

**SS EN 131-2 : 2019**  
**EN 131-2:2010+A2:2017, IDT**  
(ICS 97.145)

**SINGAPORE STANDARD**

**Ladders**

**– Part 2 : Requirements, testing, marking**

The national standard is the identical implementation of EN 131-2:2010+A2:2017 and is adopted with permission of CEN, Avenue Marnix 17, 1000 Brussels

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ISBN 978-981-48-9446-3

The content of this Singapore Standard was approved on 25 September 2019 by the Quality and Safety Standards Committee (QSSC) under the purview of the Singapore Standards Council.

First published, 2019

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The Technical Committee sets up the Working Group on Portable Aluminium Ladders to prepare this standard. The Working Group consists of the following experts who contribute in their *individual capacity*:

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The organisations in which the experts of the Working Group are involved are:

*C&W Services (S) Pte Ltd*

*GS Industries Pte Ltd*

*Institution of Occupational Safety and Health, Singapore Branch*

*L&M Metals (S) Pte Ltd*

*Ministry of Manpower*

*Modern (Singapore) Scaffolding & Engineering Pte Ltd*

*Prefabricated Access Supplier and Manufacturer Association*

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*Singapore Polytechnic*

*Springwell Marketing Services Pte Ltd*

*The Institution of Engineers, Singapore*

*TÜV SÜD PSB Pte Ltd*

*Workplace Safety and Health Council*

*WSH (Asia)*

## **National Foreword**

This Singapore Standard was prepared by the Working Group on Portable Aluminium Ladders set up by the Technical Committee on Personal Safety and Health under the purview of QSSC.

SS EN 131 consists of the following six parts, under the general title 'Ladders':

- Part 1: Terms, types, functional sizes (Identical adoption of EN 131-1:2015)
- Part 2: Requirements, testing, marking (Identical adoption of EN 131-2:2010+A2:2017)
- Part 3: Marking and user instructions (Identical adoption of EN 131-3:2018)
- Part 4: Single or multiple hinge-joint ladders (Identical adoption of EN 131-4:2007)
- Part 6: Telescopic ladders (Identical adoption of EN 131-6:2019)
- Part 7: Mobile ladders with platform (Identical adoption of EN 131-7:2013)

This standard is identical with EN 131-2:2010+A2:2017, "Ladders – Part 2: Requirements, testing, marking", published by European Committee for Standardisation, CEN, Avenue Marnix 17, B-1000 Brussels.

NOTE 1 – EN 131-5: Accessories for ladders is not available for adoption as CEN has terminated the development of this part.

NOTE 2 – Where appropriate, the words "European Standard" are read as "Singapore Standard".

NOTE 3 – Reference to European Standards are replaced by applicable Singapore Standards.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

### **NOTE**

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "Mature Standards". Mature Standards will not be subject to further review, unless there are requests to review such standards.*
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3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

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English Version

## Ladders - Part 2: Requirements, testing, marking

Échelles - Partie 2: Exigences, essais, marquage

Leitern - Teil 2: Anforderungen, Prüfung,  
Kennzeichnung

This European Standard was approved by CEN on 16 April 2012 and includes Amendment 2 approved by CEN on 17 September 2016.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**



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## European foreword

This document (EN 131-2:2010+A2:2017) 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 July 2017 and conflicting national standards shall be withdrawn at the latest by December 2017.

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 A2 EN 131-2:2010+A1:2012 and CEN/TS 16665:2014 A2.

This document includes Amendment 1, approved by CEN on 2012-04-16 and Amendment 2 approved by CEN on 2016-09-17.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1 and A2 A2.

A2 *deleted text* A2

This European Standard is one of a series about ladders. The other standards of this series are listed in Clause 2 and in the Bibliography.

A2 Classification is determined in the strength test for all ladders and additionally in the durability test for standing ladders.

A test protocol is being considered for an alternative base slip test on behalf of an expert group of the GPSD committee. A2

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Introduction**

Due to the unhomogeneity of the material wood, special requirements have been appropriated on this item.

## 1 Scope

This European Standard specifies the general design features, requirements and test methods for portable ladders.

It does not apply to step stools or ladders for specific professional use such as firebrigade ladders, roof ladders and mobile ladders.

It does not apply to ladders used for work on or near live electrical systems or installations. For this purpose EN 61478 applies.

Ⓐ

NOTE For insulating ladders for use on or near low voltage electrical installations EN 50528 applies. Ⓐ

This European Standard is intended to be used in conjunction with EN 131-1.

For single or multiple hinge joint ladders EN 131-4 applies.

Ⓐ For telescopic ladders EN 131-6 applies.

For mobile ladders with a platform EN 131-7 applies. Ⓐ

## 2 Normative references

The following referenced documents are indispensable for the application 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 59, *Glass reinforced plastics — Measurement of hardness by means of a Barcol impressor*

Ⓐ EN 131-1:2015 Ⓐ, *Ladders — Part 1: Terms, types, functional sizes*

EN 131-3, *Ladders — Part 3: User Instructions*

EN 204, *Classification of thermoplastic wood adhesives for non-structural applications*

EN 301, *Adhesives, phenolic and aminoplastic, for load-bearing timber structures — Classification and performance requirements*

EN 385, *Finger jointed structural timber — Performance requirements and minimum production requirements*

EN 386:2001, *Glued laminated timber — Performance requirements and minimum production requirements*

EN 391:2001, *Glued laminated timber — Delamination test of glue lines*

EN 392, *Glued laminated timber — Shear test of glue lines*

EN 408, *Timber structures — Structural timber and glued laminated timber — Determination of some physical and mechanical properties*

Ⓐ EN 572-2, *Glass in building — Basic soda lime silicate glass products — Part 2: Float glass* Ⓐ

EN 844-9:1997, *Round and sawn timber — Terminology — Part 9: Terms relating to features of sawn timber*

EN 1310, *Round and sawn timber — Method of measurement of features*

EN 10088-2:2014, *Stainless steels — Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes* <sup>(A2)</sup>

EN 61478, *Live working — Ladders of insulating material* (IEC 61478:2001)

EN ISO 179-1, *Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test* (ISO 179-1:2000)

EN ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles* (ISO 527-1:1993 including Corr 1:1994)

EN ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics* (ISO 527-2:1993 including Corr 1:1994)

EN ISO 3834-1, *Quality requirements for fusion welding of metallic materials — Part 1: Criteria for the selection of the appropriate level of quality requirements* (ISO 3834-1:2005)

EN ISO 3834-2, *Quality requirements for fusion welding of metallic materials — Part 2: Comprehensive quality requirements* (ISO 3834-2:2005)

EN ISO 3834-3, *Quality requirements for fusion welding of metallic materials — Part 3: Standard quality requirements* (ISO 3834-3:2005)

EN ISO 3834-4, *Quality requirements for fusion welding of metallic materials — Part 4: Elementary quality requirements* (ISO 3834-4:2005)

EN ISO 4892-2:2006, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps* (ISO 4892-2:2006)

EN ISO 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature* (ISO 6892-1:2009)

EN ISO 14125, *Fibre-reinforced plastic composites — Determination of flexural properties* (ISO 14125:1998)

EN ISO 14644-1, *Cleanrooms and associated controlled environments — Part 1: Classification of air cleanliness by particle concentration* (ISO 14644-1) <sup>(A2)</sup>

EN ISO 14731, *Welding coordination — Tasks and responsibilities* (ISO 14731:2006)