

# SLOVENSKI STANDARD SIST EN 795:2012

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Nadomešča:

**SIST EN 795:1996** 

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# Osebna varovalna oprema za zaščito pred padci z višine - Sidrišča

Personal fall protection equipment - Anchor devices

Persönliche Absturzschutzausrüstung - Anschlageinrichtungen

Équipement de protection individuelle contre les chutes 2 Dispositifs d'ancrage

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**EUROPEAN STANDARD** 

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#### **English Version**

# Personal fall protection equipment - Anchor devices

Équipement de protection individuelle contre les chutes -Dispositifs d'ancrage Persönliche Absturzschutzausrüstung - Anschlageinrichtungen

This European Standard was approved by CEN on 9 June 2012.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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# **Foreword**

This document (EN 795:2012) has been prepared by Technical Committee CEN/TC 160 "Protection against falls from height including working belts", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2013, and conflicting national standards shall be withdrawn at the latest by January 2013.

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

This document supersedes EN 795:1996.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 89/686/EEC.

For relationship with EU Directive 89/686/EEC, see informative Annex ZA, which is an integral part of this document.

For details of the significant changes made since EN 795:1996 please refer to Annex B.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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# Introduction

A reliable anchor device is an essential component of any personal fall protection system.

This European Standard is intended to act as a complementary standard for existing European Standards covering other components used in personal fall protection systems.

The scope and the requirements are based on the philosophy that anchor devices are rated to sustain the maximum dynamic force generated in a fall from a height by the mass of one person, including any equipment carried. The static strength tests are based on a minimum factor of safety of two. To allow for foreseeable misuse of equipment, this European Standard provides requirements and test methods for anchor devices used in personal fall protection systems in accordance with EN 363, even if their intended use is for restraint.

Requirements and test methods for multi-user anchor devices, i.e. anchor devices that allow more than one user to be attached at any one time, are not addressed in this document but advice is provided in a separate CEN Technical Specification.

This European Standard is intended for the type testing of new products before placing them on the market and gives only minimum performance requirements. It is essential that anchor devices are designed and manufactured so that, in the foreseeable conditions of use for which they are intended, the user is able to perform the risk-related activity while being appropriately protected at the highest possible level. Manufacturers may wish to bear these points in mind when deciding on the actual performance of their products.

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#### Scope 1

This European Standard specifies requirements for performance and associated test methods for single-user anchor devices which are intended to be removable from the structure. These anchor devices incorporate stationary or travelling (mobile) anchor points designed for the attachment of components of a personal fall protection system in accordance with EN 363.

This European Standard also gives requirements for marking and instructions for use, and guidance on installation.

This European Standard is not applicable to:

- anchor devices intended to allow more than one user to be attached at any one time;
- anchor devices used in any sports or recreational activity;
- equipment designed to conform to EN 516 or EN 517;
- elements or parts of structures which were installed for use other than as anchor points or anchor devices. e.g. beams, girders;
- structural anchors (see 3.3).

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#### 2 Normative references

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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 360, Personal protective equipment against falls from a height — Retractable type fall arresters

EN 362, Personal protective equipment against falls from a height — Connectors

EN 363, Personal fall protection equipment — Personal fall protection systems

EN 364:1992, Personal protective equipment against falls from a height — Test methods

EN 365, Personal protective equipment against falls from a height — General requirements for instructions for use, maintenance, periodic examination, repair, marking and packaging

EN 892, Mountaineering equipment — Dynamic mountaineering ropes — Safety requirements and test methods

EN ISO 9227, Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227)

ISO 2232, Round drawn wire for general purpose non-alloy steel wire ropes and for large diameter steel wire ropes — Specifications

# Terms and definitions

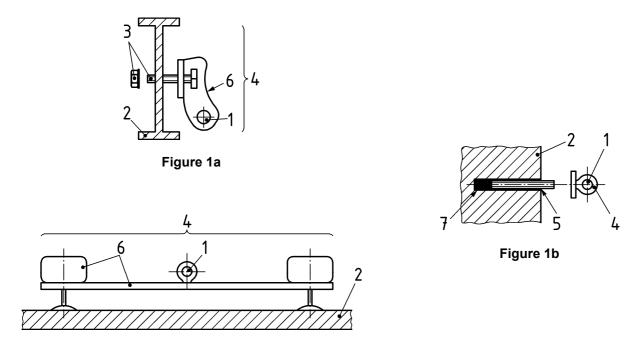
For the purposes of this document, the following terms and definitions apply.

#### 3.1

# anchor system

system intended for use as part of a personal fall protection system that incorporates an anchor point or points and/or an anchor device and/or an element and/or a fixing element and/or a structural anchor (see Figure 1)

Note 1 to entry: Anchor systems that are not intended to be removed from the structure are not covered by this European Standard. See Figure 2.



# Figure icTeh STANDARD PREVIEW (standards.iteh.ai)

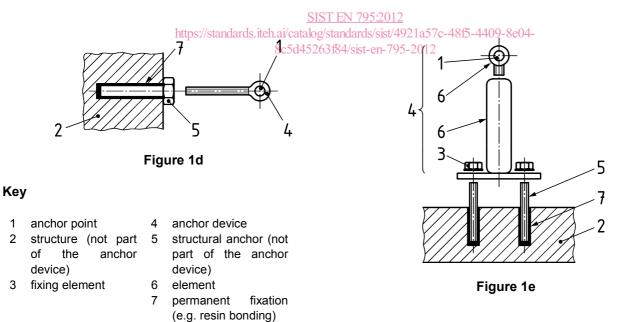
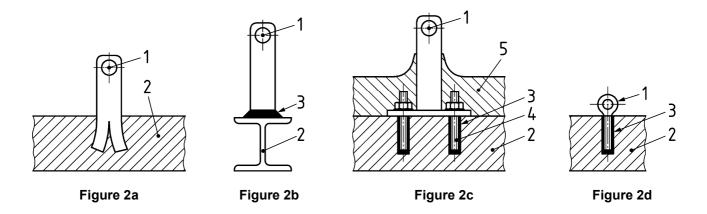


Figure 1 — Examples of anchor systems that include an anchor device



#### Key

- 1 anchor point
- 2 structure
- 3 permanent fixation (e.g. studded, screwed, riveted, welded, resin bonded)
- 4 structural anchor
- 5 concrete, insulation or other covering

Figure 2 — Examples of anchor systems that are not covered by this European Standard

# 3.2 (standards.iteh.ai)

#### anchor device

assembly of elements which incorporates one or more anchor points or mobile anchor points that can include a fixing element, is intended for use as part of a personal fall protection system, is intended to be removable from the structure and to be part of the anchor system 4/sist-en-795-2012

#### 3.2.1

# type A anchor device

anchor device with one or more stationary anchor points, while in use, and with the need for a structural anchor(s) or fixing element(s) to fix to the structure (see Figures 3 and 4)

Note 1 to entry: Anchor points may rotate or swivel when in use, where they are designed to do so.

# 3.2.2

#### type B anchor device

anchor device with one or more stationary anchor points without the need for a structural anchor(s) or fixing element(s) to fix it to the structure (see Figure 5)

#### 3.2.3

#### type C anchor device

anchor device employing a flexible anchor line which deviates from the horizontal by not more than 15° (when measured between the extremity and intermediate anchors at any point along its length) (see Figure 6)

#### 3.2.4

### type D anchor device

anchor device employing a rigid anchor line which deviates from the horizontal by not more than 15° (when measured between the extremity and intermediate anchors at any point along its length) (see Figure 7)

#### 3.2.5

#### type E anchor device

anchor device for use on surfaces up to 5° from the horizontal where the performance relies solely on mass and friction between itself and the surface (see Figure 8)

#### 3.3

#### structural anchor

element or elements which are designed for use in conjunction with a personal fall protection system and to be permanently incorporated into a structure

Note 1 to entry: A structural anchor is not part of the anchor device.

Note 2 to entry: An example of a structural anchor is where an element is welded or bonded by resin to the structure.

#### 3.4

# fixing element

element or elements used to connect/fix the anchor device to the structure and which is/are removable from the structure

#### 3.5

#### element

part of an anchor system or anchor device

#### 3.6

## anchor point

point on an anchor system where personal fall protection equipment is intended to be attached

#### 3.7

#### extremity anchor

element which connects the extremity of a flexible anchor line or rigid anchor line onto the structure

#### iTeh STANDARD PREVIEW 3.8

# intermediate anchor

intermediate anchor element located between the extremity anchors, which connects a flexible anchor line or a rigid anchor line onto the structure

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Intermediate supports, e.g. a flexible anchor line guide, which are not intended to withstand the load, are Note 1 to entry: 8c5d45263f84/sist-en-795-2012 not intermediate anchors.

### 3.9

#### mobile anchor point

element with an anchor point which is intended to travel along an anchor line

# 3.10

# flexible anchor line

flexible line between extremity anchors to which personal fall protection equipment can be attached either directly by a connector or through a mobile anchor point

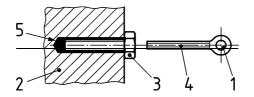
Note 1 to entry: A flexible anchor line can be cable (wire rope), fibre rope, or webbing.

#### 3.11

# rigid anchor line

rigid line between extremity anchors to which personal fall protection equipment can be attached either directly by a connector or through a mobile anchor point

A rigid anchor line can be a rigid profile e.g. a rigid tube or rigid rail. Note 1 to entry:



# Key

Key

1

2

3

- anchor point 1 permanent fixation
- 2 structure
- 3 structural anchor

anchor point

structure

anchor device

Figure 3 — Example of a type A anchor device with a structural anchor



Figure 4 — Example of a type A anchor device with a fixing element