

# **SLOVENSKI STANDARD**

## **SIST EN 60695-6-1:2005/A1:2010**

**01-december-2010**

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**Preskušanje požarne ogroženosti - 6-1. del: Otemnitev dima - Splošna navodila - Dopolnilo A1 (IEC 60695-6-1:2005/A1:2010)**

Fire hazard testing - Part 6-1: Smoke obscuration - General guidance (IEC 60695-6-1:2005/A1:2010)

Prüfungen zur Beurteilung der Brandgefahr - Teil 6-1: Sichtminderung durch Rauch - Allgemeiner Leitfaden (IEC 60695-6-1:2005/A1:2010)

Essais relatifs aux risques du feu - Partie 6-1: Opacité des fumées - Lignes directrices générales (CEI 60695-6-1:2005/A1:2010)

<https://standards.iteh.ai/catalog/standards/sist/4d60e177-c8a8-4023-88a4-66f86e8a343a/sist-en-60695-6-1-2005-a1-2010>

**Ta slovenski standard je istoveten z: EN 60695-6-1:2005/A1:2010**

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**ICS:**

13.220.40	Sposobnost vžiga in obnašanje materialov in proizvodov pri gorenju	Ignitability and burning behaviour of materials and products
29.020	Elektrotehnika na splošno	Electrical engineering in general

**SIST EN 60695-6-1:2005/A1:2010**

**en**

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SIST EN 60695-6-1:2005/A1:2010

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60695-6-1/A1**

September 2010

ICS 13.220.99; 29.020

English version

**Fire hazard testing -  
Part 6-1: Smoke obscuration -  
General guidance  
(IEC 60695-6-1:2005/A1:2010)**

Essais relatifs aux risques du feu -  
Partie 6-1: Opacité des fumées -  
Lignes directrices générales  
(CEI 60695-6-1:2005/A1:2010)

Prüfungen zur Beurteilung  
der Brandgefahr -  
Teil 6-1: Sichtminderung durch Rauch -  
Allgemeiner Leitfaden  
(IEC 60695-6-1:2005/A1:2010)

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This amendment A1 modifies the European Standard EN 60695-6-1:2005; it was approved by CENELEC on 2010-09-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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

The text of document 89/905/CDV, future amendment 1 to IEC 60695-6-1:2005, prepared by IEC TC 89, Fire hazard testing, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60695-6-1:2005 on 2010-09-01.

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 amendment has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2011-06-01 |
| – latest date by which the national standards conflicting with the amendment have to be withdrawn   | (dow) | 2013-09-01 |

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## Endorsement notice

The text of amendment 1:2010 to the International Standard IEC 60695-6-1:2005 was approved by CENELEC as an amendment to the European Standard without any modification.

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[SIST EN 60695-6-1:2005/A1:2010](https://standards.iteh.ai/catalog/standards/sist/4d60e177-c8a8-4023-88a4-66f86e8a343a/sist-en-60695-6-1-2005-a1-2010)

<https://standards.iteh.ai/catalog/standards/sist/4d60e177-c8a8-4023-88a4-66f86e8a343a/sist-en-60695-6-1-2005-a1-2010>

Replace Annex ZA of EN 60695-6-1:2005 by the following:

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
-	-	Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item	EN 13823	2002
IEC 60695-1-10	-	Fire hazard testing - Part 1-10: Guidance for assessing the fire hazard of electrotechnical products - General guidelines	EN 60695-1-10	-
IEC 60695-1-11	-	Fire hazard testing - Part 1-11: Guidance for assessing the fire hazard of electrotechnical products - Fire hazard assessment	EN 60695-1-11	-
IEC 60695-4	2005	Fire hazard testing - Part 4: Terminology concerning fire tests for electrotechnical products	EN 60695-4	2006
IEC 60695-6-2	-	Fire hazard testing - Part 6-2: Smoke obscuration - Summary and relevance of test methods	EN 60695-6-2	-
IEC 60695-6-30	1996	Fire hazard testing - Part 6: Guidance and test methods on the assessment of obscuration hazard of vision caused by smoke opacity from electrotechnical products involved in fires - Section 30: Small-scale static method - Determination of smoke opacity - Description of the apparatus	-	-
IEC 60695-6-31	1999	Fire hazard testing - Part 6-31: Smoke obscuration - Small-scale static test - Materials	-	-
IEC Guide 104	1997	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-
ISO/IEC Guide 51	1999	Safety aspects - Guidelines for their inclusion in standards	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 5659-2	2006	Plastics - Smoke generation - Part 2: Determination of optical density by a single-chamber test	EN ISO 5659-2	2006
ISO 5660-2	2002	Reaction-to-fire tests - Heat release, smoke production and mass loss rate - Part 2: Smoke production rate (dynamic measurement)	-	-
ISO 13943	2008	Fire safety - Vocabulary	EN ISO 13943	2010
ISO 19706	2007	Guidelines for assessing the fire threat to people	-	-
NOTE ISO 9122-1:1989, <i>Toxicity testing of fire effluents – Part 1: General</i> , has been withdrawn and replaced by ISO 19706:2007.				
ASTM E 1354	2008	Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter	-	-

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 60695-6-1:2005/A1:2010](https://standards.iteh.ai/catalog/standards/sist/4d60e177-c8a8-4023-88a4-66f86e8a343a/sist-en-60695-6-1-2005-a1-2010)

<https://standards.iteh.ai/catalog/standards/sist/4d60e177-c8a8-4023-88a4-66f86e8a343a/sist-en-60695-6-1-2005-a1-2010>



IEC 60695-6-1

Edition 2.0 2010-05

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

BASIC SAFETY PUBLICATION

PUBLICATION FONDAMENTALE DE SÉCURITÉ

AMENDMENT 1

AMENDEMENT 1

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

**Fire hazard testing –****Part 6-1: Smoke obscuration – General guidance**

<https://standards.iteh.ai/catalog/standards/sist/4d60c177-c8a8-4023-88a4-66f86e8a343a/sist-en-60695-6-1-2005-a1-2010>

**Essais relatifs aux risques du feu –****Partie 6-1: Opacité des fumées – Lignes directrices générales**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE  
CODE PRIX

N

ICS 13.220.99; 29.020

ISBN 978-2-88910-939-5

## FOREWORD

This amendment has been prepared by IEC technical committee 89: Fire hazard testing.

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

CDV	Report on voting
89/905/CDV	89/946A/RVC

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site 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.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

### 2 Normative references

[SIST EN 60695-6-1:2005/A1:2010](https://standards.iteh.ai/catalog/standards/sist/4d60e177-c8a8-4023-88a4-66f86e8a343a/sist-en-60695-6-1-2005-a1-2010)

<https://standards.iteh.ai/catalog/standards/sist/4d60e177-c8a8-4023-88a4-66f86e8a343a/sist-en-60695-6-1-2005-a1-2010>

*Replace the text of this clause with the following:*

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.

IEC 60695-1-10, *Fire hazard testing – Part 1-10: Guidance for assessing the fire hazard of electrotechnical products – General guidelines*

IEC 60695-1-11<sup>1</sup>, *Fire hazard testing – Part 1-11: Guidance for assessing the fire hazard of electrotechnical products – Fire hazard assessment*

IEC 60695-4:2005, *Fire hazard testing – Part 4: Terminology concerning fire tests for electrotechnical products*

IEC 60695-6-2<sup>2</sup>, *Fire hazard testing – Part 6-2: Smoke obscuration – Summary and relevance of test methods*

IEC 60695-6-30:1996, *Fire hazard testing – Part 6: Guidance and test methods on the assessment of obscuration hazard of vision caused by smoke opacity from electrotechnical products involved in fires – Section 30: Small-scale static method – Determination of smoke opacity – Description of the apparatus*

<sup>1</sup> To be published.

<sup>2</sup> To be published.



IEC 60695-6-31:1999, *Fire hazard testing – Part 6-31: Smoke obscuration – Small-scale static test – Materials*

IEC Guide 104:1997, *The preparation of safety publications and the use of basic safety publications and group safety publications*

ISO/IEC Guide 51:1999, *Safety aspects – Guidelines for inclusion in standards*

ISO 5659-2:2006, *Plastics – Smoke generation – Part 2: Determination of optical density by a single-chamber test*

ISO 5660-2:2002, *Reaction-to-fire tests – Heat release, smoke production and mass loss rate – Part 2: Smoke production rate (dynamic measurement)*

ISO 13943:2008, *Fire safety – Vocabulary*

ISO 19706:2007, *Guidelines for assessing the fire threat to people*

NOTE ISO 9122-1:1989, *Toxicity testing of fire effluents – Part 1: General*, has been withdrawn and replaced by ISO 19706:2007.

ASTM E 1354:2008, *Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*

EN 13823:2002, *Reaction to fire tests for building products – Building products, excluding floorings, exposed to thermal attack by a single burning item*

### 3 Terms, definitions and symbols

#### 3.1 Terms and definitions

*Replace the text of this subclause with the following:*

For the purposes of this document, the terms and definitions given in ISO/IEC 13943, some of which are reproduced below for the users' convenience, as well as the following apply.

##### 3.1.1

##### **combustion**

exothermic reaction of a substance with an oxidizing agent

NOTE Combustion generally emits fire effluent accompanied by flames and/or glowing.

[ISO/IEC 13943, definition 4.46]

##### 3.1.2

##### **extinction area of smoke**

product of the volume occupied by smoke and the extinction coefficient of the smoke

NOTE It is a measure of the amount of smoke, and the typical units are square metres (m<sup>2</sup>).

[ISO /IEC 13943, definition 4.92]

##### 3.1.3

##### **extinction coefficient**

natural logarithm of the ratio of incident light intensity to transmitted light intensity, per unit light path length

NOTE Typical units are reciprocal metres (m<sup>-1</sup>).