



NSAI
Standards

Irish Standard
I.S. EN 50528:2010

Insulating ladders for use on or near low voltage electrical installations

I.S. EN 50528:2010

Incorporating amendments/corrigenda issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

<i>This document replaces:</i>	<i>This document is based on:</i> EN 50528:2010	<i>Published:</i> 14 May, 2010
This document was published under the authority of the NSAI and comes into effect on: 14 June, 2010		ICS number: 97.145 13.260
NSAI 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie
Údarás um Chaighdeán Náisiúnta na hÉireann		

I.S. EN 50528:2010

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50528

May 2010

ICS 97.145;13.260

English version

Insulating ladders for use on or near low voltage electrical installations

Echelles isolantes pour utilisation
sur ou à proximité des installations
électriques basse tension

Isolierende Leitern für Arbeiten
an oder in der Nähe
von Niederspannungsanlagen

This European Standard was approved by CENELEC on 2010-05-01. CENELEC 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 Central Secretariat or to any CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 78, Equipment and tools for live working. It was submitted to the formal vote and was approved by CENELEC as EN 50528 on 2010-05-01.

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

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2011-05-01
 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2013-05-01
-

Contents

Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Requirements	7
4.1 Safety requirements	7
4.2 Functional requirements	7
4.3 Electrical requirements	9
4.4 Mechanical requirements	9
4.5 Markings	9
4.6 Instruction for use	9
5 Verification and testing	10
5.1 General	10
5.2 Design, dimensions, construction	11
5.3 Mechanical tests	11
5.4 Marking	12
5.5 Instruction for use	12
5.6 Electrical tests	12
6 Conformity evaluation	13
7 Modifications	13
Annex A (normative) Classification of defects and associated requirements and tests	18
Annex B (informative) In-service recommendations	19
B.1 General	19
B.2 Use and storage	19
B.3 Inspection before use	19
B.4 Maintenance	19
Annex C (normative) General test procedure	21
Bibliography	22

Figures

Figure 1 – Cradle sketch plan (given as an example)	14
Figure 2 – Test on stiles – Configuration and type of electrodes used	15
Figure 3 – Examples of foot leveller device, adjustable feet and adjustable ladder stabilizer	16
Figure 4 – Example of individual standing platform	17

Tables

Table A.1 – Classification of defects and associated requirements and tests	18
Table C.1 – Sequential order for performing tests	21

Introduction

Ladders covered by this European Standard are used to work on low voltage live parts, such as to perform connector fittings, repair on pole, switching actions. They are also used to carry out operations prior to dead working, as in the case of voltage detection, earthing and short-circuiting, etc.

In all these cases the ladders has two main functions, to reach the part of the installation that needs to be operated on and to protect the worker from risk of electrical injury, by providing the insulation level and maintaining the safety distance between the worker and the live or potentially live installation.

Taking the local risk assessment into account, additional protection (either personal or collective) can be furthermore considered.

This European Standard contributes to the safety of the users provided they are trained to the operations envisaged.

Additional requirements when using the ladders should be considered to fulfil the European Directives and national regulations.

The ladder is used in accordance with EN 50110 series.

This European Standard has been prepared in accordance with the requirements of EN 61477.

1 Scope

This European Standard is applicable to portable ladders made of non conductive stiles, including accessories (cradle, adjustable foot, adjustable ladder stabilizer, foot leveller device, etc.) used to work on or near electrical systems and installations in the low voltage range (below 1 000 V a.c./1 500 V d.c.).

These ladders are used, to provide temporary access, generally on overhead line structures and to undertake electrical operations. They shall be used by one person only

These ladders are not intended to be put in direct contact with energized parts nevertheless they provide sufficient insulation level to protect against inadvertent contact with low voltage live parts.

The requirements and tests described in this European Standard shall be considered in addition to the EN 131 series.

NOTE This European Standard does not cover ladders for applications upper than 1 000 V a.c./1 500 V d.c. These products are separately covered by a specific standard (EN 61478).

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 131-1:2007, *Ladders – Part 1: Terms, types, functional sizes*

EN 131-2:1993, *Ladders – Part 2: Requirements, testing, marking*

EN 131-3:2007, *Ladders – Part 3: User instructions*

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

EN 60068-1:1994, *Environmental testing – Part 1: General and guidance* (IEC 60068-1:1988 + corrigendum Oct. 1988 + A1:1992)

EN 61318:2008, *Live working – Conformity assessment applicable to tools, devices and equipment* (IEC 61318:2007)

EN 61477:2009, *Live working – Minimum requirements for the utilization of tools, devices and equipment* (IEC 61477:2009 + corrigendum Apr. 2009)

EN 61478:2001 + A1:2003, *Live working – Ladders of insulating material* (IEC 61478:2001 + A1:2003, mod.)

IEC 60417, *Graphical symbols for use on equipment*

3 Terms and definitions

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

NOTE 1 Further information on terminology is given in EN 131-1.

NOTE 2 The term “ladder” is used in this document for “ladders for use on or near low voltage installations”.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-