

### SLOVENSKI STANDARD oSIST prEN IEC 61084-2-2:2023

01-februar-2023

#### Sistemi kabelskih korit in sistemi kabelskih cevi za električne inštalacije - 2-2. del: Posebne zahteve - Sistemi kabelskih korit in sistemi kabelskih cevi, namenjenih za montažo pod tlemi, po golih tleh ali po tleh

Cable trunking systems and cable ducting systems for electrical installations - Part 2-2: Particular requirements - Cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor

Elektroinstallationskanalsysteme für elektrische Installationen - Teil 2-2: Besondere Anforderungen für Elektroinstallationskanalsysteme für die Montage unterboden, bodenbündig, oder aufboden

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Systèmes de goulottes et systèmes de conduits-profilés pour installations électriques -Partie 2-2: Exigences particulières - Systèmes de goulottes et systèmes de conduitsprofilés prévus pour être montés en sous-sol, encastrés dans le sol, ou sur le sol

Ta slovenski standard je istoveten z: prEN IEC 61084-2-2:2022

ICS:

29.120.10 Inštalacijske cevi za električne namene

Conduits for electrical purposes

oSIST prEN IEC 61084-2-2:2023

2003-01. Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

en

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## DRAFT prEN IEC 61084-2-2

December 2022

ICS 29.060.01; 29.120.10

Will supersede EN 50085-2-2:2008

**English Version** 

# Cable trunking systems and cable ducting systems for electrical installations - Part 2-2: Particular requirements - Cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor (IEC 61084-2-2:2017)

Systèmes de goulottes et systèmes de conduits-profilés pour installations électriques - Partie 2-2: Exigences particulières - Systèmes de goulottes et systèmes de conduits-profilés prévus pour être montés en sous-sol, encastrés dans le sol, ou sur le sol (IEC 61084-2-2:2017) Elektroinstallationskanalsysteme für elektrische Installationen - Teil 2-2: Besondere Anforderungen für Elektroinstallationskanalsysteme für die Montage unterboden, bodenbündig, oder aufboden (IEC 61084-2-2:2017)

This draft European Standard is submitted to CENELEC members for enquiry. Deadline for CENELEC: 2023-03-03.

The text of this draft consists of the text of IEC 61084-2-2:2017.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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#### prEN IEC 61084-2-2:2022 (E)

#### **European foreword**

This document (prEN IEC 61084-2-2:2022) consists of the text of document IEC 61084-2-2:2017, prepared by SC 23A "Cable management systems" of IEC/TC 23 "Electrical accessories".

This document is currently submitted to the Enquiry.

The following dates are proposed:

•	latest date by which the existence of this document has to be announced at national level	(doa)	dor + 6 months
•	latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	dor + 12 months
•	latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	dor + 60 months (to be confirmed or modified when voting)

This document will supersede EN 50085-2-2:2008 and all of its amendments and corrigenda (if any).

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZZ, which is an integral part of prEN IEC 61084-2-2:2022/prAA:2022.

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# IEC 61084-2-2

Edition 2.0 2017-03

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



Cable trunking systems and cable ducting systems for electrical installations – Part 2-2: Particular requirements – Cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor

Systèmes de goulottes et systèmes de conduits-profilés pour installations électriques – standards itch ai/catalog/standards/sist/de109d1b-1138-46db-8a17-Partie 2-2: Exigences particulières – Systèmes de goulottes et systèmes de conduits-profilés prévus pour être montés en sous-sol, encastrés dans le sol, ou sur le sol

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### CABLE TRUNKING SYSTEMS AND CABLE DUCTING SYSTEMS FOR ELECTRICAL INSTALLATIONS –

# Part 2-2: Particular requirements – Cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor

#### FOREWORD

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International Standard IEC 61084-2-2 has been prepared by subcommittee 23A: Cable management systems, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2003. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- classification;
- construction;
- mechanical and electrical properties.

This International standard is to be used in conjunction with IEC 61084-1:2017.

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The text of this standard is based on the following documents:

FDIS	Report on voting	
23A/828/FDIS	23A/836/RVD	

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part of the IEC 61084 series supplements or modifies the corresponding clauses of IEC 61084-1:2017 as follows:

- where no particular clause or subclause of IEC 61084-1 is mentioned, the corresponding clause or subclause of IEC 61084-1 applies as far as it is reasonable;
- where "addition" or "replacement" is stated, the relevant text of IEC 61084-1 is to be adapted accordingly;
- subclauses, figures and tables which are additional to those in IEC 61084-1 are numbered starting from 101.

In this standard, the following print types are used:

- requirements and definitions: roman type;
- compliance statements: italic type.

A list of all parts in the IEC 61084 series, published under the general title *Cable trunking and cable ducting systems for electrical installations*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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#### CABLE TRUNKING SYSTEMS AND CABLE DUCTING SYSTEMS FOR ELECTRICAL INSTALLATIONS –

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# Part 2-2: Particular requirements – Cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor

#### 1 Scope

This part of the IEC 61084 series specifies requirements and tests for cable trunking systems (CTS) and cable ducting systems (CDS) intended for the accommodation, and where necessary for the electrically protective separation, of insulated conductors, cables and possibly other electrical equipment in electrical and/or communication systems installations. The maximum voltage of these installations is 1 000 V AC and 1 500 V DC.

These systems are intended for mounting underfloor, flushfloor or onfloor.

This document does not apply to CTS/CDS which are intended to be fixed to the wall and supported by the floor.

This document does not apply to conduit systems, cable tray systems, cable ladder systems, power track systems or equipment covered by other standards.

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#### 2 Normative references

This clause of Part 1 is applicable, except as follows:

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Addition:

IEC 60068-2-60:2015, Environmental testing – Part 2-60: Tests – Test Ke: Flowing mixed gas corrosion test

IEC 60068-2-75:2014, Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests

IEC 61084-1:2017, Cable trunking systems and cable ducting systems for electrical installations – Part 1: General requirements

#### 3 Terms and definitions

This clause of Part 1 is applicable, except as follows:

#### **3.1** Replace Note 1 to entry by:

Note 1 to entry: Different types of CTS are shown in Figure 101 and explained in Annex A.

**3.2** Replace Note 1 to entry by:

Note 1 to entry: Different types of CDS are shown in Figure 101 and explained in Annex A.

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#### 3.3 Addition:

#### f) service unit

Replace Note 1 to entry by:

Note 1 to entry: A system does not necessarily include all system components a) to f). Different combinations of system components can be used.

Addition:

#### 3.101

#### underfloor CTS/CDS

CTS/CDS whose components, except access units and service units, are intended to be mounted within or under a floor and in normal use are not exposed to traffic loads

Note 1 to entry: See Figures 102a), 102c) and 103.

#### 3.102 flushfloor CTS/CDS

CTS/CDS whose components, except access units and service units, are intended to be mounted flush such that the height above the upper level of the floor covering is not more than 4 mm

Note 1 to entry: The upper surface is considered to be exposed to traffic loads. REVIEW

Note 1 to entry: See Figures 102b) and 104.

#### 3.103 onfloor CTS/CDS

CTS/CDS whose components are intended to be mounted on a floor such that the height above the upper level of the floor covering is greater than 4 mm

Note 1 to entry: The upper surface is considered to be exposed to traffic loads.

Note 2 to entry: See Figures 102d) and 105.

#### 3.104

#### access unit

system component intended to provide access to insulated conductors or cables

#### 3.105

#### service unit

system component intended for incorporation of one or more apparatus either directly or by means of one or more apparatus mounting devices

#### 3.106

service unit

<when not in use> service unit which has no cables connected to electrical equipment

#### 3.107

service unit

<when in use> service unit which has cables connected to electrical equipment

#### **General requirements** 4

This clause of Part 1 is applicable.

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#### 5 General conditions for tests

This clause of Part 1 is applicable.

#### 6 Classification

This clause of Part 1 is applicable, except as follows:

Additional subclauses:

- 6.101 According to floor treatment
- 6.101.1 CTS/CDS for dry-treatment of floor
- 6.101.2 CTS/CDS for wet-treatment of floor when the service unit is not in use
- 6.101.3 CTS/CDS for wet-treatment of floor when the service unit is in use
- 6.102 According to resistance to vertical load applied through small surface area
- 6.102.1 CTS/CDS for 500 N
- 6.102.2 CTS/CDS for 750 N
- 6.102.3 CTS/CDS for 1 000 N NDARD PREVIEW
- 6.102.4 CTS/CDS for 1 500 Nandards.iteh.ai)
- 6.102.5 CTS/CDS for 2 000 N
- 6.102.6 CTS/CDS for 2 500 N ST prEN IEC 61084-2-2:2023
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- 6.102.7 CTS/CDS for 3 000 N 178f/osist-pren-iec-61084-2-2-2023
- 6.103 Optional classification according to resistance to vertical load applied through large surface area
- 6.103.1 CTS/CDS for 2 000 N
- 6.103.2 CTS/CDS for 3 000 N
- 6.103.3 CTS/CDS for 5 000 N
- 6.103.4 CTS/CDS for 10 000 N
- 6.103.5 CTS/CDS for 15 000 N

#### 7 Marking and documentation

This clause of Part 1 is applicable, except as follows:

#### Additional subclauses:

**7.101** Access units and service units of systems classified according to 6.101.1 shall be marked that they are suitable for dry treatment of floor only. The marking shall be visible by the user which may be achieved by opening the cover.

NOTE This marking can be in the form of text or graphic.

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**7.102** Service units shall be marked with a warning about the potential damage to electrical accessories by closing the cover. The marking shall be visible by the user which may be achieved by opening the cover.

NOTE This marking can be in the form of text or graphic.

**7.103** Compliance with 7.101 and 7.102 is checked by inspection.

#### 8 Dimensions

This clause of Part 1 is applicable, except as follows:

Addition:

There are no dimensions requirements.

#### 9 Construction

This clause of Part 1 is applicable, except as follows:

Addition:

**9.101** Access covers of underfloor, flushfloor and onfloor CTS/CDS, which in normal use are subjected to external mechanical loads, shall resist movement and unintentional opening.

Compliance is checked by inspection and by the tests of 10.5.

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**9.102** Service units installed flushfloor shall protect the installed electrical apparatus and the plug from direct impact when in use. This protection shall be effective and shall not cause damage to the outgoing cable.

Compliance is checked by inspection and by the tests of 10.3.

**9.103** It shall be possible to securely fix:

- service units to the system;
- electrical apparatus to the service units.

Compliance is checked by the tests of 10.3 and 10.5.1.

**9.104** When the service unit is not in use, it shall be possible to close openings intended for the passage of cables.

Openings, when in use, in underfloor and flushfloor CTS/CDS, for the passage of cables, need not be closed if one of its dimensions is less than 20 mm in one direction.

Compliance is checked by inspection and measurement.

**9.105** Underfloor and flushfloor CTS/CDS which in normal use are embedded in screed material shall be protected against ingress of the screed material.

Openings leading to the interior of underfloor and flushfloor CTS/CDS which in normal use, are located below the upper level of the floor without covering, shall not be wider than 7 mm in one direction.