



SLOVENSKI STANDARD

SIST EN 50173-1:2018

01-oktober-2018

Nadomešča:
SIST EN 50173-1:2011

Informacijska tehnologija - Univerzalni sistemi polaganja kablov - 1. del: Splošne zahteve

Information technology - Generic cabling systems - Part 1: General requirements

Informationstechnik - Anwendungsneutrale Kommunikationskabelanlagen - Teil 1: Allgemeine Anforderungen

(standards.iteh.ai)

Technologies de l'information - Systèmes de câblage générique - Partie 1: Exigences générales

[SIST EN 50173-1:2018](https://standards.iteh.ai/catalog/standards/sist/a9ca8986-d662-4fa9-a28f-9f7c94d34a01/sist-en-50173-1-2018)

<https://standards.iteh.ai/catalog/standards/sist/a9ca8986-d662-4fa9-a28f-9f7c94d34a01/sist-en-50173-1-2018>

Ta slovenski standard je istoveten z: EN 50173-1:2018

ICS:

33.040.50	Vodi, zveze in tokokrogi	Lines, connections and circuits
35.110	Omreževanje	Networking

SIST EN 50173-1:2018 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 50173-1:2018

<https://standards.iteh.ai/catalog/standards/sist/a9ca8986-d662-4fa9-a28f-9f7c94d34a01/sist-en-50173-1-2018>

EUROPEAN STANDARD

EN 50173-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2018

ICS 33.040.50

Supersedes EN 50173-1:2011

English Version

Information technology - Generic cabling systems - Part 1: General requirements

Technologies de l'information - Systèmes de câblage
générique - Partie 1: Exigences générales

Informationstechnik - Anwendungsneutrale
Kommunikationskabelanlagen - Teil 1: Allgemeine
Anforderungen

This European Standard was approved by CENELEC on 2018-03-19. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

(standards.iteh.ai)

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



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

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

EN 50173-1:2018 (E)

Contents	Page
European foreword	12
Introduction	13
1 Scope and conformance	15
1.1 Scope	15
1.2 Conformance	15
2 Normative references	16
3 Terms, definitions and abbreviations	22
3.1 Terms and definitions	22
3.2 Abbreviations	31
3.3 Symbols	33
4 Structure of generic backbone cabling	33
4.1 General	33
4.2 Functional elements	34
4.3 Structure and hierarchy	34
4.4 Cabling subsystems	36
4.5 Design objectives	36
4.6 Accommodation of functional elements	37
4.7 Interfaces	37
4.8 Dimensioning and configuring	38
5 Channel performance	39
5.1 Environmental performance	39
5.2 Transmission performance	41
6 Reference implementations for backbone cabling	75
6.1 General	75
6.2 Balanced cabling	75
6.3 Coaxial cabling	78
6.4 Optical fibre cabling	78
7 Cable requirements	78
7.1 General	78
7.2 Operating environment	79
7.3 Balanced cables of Categories 5, 6, 6A, 7, 7A, BCT-B, 8.1 and 8.2	79
7.4 Coaxial cables	81
7.5 Optical fibre cables	81
8 Connecting hardware requirements	83
8.1 General requirements	83
8.2 Category 5, 6, 6A, 7, 7A, BCT-B, 8.1 and 8.2 and connecting hardware for balanced cabling	88
8.3 Category BCT-C connecting hardware for coaxial cabling	94
8.4 Optical fibre connecting hardware	96
9 Requirements for cords and jumpers	99
9.1 General	99
9.2 Operating environment	99
9.3 Category 5, 6, 6A, 7, 7A, BCT-B, 8.1 and 8.2 cords for balanced cabling	99
9.4 Coaxial cords	105
9.5 Optical fibre cords	105
Annex A (normative) Link performance limits	107
A.1 General	107

A.2	Balanced cabling	107
A.2.1	General.....	107
A.2.2	Return loss	108
A.2.3	Insertion loss	109
A.2.4	Near-end crosstalk loss.....	110
A.2.5	Attenuation to crosstalk loss ratio at the near-end.....	113
A.2.6	Attenuation to crosstalk loss ratio at the far-end.....	113
A.2.7	Direct current loop resistance	116
A.2.8	Direct current resistance unbalance.....	116
A.2.9	Propagation delay	117
A.2.10	Delay skew	118
A.2.11	Transverse conversion loss	119
A.2.12	Equal level transverse conversion transfer loss (ELTCTL).....	119
A.2.13	Coupling attenuation	119
A.2.14	Alien near-end crosstalk.....	120
A.2.15	Alien attenuation to crosstalk ratio at the far end.....	120
A.3	Coaxial cabling	120
A.3.1	Return loss	120
A.3.2	Insertion loss	120
A.3.3	Direct current loop resistance	120
A.3.4	Direct current carrying capacity.....	121
A.3.5	Operating voltage.....	121
A.3.6	Screening attenuation	121
A.4	Optical fibre cabling.....	121
Annex B (informative)	Permanent link performance limits for maximum implementations (balanced and coaxial cabling).....	122
B.1	Balanced cabling.....	122
B.1.1	General.....	122
B.1.2	Performance limits.....	122
B.2	Coaxial cabling	128
B.2.1	General.....	128
B.2.2	Insertion loss	128
B.2.3	Direct current loop resistance	128
Annex C (informative)	Information on all-silica optical fibres in the previous edition	129
C.1	Cabled singlemode optical fibres of Category OS1	129
C.2	Cabled multimode optical fibres of Category OM1 and OM2	129
C.2.1	Cable specification	129
C.2.2	Application support.....	129
Annex D (normative)	Electrical, mechanical and environmental requirements of balanced connecting hardware	132
D.1	General.....	132
D.2	Electrical performance of Category 5, 6, 6A, 7, 7A, BCT-B, 8.1 and 8.2 connecting hardware	132
D.2.1	Return loss	132
D.2.2	Insertion loss	133
D.2.3	Near-end crosstalk loss.....	134
D.2.4	Power sum near-end crosstalk loss	135
D.2.5	Far-end crosstalk loss	136

EN 50173-1:2018 (E)

D.2.6	Power sum far-end crosstalk loss	137
D.2.7	Input to output resistance	138
D.2.8	Input to output resistance unbalance	138
D.2.9	Current carrying capacity	139
D.2.10	Propagation delay	139
D.2.11	Delay skew	140
D.2.12	Unbalance attenuation	140
D.2.13	Transfer impedance	142
D.2.14	Coupling attenuation	143
D.2.15	Dielectric performance	144
D.2.16	Power sum alien near-end crosstalk loss	145
D.2.17	Power sum alien far-end crosstalk loss	146
D.3	Mechanical and environmental performance	147
D.3.1	General.....	147
D.3.2	Solderless connections	147
D.3.3	Free and fixed connectors (modular plugs and jacks).....	148
D.3.4	Other connecting hardware.....	149
Annex E (informative)	Electromagnetic characteristics of balanced cabling.....	151
Annex F (informative)	Supported applications	152
F.1	Supported applications for balanced cabling	152
F.2	Supported applications for coaxial cabling.....	156
F.3	Supported applications for optical fibre cabling	157
F.3.1	Generic applications	157
F.3.2	Data centre (computer room space) applications	160
F.3.3	Industrial space applications	162
Annex G (informative)	Introduction to environmental classification.....	163
G.1	General.....	163
G.2	The application of environmental classification.....	163
G.2.1	MICE	163
G.2.2	The channel environment.....	163
Figure G.1	— Variation of the environment along a cabling channel.....	163
Figure G.2	— The local environment	164
G.2.3	Component selection	164
G.3	The MICE system.....	164
G.4	Guidance with respect to environmental classification	170
G.4.1	Mechanical environment	170
G.4.2	Ingress protection environment.....	170
G.4.3	Climatic and chemical environment	170
G.4.4	Electromagnetic environment.....	170
Annex H (informative)	Acronyms for balanced cables	172
Annex I (normative)	Testing procedures to assess conformance with EN 50173 standards	174
I.1	General.....	174
I.2	Channel and link performance testing.....	174
I.2.1	General.....	174
I.2.2	Testing balanced cabling channels and links.....	175
I.2.3	Testing optical fibre cabling channels and links.....	175
I.2.4	Channel and link test schedules	175

Bibliography	178
Figures	
Figure 1 — Schematic relationship between the EN 50173 series and other relevant standards	13
Figure 2 — Structure of generic cabling	34
Figure 3 — Hierarchical structure of generic cabling	35
Figure 4 — Interconnect and cross-connect models	35
Figure 5 — Examples of backbone cabling implementations to improve reliability	37
Figure 6 — Test and equipment interfaces for backbone cabling	38
Figure 7 — Backbone cabling model	76
Figure 8 — Pin grouping and pair assignments for EN 60603-7 series connecting hardware of Categories 5, 6, 6 _A and 8.1 (front view of fixed connector)	92
Figure 9 — Pin grouping and pair assignments for EN 60603-7 series connecting hardware of Categories 7, 7 _A , BCT-B and 8.2 (front view of fixed connector)	92
Figure 10 — Pin grouping and pair assignments for EN 61076-3-104 connecting hardware (front view of fixed connector)	93
Figure 11 — Four position jack pin and pair grouping assignments for EN 61076-2-101 connecting hardware (front view of connector)	93
Figure 12 — Four position jack pin and pair grouping assignments for EN 61076-2-109 connecting hardware (front view of fixed connector)	94
Figure 13 — Conductor assignment of EN 61169-2 (Type 9,52) and EN 61169-24 (Type F)	96
Figure 14 — Optical fibre assignments for connecting hardware for two optical fibres	98
Figure 15 — Optical fibre assignments for connecting hardware for 12 and 24 optical fibres (front view of fixed or free connector)	99
Figure A.1 — Link options	107
Figure G.1 — Variation of the environment along a cabling channel	163
Figure G.2 — The local environment	164
Figure G.3 — Noise Ranges of Common Industrial Machine Devices	171
Figure H.1 — Balanced cable naming schema	172
Figure H.2 — Balanced cable construction types	173

EN 50173-1:2018 (E)**Tables**

Table 1 — Contextual relationship between EN 50173 series and other standards relevant for information technology cabling systems.....	14
Table 2 — Channel environments.....	39
Table 3 — Details of Environmental Classification	40
Table 4 — Formulae for RL limits for a channel.....	43
Table 5 — RL limits for a channel at key frequencies.....	44
Table 6 — Formulae for IL limits for a channel	45
Table 7 — IL limits for a channel at key frequencies	46
Table 8 — Formulae for NEXT limits for a channel.....	47
Table 9 — NEXT limits for a channel at key frequencies.....	48
Table 10 — Formulae for PSNEXT limits for a channel.....	49
Table 11 — PSNEXT limits for a channel at key frequencies	50
Table 12 — ACR-N limits for a channel at key frequencies	51
Table 13 — PSACR-N limits for a channel at key frequencies	52
Table 14 — Formulae for ACR-F limits for a channel.....	53
Table 15 — ACR-F limits for a channel at key frequencies.....	54
Table 16 — Formulae for PSACR-F limits for a channel.....	55
Table 17 — PSACR-F limits for a channel at key frequencies.....	56
Table 18 — DCLR limits for a channel.....	57
Table 19 — d.c. resistance unbalance limits for a channel.....	57
Table 20 — Formulae for propagation delay limits for a channel.....	59
Table 21 — Propagation delay limits for a channel at key frequencies	59
Table 22 — Delay skew limits for a channel	60
Table 23 — Formulae for TCL limits for a cabling channel	61
Table 24 — TCL limits for a cabling channel at key frequencies	62
Table 25 — Formulae for ELTCTL limits for a cabling channel	64
Table 26 — ELTCTL limits for a cabling channel at key frequencies	65
Table 27 — Formulae for coupling attenuation limits for a screened cabling channel	66
Table 28 — Coupling attenuation limits for a screened cabling channel at key frequencies.....	67

Table 29 — Formulae for PSANEXT limits for a channel	68
Table 30 — PSANEXT limits for a channel at key frequencies.....	69
Table 31 — Formulae for coupling attenuation to meet PSANEXT limits.....	69
Table 32 — Formulae for PSANEXT _{avg} limits for a channel.....	70
Table 33 — PSANEXT _{avg} limits for a channel at key frequencies.....	70
Table 34 — Formulae for PSAACR-F limits for a channel.....	71
Table 35 — PSAACR-F limits for a channel at key frequencies	71
Table 36 — Formulae for coupling attenuation to meet PSAACR limits.....	71
Table 37 — Formulae for PSAACR-F _{avg} limits for a channel.....	72
Table 38 — PSAACR-F _{avg} limits for a channel at key frequencies	72
Table 39 — RL limits for a Class BCT-C channel.....	73
Table 40 — Formulae for IL limits for a Class BCT-C channel.....	73
Table 41 — IL limits for a Class BCT-C channel at key frequencies	73
Table 42 — DCLR limits for a Class BCT-C channel.....	73
Table 43 — Operating voltage limit for a Class BCT-C channel.....	74
Table 44 — Screening attenuation limits for a Class BCT-C channel	74
Table 45 — Backbone channel length equations.....	77
Table 46 — Balanced cable standards	79
Table 47 — Environmental performance specifications for balanced cables ^a	80
Table 48 — Coupling attenuation limits for Category BCT-B cables	80
Table 49 — Electrical performance requirements for Category BCT-C cable.....	81
Table 50 — Mechanical performance requirements for Category BCT-C cable.....	81
Table 51 — Environmental performance specifications for optical fibre cables (in addition to series EN 60794) ^a	81
Table 52 — Cabled multimode optical fibre performance requirements.....	82
Table 53 — Cabled single-mode optical fibre performance requirements.....	83
Table 54 — Environmental performance specifications for balanced cabling connecting hardware.....	85
Table 55 — Environmental performance specifications for coaxial cabling connecting hardware	86
Table 56 — Environmental performance specifications for optical fibre cabling connecting hardware.....	87
Table 57 — Mechanical characteristics of connecting hardware intended for use with balanced cabling of Category 5, 6, 6A, 7, 7A, BCT-B, 8.1 and 8.2.....	89

EN 50173-1:2018 (E)

Table 58 — Backwards compatibility matrix.....	90
Table 59 — EN 60603-7 series connecting hardware	91
Table 60 — Formulae for RL limits for BCT-C connecting hardware.....	94
Table 61 — RL limits for BCT-C connecting hardware at key frequencies	94
Table 62 — Formulae for IL limits for BCT-C connecting hardware	95
Table 63 — IL limits for BCT-C connecting hardware at key frequencies	95
Table 64 — Screening attenuation limits for BCT-C connecting hardware.....	95
Table 65 — Attenuation limits for optical fibre connecting hardware	97
Table 66 — RL limits for optical fibre connecting hardware.....	97
Table 67 — Environmental performance specifications for balanced cords (in addition to IEC 61935-2-X) ..	100
Table 68 — RL requirements for cords	101
Table 69 — RL limits for cords at key frequencies.....	101
Table 70 — Component performance formulae used to derive limits for cord NEXT	103
Table 71 — Minimum NEXT for 2 m cords at key frequencies	104
Table 72 — Minimum NEXT for 5 m cords at key frequencies	104
Table 73 — Minimum NEXT for 10 m cords at key frequencies	105
Table 74 — Environmental performance specifications for optical fibre cords (in addition to EN 61753-1) ..	106
Table A.1 — Formulae for RL limits for a link.....	108
Table A.2 — Formulae for IL limits for a link	110
Table A.3 — Formulae for NEXT limits for a link.....	111
Table A.4 — Formulae for PSNEXT limits for a link.....	112
Table A.5 — Formulae for ACR-F limits for a link	113
Table A.6 — Formulae for PSACR-F limits for a link	115
Table A.7 — DCLR limits for a link.....	116
Table A.8 — d.c. resistance unbalance limits for a link.....	117
Table A.9 — Propagation delay formulae for a link.....	118
Table A.10 — Delay skew formulae for a link	119
Table A.11 — Formulae for IL limits for a link	120
Table B.1 — RL limits for a permanent link at key frequencies	122
Table B.2 — IL limits for a permanent link at key frequencies	123

ITh STANDARD PREVIEW

(standards.iteh.ai)

SIST EN 50173-1:2018

<https://standards.iteh.ai/catalog/standards/sist/a9ca8986-d662-4fa9-a28f-917c94d34a01/sist-en-50173-1-2018>

Table B.3 — NEXT limits for a permanent link at key frequencies	123
Table B.4 — PSNEXT limits for a permanent link at key frequencies	124
Table B.5 — ACR-N limits for a permanent link at key frequencies	124
Table B.6 — PSACR-N limits for a permanent link at key frequencies.....	125
Table B.7 — ACR-F limits for a permanent link at key frequencies.....	125
Table B.8 — PSACR-F limits for a permanent link at key frequencies.....	126
Table B.9 — DCLR limits for a permanent link.....	126
Table B.10 — Propagation delay limits for a permanent link at key frequencies.....	127
Table B.11 — Delay skew limits for a permanent link.....	127
Table B.12 — IL limits for a permanent link at key frequencies.....	128
Table B.13 — DCLR limits for a permanent link.....	128
Table C.1 — Cabled multimode optical fibre performance requirements	129
Table C.2 — Supported generic ICT applications and maximum channel lengths.....	130
Table C.3 — Supported data centre applications and maximum channel lengths	131
Table C.4 — Supported monitoring and control applications and maximum channel lengths.....	131
Table D.1 — Formulae for RL limits for connecting hardware.....	132
Table D.2 — RL limits for connecting hardware at key frequencies.....	133
Table D.3 — Formulae for IL limits for connecting hardware.....	133
Table D.4 — IL limits for connecting hardware at key frequencies.....	134
Table D.5 — Formulae for NEXT limits for connecting hardware	134
Table D.6 — NEXT limits for connecting hardware at key frequencies	135
Table D.7 — Formulae for PSNEXT limits for connecting hardware	135
Table D.8 — PSNEXT limits for connecting hardware at key frequencies	136
Table D.9 — Formulae for FEXT limits for connecting hardware.....	136
Table D.10 — FEXT limits for connecting hardware at key frequencies.....	137
Table D.11 — Formulae for PSFEXT limits for connecting hardware.....	137
Table D.12 — PSFEXT limits for connecting hardware at key frequencies.....	138
Table D.13 — Input to output resistance limits for connecting hardware at key frequencies	138
Table D.14 — Input to output resistance unbalance limits for connecting hardware at key frequencies	139
Table D.15 — Current carrying capacity limits for connecting hardware at key frequencies.....	139

EN 50173-1:2018 (E)

Table D.16 — Propagation delay limits for connecting hardware	140
Table D.17 — Delay skew limits for connecting hardware	140
Table D.18 — Formulae for TCL limits for connecting hardware	141
Table D.19 — TCL limits for connecting hardware at key frequencies	141
Table D.20 — Formulae for TCTL limits for connecting hardware	142
Table D.21 — TCTL limits for connecting hardware at key frequencies	142
Table D.22 — Formulae for transfer impedance for connecting hardware	143
Table D.23 — Transfer impedance limits for connecting hardware at key frequencies	143
Table D.24 — Formulae for coupling attenuation limits for connecting hardware	144
Table D.25 — Coupling attenuation limits for connecting hardware at key frequencies	144
Table D.26 — Insulation resistance limits for connecting hardware	145
Table D.27 — Voltage proof limits for connecting hardware	145
Table D.28 — Formulae for PSANEXT limits for connecting hardware	145
Table D.29 — PSANEXT limits for connecting hardware at key frequencies	146
Table D.30 — Formulae for PSAFEXT limits for connecting hardware	146
Table D.31 — PSAFEXT limits for connecting hardware at key frequencies	146
Table D.32 — Standards for solderless connections	147
Table D.33 — Standards for free and fixed connectors (modular plugs and jacks)	148
Table D.34 — Standards for M12 style connectors	148
Table D.35 — Free and fixed connectors (modular plugs and jacks) operations matrix	149
Table D.36 — Reference for reliability testing of other connecting hardware	149
Table D.37 — Other connecting hardware operations matrix	150
Table F.1 — Supported ICT and BCT applications using balanced cabling	152
Table F.2 — Modular connector pin assignment for ICT applications	155
Table F.3 — Supported ICT and BCT applications using balanced cabling in industrial spaces	156
Table F.4 — Supported BCT applications using coaxial cabling	157
Table F.5 — Maximum channel insertion loss and lengths for applications supported with multimode optical fibres	158
Table F.6 — Maximum channel insertion loss and lengths for applications supported with single-mode optical fibres	159

Table F.7 — Maximum channel insertion loss and lengths for applications supported with multimode optical fibres in computer room spaces	160
Table F.8 — Maximum channel insertion loss and lengths for applications supported with single-mode optical fibres in computer room spaces	161
Table F.9 — Maximum channel insertion loss and lengths for applications supported with multimode optical fibres in industrial spaces	162
Table F.10 — Maximum channel insertion loss and lengths for applications supported with single-mode optical fibres in industrial spaces.....	162
Table G.1 — Derivation of boundaries for mechanical criteria in Table 3.....	165
Table G.2 — Derivation of boundaries for ingress protection criteria in Table 3	165
Table G.3 — Derivation of boundaries for climatic and chemical criteria in Table 3.....	166
Table G.4 — Derivation of boundaries chemical criteria in Table 3.....	167
Table G.5 — Derivation of boundaries for electromagnetic criteria in Table 3	170
Table G.6 — Coupling mechanisms for common noise sources	171
Table I.1 — Test regime for reference conformance and installation conformance of balanced cabling to EN 50173 series standards	175
Table I.2 — Test regime for reference conformance and installation conformance to EN 50173 series standards – Optical fibre cabling.....	177

iTech STANDARD PREVIEW
<https://standards.iteh.ai/catalog/standards/sist/a9ca8986-d662-4fa9-a28f-9f7c94d34a01/sist-en-50173-1-2018>

EN 50173-1:2018 (E)**European foreword**

This document (EN 50173-1:2018) was prepared by CLC/TC 215, "*Electrotechnical aspects of telecommunication equipment*".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-03-19
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2021-03-19

This document supersedes EN 50173-1:2011.

The first edition of EN 50173-1, published in 2002, has been developed to enable the application-independent cabling to support ICT applications in office premises. Their basic principles, however, are applicable to other types of applications and in other types of premises.

This edition of EN 50173-1:

- a) introduces new balanced cabling component Categories 8.1 and 8.2 to support new channel Classes I and II;
- b) removes balanced cabling components and channel Class CCCB;
- c) removes the optical fibre Classes concept;
- d) defines a new ~~cabled optical fibre~~ **Category OM5**;
- e) updates Annex F "Supported applications";
- f) amends various other subclauses, tables and figures.

TC 215 has decided to establish relevant European Standards which address the specific requirements of these premises. In order to point out the commonalities of these cabling design standards, these ENs are published as individual parts of the series EN 50173, thus also acknowledging that standards users recognize the designation "EN 50173" as a synonym for generic cabling design.

At the time of publication of this European Standard, series EN 50173 comprises the following standards:

EN 50173-1	Information technology – Generic cabling systems – Part 1: General requirements
EN 50173-2	Information technology – Generic cabling systems – Part 2: Office spaces
EN 50173-3	Information technology – Generic cabling systems – Part 3: Industrial spaces
EN 50173-4	Information technology – Generic cabling systems – Part 4: Homes
EN 50173-5	Information technology – Generic cabling systems – Part 5: Data centre spaces
EN 50173-6	Information technology – Generic cabling systems – Part 6: Distributed building services

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

Introduction

This European Standard contains general requirements in support of the other standards in the EN 50173 series.

It should be noted that generic cabling is a passive system and cannot be tested for EMC compliance individually. Application-specific equipment, designed for one or more cabling media, is required to meet relevant EMC standards on those media. Care should be taken that the installation of any of those media in a cabling system does not degrade the characteristics of the system. The installation methods of EN 50174 series should be used to minimise the effect of electromagnetic disturbances. For EMC requirements of BCT cabling see EN 50083-8.

Figure 1 and Table 1 show the schematic and contextual relationships between the standards produced by TC 215 for information technology cabling, namely:

- 1) this and other parts of the EN 50173 series;
- 2) installation (EN 50174 series);
- 3) bonding (EN 50310).

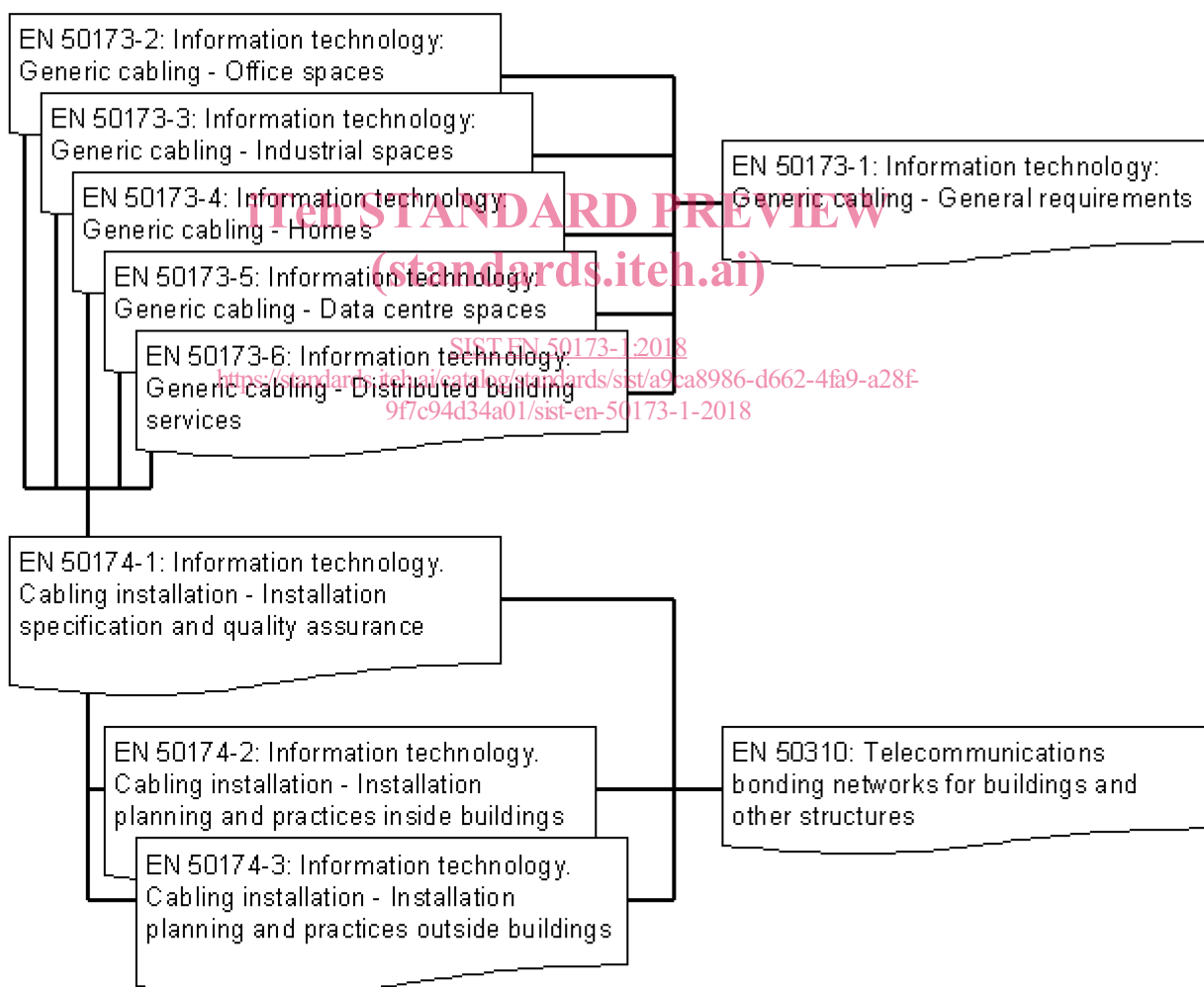


Figure 1 — Schematic relationship between the EN 50173 series and other relevant standards