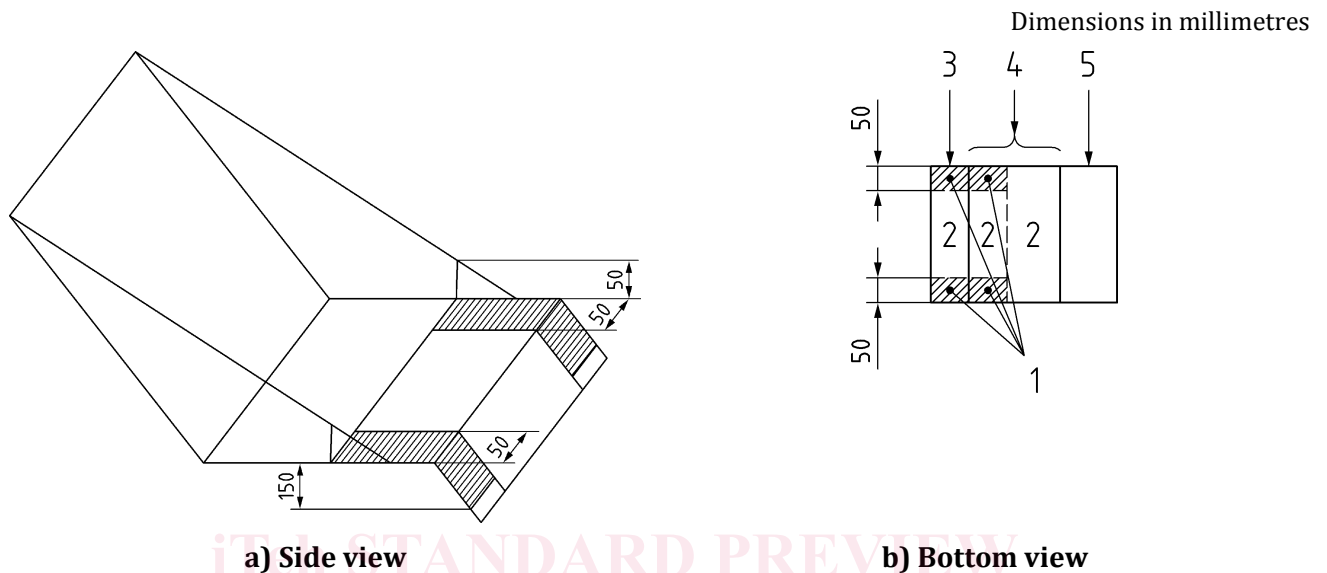
- 1 origin from which the *protected volume* has been defined (mid-point of the *junction line*, on the uncompressed upper surface of the *seat unit*)
- 2 seat
- 3 back rest
- 4 leg rest

**Figure 1 — Protected volume for seat units**

The space located behind the backrest is excluded from the *protected volume*.

Where a vehicle is suitable for two or more children the space located behind the backrest shall be considered if it enters another *protected volume*.

The space underneath the seat and underneath the leg rest is excluded from the *protected volume*, except for a 50 mm wide band measured from the outermost edge of the seat/leg rest sides where the seat/leg rest is not fitted with lateral protections of a height greater than 50 mm (textile or any rigid component) (see Figure 2).



#### Key

- 1 space to be checked
- 2 space not to be checked
- 3 leg rest
- 4 seat
- 5 backrest

Figure 2 — Effect of lateral protection on the determination of the *protected volume*

#### 4.5.2 Protected volume of pram bodies having a length greater than 800 mm

The *protected volume* of *pram bodies* having a length greater than 800 mm shall be determined in accordance with Figure 3.

The 550 mm height shall be measured in accordance with 8.1.2.2.

The surface underneath the *pram body* is excluded from the *protected volume*.

Dimensions in millimetres

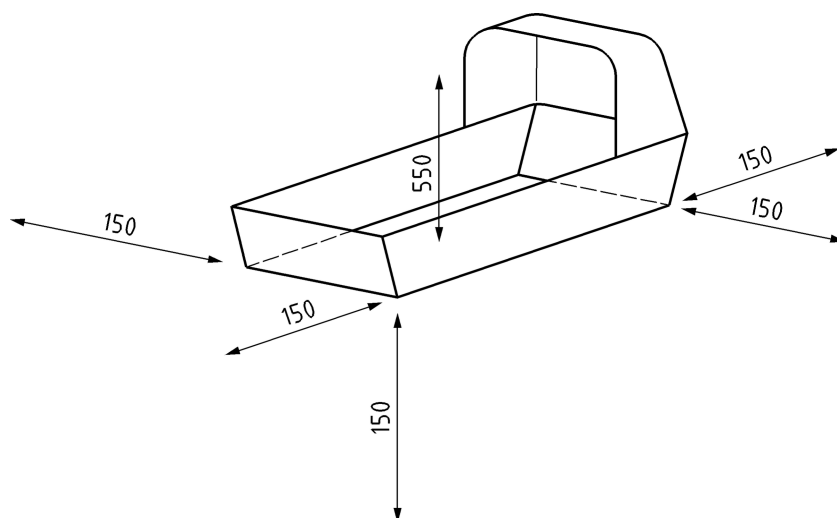


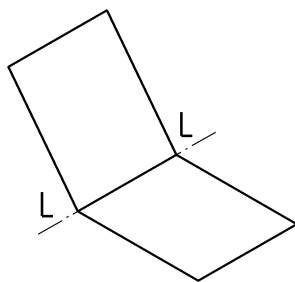
Figure 3 — Protected volume for pram bodies having a length greater than 800 mm

#### 4.5.3 Protected volume for pram bodies having a maximum internal length of 800 mm and car seats

For vehicles designed only for children under 6 months of age, *pram bodies* with a maximum internal length of 800 mm and for *car seats*, the *protected volume* is considered to be the inner upper surface that supports the child and the inner surface of the sides and ends of the *pram body*.

#### 4.6 Determination of the junction line

The *junction line* shall be determined as the intersection between the seat and the backrest as shown on Figure 4.

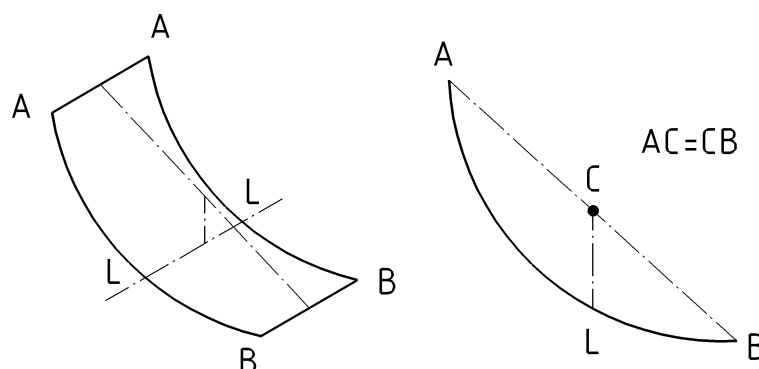


#### Key

LL junction line

Figure 4 — Junction line

When the *seat unit* is in the form of a hammock, then a theoretical *junction line*, "LL", is determined as shown in Figure 5.

**Key**

LL junction line

L vertical projection of C on the hammock

**Figure 5 — Junction line for seat unit in form of a hammock**

NOTE The *junction line* may vary when the backrest is adjusted to different positions.

**5 Test equipment****5.1 Test masses****5.1.1 General**

Unless otherwise specified, the test masses shall be those given in 5.1.2 to 5.1.9.

Any damage to fabric which may occur as a result of abrasion by the test masses during tests shall be ignored. Damage can be minimized by using a convenient means of protection of negligible mass. Where damage is not caused by abrasion by the test masses it constitutes a structural failure.

Test masses may be fitted with additional handles for carrying purposes, as long as the centre of gravity is not changed and mass remains within tolerances and the test procedure is not affected.

**5.1.2 Test mass A**

Test mass A is a rigid cylinder ( $160 \pm 5$ ) mm in diameter and ( $300 \pm 5$ ) mm in height, having a mass of ( $9 + 0, 1/0$ ) kg and with its centre of gravity in the centre of the cylinder. All edges shall have a radius of ( $5 \pm 1$ ) mm. Two anchorage points shall be provided, positioned ( $150 \pm 2,5$ ) mm from the base and at  $180^\circ$  to each other around the circumference as shown in Figure 6.