

English Version

**Gymnastic equipment - Individual and multifunctional  
vaulting boxes - Safety requirements and test methods**

Matériel de gymnastique - Plinths individuels et  
multifonctions - Exigences de sécurité et méthodes  
d'essai

Turngeräte - Individuelle und multifunktionale  
Sprungkästen - Sicherheitstechnische Anforderungen  
und Prüfverfahren

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

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## European foreword

This document (prEN 17461:2019) has been prepared by Technical Committee CEN/TC 136 “Sports, playground and other recreational facilities and equipment”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

## 1 Scope

This document specifies functional requirements and specific safety requirements in addition to the general safety standard EN 913 for gymnastic and vaulting boxes for individual or multifunctional use. This document also specifies requirements when multifunctional boxes are used in combination with accessories.

## 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 913:2018, *Gymnastic equipment - General safety 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

#### **vaulting boxes**

sectioned box that is padded, used in gymnastics

### 3.2

#### **multifunctional vaulting boxes**

multi-purpose apparatus with connection points and openings provided to use the vaulting box in combination with other vaulting boxes or accessories

## 4 Requirements

### 4.1 Classification

Multifunctional vaulting boxes shall be classified by the design (types) as shown in Table 1. Examples are given in Annex A.

**Table 1 — Classification of vaulting boxes**

Type	Description	Example
1	rectangular vaulting box with individual box sections and padded top box	Figure A.1
2	rectangular mini vaulting box with padded top or flat top	Figure A.2
3	pyramidal vaulting box with individual box sections and padded top box	Figure A.3
4	padded vaulting tables with supporting frame	Figure A.4
5	pyramidal to rectangular vaulting box with individual box sections and padded top box	Figure A.5
6	rectangular multifunctional vaulting box with individual box sections and padded top box	Figure A.6
7	pyramidal multifunctional vaulting box with individual box sections and padded top box	Figure A.7
8	vaulting box or table with padded top with any other design which fulfils dimensions and safety requirements of this standard	Table 2

## 4.2 Dimensions

Top surfaces of the (multifunctional) vaulting boxes shall comply with the dimensions specified in Table 2.

**Table 2 — Dimensions of top surfaces**

Dimensions in millimetres

Range	Length <i>l</i>	Width <i>b</i>	Height <i>h</i>
Maximum	1 605	750	1 500
Minimum	700	500	400

Height of the (multifunctional) vaulting boxes shall comply with the dimensions specified in Table 3.

**Table 3 — Dimensions of height**

Type	Maximum height mm
1, 3, 5, 6, 7, 8	1 500
2	400
4	999

### 4.3 Performance of padded box top

When tested according to EN 913:2018, Annex C, using a drop height of 300 mm, the peak acceleration shall not exceed 500 m/s<sup>2</sup> (50g).

### 4.4 Entrapment

The connection points or gaps shall be positioned more than 90 mm from the top of the (multifunctional) vaulting box (including padding), see Figure 1.

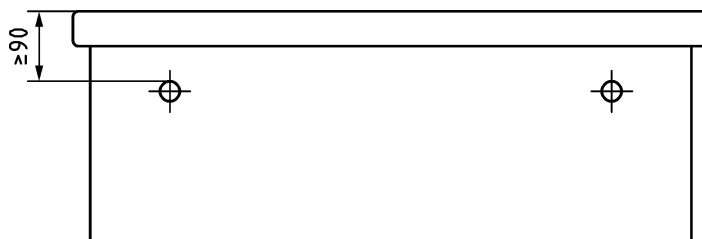


Figure 1 — Position of connection points or gaps

### 4.5 Floor projection

There should be no floor projection that could cause tripping. The maximum size of floor projection shall comply with the dimensions specified in Table 4. See Figure 2 for an example.

Table 4 — Dimensions of maximum size of projection

Type	Maximum height (length x width x height) mm
1, 6	155 × 90 × 50
2, 3, 4, 5, 7, 8	No floor projection allowed

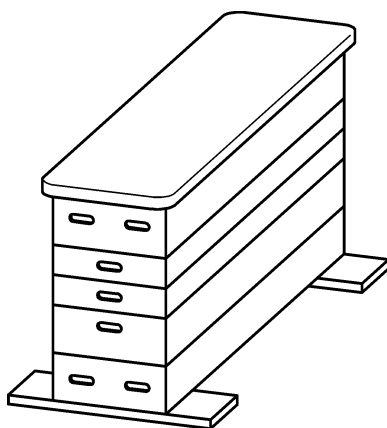


Figure 2 — Example vaulting box type 1