

## SLOVENSKI STANDARD SIST EN 131-1:2016

### 01-januar-2016

Nadomešča: SIST EN 131-1:2007+A1:2011

#### Lestve - 1. del: Terminologija, tipi, funkcionalne velikosti

Ladders - Part 1: Terms, types, functional sizes

Leitern - Teil 1: Benennungen, Bauarten, Funktionsmaße

**iTeh STANDARD PREVIEW** Echelles - Partie 1: Terminologie, types, dimensions fonctionnenelles (standards.iteh.ai)

Ta slovenski standard je istoveten ZIST ENEN-131-1:2015 https://standards.iteh.ai/catalog/standards/sist/b02cd0f3-a69c-4f2d-a79e-

#### <u>ICS:</u>

| 01.040.97 | Oprema za dom in trgovino.<br>Razvedrilo. Šport (Slovarji) | Domestic and commercial equipment. Entertainment. Sports (Vocabularies) |
|-----------|--|---|
| 97.145    | Lestve   | Ladders   |

SIST EN 131-1:2016

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#### SIST EN 131-1:2016

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN 131-1

November 2015

ICS 01.040.97; 97.145

Supersedes EN 131-1:2007+A1:2011

**English Version** 

## Ladders - Part 1: Terms, types, functional sizes

Échelles - Partie 1: Terminologie, types, dimensions fonctionnelles Leitern - Teil 1: Benennungen, Bauarten, Funktionsmaße

This European Standard was approved by CEN on 11 September 2015.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of 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 United Kingdom.

> <u>SIST EN 131-1:2016</u> https://standards.iteh.ai/catalog/standards/sist/b02cd0f3-a69c-4f2d-a79e-7eb06705d920/sist-en-131-1-2016



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

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#### SIST EN 131-1:2016

### EN 131-1:2015 (E)

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### **European foreword**

This document (EN 131-1:2015) has been prepared by Technical Committee CEN/TC 93 "Ladders", 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 May 2016, and conflicting national standards shall be withdrawn at the latest by November 2016.

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 131-1:2007+A1:2011.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

Compared to EN 131-1:2007+A1:2011, the following modifications have been made in order to improve the stability of ladders in use:

- a) in figures stabilizers or wider base width for leaning ladders were introduced;
- b) further terms 3.48, 3.49 and 3.50 for stabilizers were added in Clause 3;
- c) requirements for minimum base width for leaning ladders were specified in 4.2.1, Table 2 and Table 6. https://standards.iteh.ai/catalog/standards/sist/b02cd0f3-a69c-4f2d-a79e-

7eb06705d920/sist-en-131-1-2016 EN 131, *Ladders*, is one of a series about ladders:

- *Part 1: Terms, types, functional sizes* [the present document];
- Part 2: Requirements, testing, marking;
- Part 3: User Instructions;
- Part 4: Single or multiple hinge-joint ladders;
- Part 6: Telescopic ladders;
- Part 7: Mobile ladders with platform.

The standards of this series are listed in Clause 2 and in the Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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.

#### 1 Scope

This European Standard defines terms and specifies the general design characteristics of ladders.

It applies to portable ladders.

It does not apply to ladders designed for specific professional use such as fire brigade ladders, roof ladders and mobile ladders.

NOTE 1 For multiple hinge joint ladders EN 131–4 applies.

NOTE 2 For telescopic ladders EN 131–6 applies.

- NOTE 3 For mobile ladders with platforms EN 131–7 applies.
- NOTE 4 This standard does not apply to step stools for which EN 14183 applies.

#### 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 131-2, Ladders — Part 2: Requirements, testing, marking PREVIEW

EN 131-3, Ladders — Part 3: User Instructions ndards.iteh.ai)

EN 131-4:2007, Ladders — Part 4: Single or multiple hinge-joint ladders

https://standards.iteh.ai/catalog/standards/sist/b02cd0f3-a69c-4f2d-a79e-7eb06705d920/sist-en-131-1-2016

#### **3** Terms and definitions

For the purpose of this document, the terms and definitions given in EN 131–4:2007 for single or multiple hinge-joint ladders and the following apply.

#### Table 1

Dimensions in millimetres

| No  | Terms                               | Definition   | Figure        |
|-----|-------------------------------------|--|---------------|
| 3.1 | ladder                              | device incorporating steps or<br>rungs on which a person may<br>step to ascend or descend  |               |
| 3.2 | portable ladder                     | ladder which can be<br>transported and set up by<br>hand   |               |
| 3.3 | mobile ladder<br><b>iTeh S</b>      | ladder which is brought to<br>each operational place by<br>means of mobile support   |               |
|     | ~                                   | <del>etondorde itah ai)</del>  | Figure 1      |
| 3.4 | rung ladder<br>https://standards.it | portable ladder with rungs,<br>which have a standing surface<br>from front to back of less than<br>80 mmog/standards/sist/b02cd0B-a6 | 9c-4f2d-a79e- |
| 3.5 | leaning rung ladder                 | rung ladder which does not<br>have its own support   |               |
| 3.6 | one-piece leaning rung<br>ladder    | leaning rung ladder consisting<br>of one part only   | Figure 2      |

| No  | Terms                       | Definition  | Figure |
|-----|-----------------------------|---|--------|
| 3.7 | sectional ladder            | leaning ladder consisting of<br>several sections that can be<br>fitted together by means of<br>connection devices<br>Note 1 to entry: The length can<br>only be varied by one whole<br>section at a time. |        |
| 3.8 | extending ladder            | leaning rung ladder consisting<br>of two or more parts where the<br>length can be regulated by one<br>arrung at a time log/standards/sist/b02   |        |
| 3.9 | push-up extending<br>ladder | extending ladder where the the upper parts are extended by hand   | 2016   |

| No   | Terms                             | Definition  | Figure                   |
|------|-----------------------------------|---|--------------------------|
| 3.10 | rope-operated extending<br>ladder | extending ladder where the<br>upper parts are extended by<br>means of a rope or other<br>means such as chains, straps<br>or cables  | Figure 5                 |
| 3.11 | standing rung ladder              | two-piece self-supporting rung<br>ladder, unilaterally or<br>bilaterally ascendable   | Figure 6                 |
| 3.12 | https://standards.it              | rung ladder of several parts,<br>that can be used as, an<br>extending ladder, a standing<br>ladder of as a standing ladder<br>with an extending ladder at the<br>Stop and parts of which may be<br>used as one piece leaning<br>ladders<br>I adders<br>I adders<br>I adders<br>STEN 131-1:2016<br>eh.ai/catalog/standards/sist/b02cd0f3-a6<br>7eb06705d920/sist-en-131-1-2016 | Pc-4f2d-a79e<br>Figure 7 |
| 3.13 | step ladder                       | portable ladder with steps<br>horizontal during use and a<br>standing surface from front to<br>back equal to or greater than<br>80 mm   |                          |

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| No   | Terms                            | Definition   | Figure                 |
|------|----------------------------------|--|------------------------|
| 3.14 | leaning step ladder              | step ladder that does not have<br>its own support consisting of<br>one or several parts  | Figure 9               |
| 3.15 | standing step ladder             | two-legged self-supporting<br>step ladder, unilaterally or<br>bilaterally ascendable; with or<br>without platform; with or<br>without hand-/knee rail; a<br>platform is regarded as a step<br>unilaterally ascendable step |                        |
|      | iT                               | ladder<br>eh STANDARD P  | REVIEVFigure 10        |
|      |                                  | bilaterally ascendable, step<br>ladder<br><u>SIST EN 131-1:2016</u><br>andards.iteh.ai/catalog/standards/sist/b02<br>7eb06705d920/sist-en-131-1-   | cd0f3-a69c-4f2d-a7fe-  |
|      |                                  | unilaterally ascendable step<br>ladder with platform and<br>hand-/knee rail  | Figure 11<br>Figure 12 |
|      |                                  | bilaterally ascendable step<br>ladder with platform and<br>hand-/knee rail   | Figure 13              |
| 3.16 | standing ladder                  | ladder (with rungs or steps)<br>which has its own support  |                        |
| 3.17 | standing rung and step<br>ladder | standing ladder, one section<br>with rungs and the other<br>section with steps   |                        |

| No   | Terms                    | Definition  | Figure                                 |
|------|--------------------------|---|--|
| 3.18 | stile                    | lateral part of a ladder which<br>supports the rungs or steps as<br>well as cross struts of<br>supporting legs  |  |
| 3.19 | rung                     | climbing support with a<br>standing surface from front to<br>back of less than 80 mm and at<br>least 20 mm  | <sup>22</sup><br>19<br>18<br>Figure 14 |
| 3.20 |                          | climbing support with a<br>standing surface from front to<br>back equal to or greater than<br>80 mm<br>TANDARD PREV<br>standards.iteh.ai)<br>SIST EN 131-1:2016 | <sup>280</sup> 20 18                   |
|      | https://standards.it     | eh.ai/catalog/standards/sist/b02cd0f3-a6<br>7eb06705d920/sist-en-131-1-2016   | Pc-4f2d-a79e- II II<br>Figure 15       |
| 3.21 | platform                 | topmost standing surface of a<br>standing step ladder which is<br>different from a step   |  |
| 3.22 | ascending leg            | leg of a ladder with climbing supports  | 24                                     |
| 3.23 | supporting leg           | leg of a ladder without climbing supports   | 21                                     |
| 3.24 | hand-/knee rail          | device for holding onto or<br>gaining support from at the<br>upper end of a standing ladder   | 27                                     |
| 3.25 | cross strut              | horizontal connection of the stiles of the supporting leg   |  |
| 3.26 | bottom brace             | device which secures the<br>lower end of the stile against<br>buckling  |  |
| 3.27 | opening restraint device | device on standing ladders<br>which secures the two legs of<br>the ladder from sliding apart  | 26<br>Figure 16                        |
| 3.28 | locking device           | device to keep ladder hooks<br>engaged on the rung or step<br>during use  |  |