

This is a preview of "BS EN 131-6:2019". [Click here to purchase the full version from the ANSI store.](#)



BSI Standards Publication

Ladders

Part 6: Telescopic ladders

This is a preview of "BS EN 131-6:2019". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN 131-6:2019. It supersedes BS EN 131-6:2015, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/512, Ladders.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2019
Published by BSI Standards Limited 2019

ISBN 978 0 580 99361 9

ICS 97.145

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2019.

Amendments/corrigenda issued since publication

Date	Text affected

This is a preview of "BS EN 131-6:2019". Click [here](#) to purchase the full version from the ANSI store.

EUROPÄISCHE NORM

February 2019

ICS 97.145

Supersedes EN 131-6:2015

English Version

Ladders - Part 6: Telescopic ladders

Échelles - Partie 6: Échelles télescopiques

Leitern - Teil 6: Teleskopleitern

This European Standard was approved by CEN on 26 November 2018.

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.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Functional dimensions.....	6
4.1 General dimensions.....	6
4.2 Specific dimensions.....	6
4.3 Top rung clearance l_6	6
4.4 Outside width b_4	7
5 Requirements	7
5.1 General requirements	7
5.2 Distance between rungs/steps.....	7
5.3 Additional requirements for the top of leaning ladders.....	8
5.4 Locking of the rung/step sections.....	8
5.5 Design	8
5.6 Base width b_2	8
6 Testing.....	8
6.1 General.....	8
6.2 Ladder preconditioning.....	9
6.2.1 General.....	9
6.2.2 Drop test.....	9
6.3 Strength test of stiles	9
6.4 Bending test of stiles	11
6.5 Lateral deflection test of the ladder	11
6.6 Bottom stile ends test	11
6.7 Vertical load on rungs, steps and platforms.....	11
6.7.1 General.....	11
6.7.2 Rungs and steps	11
6.7.3 Platform.....	12
6.7.4 Rungs/steps strength test – unlocked position.....	13
6.7.5 Torsion test of rungs/steps	13
6.7.6 Pull out test of rung/step	14
6.8 Test of opening restraints and hinges of standing telescopic ladders.....	14
6.9 Base slip test for leaning ladders	14
6.10 Test of locking mechanism	14
6.10.1 Cyclic test of locking mechanism.....	14
6.10.2 Static test of locking mechanism	15
6.10.3 Cyclic test of hinge joints	15
6.11 Feet/End cap pull test.....	16
6.12 Asymmetrical bending test.....	16
6.13 Test methods for plastic ladders	16
6.14 Test methods for plastic rung/step brackets.....	16
6.15 Durability	16
6.16 Opening and closing cycle test.....	16

This is a preview of "BS EN 131-6:2019". [Click here to purchase the full version from the ANSI store.](#)

7	Marking and user instructions	17
7.1	General	17
7.2	Marking	17
7.3	User instruction	17
7.4	List of items to be inspected	17
7.5	Storage.....	18
	Annex A (normative) Test sequence.....	19
	Annex B (informative) Deviations	20
B.1	General	20
B.2	Deviations from the Netherlands.....	20
B.3	Deviations from Sweden	21
	Bibliography	22

European foreword

This document (EN 131-6:2019) 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 August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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

This document supersedes EN 131-6:2015.

In comparison with the previous edition, the following technical modifications have been made:

- a) strength test in position of use;
- b) durability test for the complete ladder added;
- c) asymmetrical bending test added;
- d) requirements specified in more detail and aligned with the EN 131 series.

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

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.

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.

This is a preview of "BS EN 131-6:2019". [Click here to purchase the full version from the ANSI store.](#)

1 Scope

This document specifies the general design features, requirements and test methods and defines terms for leaning and standing telescopic ladders.

Ladders with extension elements are not covered by this part of EN 131.

This part of the standard is intended to be used in conjunction with EN 131-1, EN 131-2, EN 131-3 and if applicable EN 131-4.

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

EN 131-2:2010+A2:2017, *Ladders — Part 2: Requirements, testing, marking*

EN 131-3:2018, *Ladders — Part 3: Marking and user instructions*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 131-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

telescopic ladder

ladder consisting of three or more rung/step sections with telescopic stiles

3.2

hinge-joint telescopic ladder

ladder including one or more hinge-joint devices with at least one predetermined lockable position

3.3

rung/step section

section of ladder that consists of one rung/step connected to two telescopic stiles

3.4

rung/step bracket

part that attaches the rung/step to the stile

3.5

rung/step section locking mechanism

mechanism that locks a rung/step section