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Standards

Irish Standard  
I.S. EN 60695-9-2:2014

# Fire hazard testing -- Part 9-2: Surface spread of flame - Summary and relevance of test methods

**I.S. EN 60695-9-2:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60695-9-2**

April 2014

ICS 13.220.40; 29.020

English version

**Fire hazard testing -  
Part 9-2: Surface spread of flame -  
Summary and relevance of test methods  
(IEC 60695-9-2:2014)**

Essais relatifs aux risques du feu -  
Partie 9-2: Propagation des flammes  
en surface -  
Résumé et pertinence des méthodes  
d'essai  
(CEI 60695-9-2:2014)

Prüfungen zur Beurteilung der  
Brandgefahr -  
Teil 9-2: Flammenausbreitung auf  
Oberflächen -  
Zusammenfassung und Anwendbarkeit  
der Prüfverfahren  
(IEC 60695-9-2:2014)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 89/1202/FDIS, future edition 1 of IEC 60695-9-2, prepared by IEC/TC 89 "Fire hazard testing" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60695-9-2:2014.

The following dates are fixed:

- latest date by which the document has to be (dop) 2015-01-10  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2017-04-10  
standards conflicting with the  
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This standard is to be used in conjunction with EN 60695-9-1.

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60695-11-10	NOTE	Harmonized as EN 60695-11-10.
IEC 60695-11-20	NOTE	Harmonized as EN 60695-11-20.
IEC 60332-1-1	NOTE	Harmonized as EN 60332-1-1.
IEC 60332-1-2	NOTE	Harmonized as EN 60332-1-2.
IEC 60332-1-3	NOTE	Harmonized as EN 60332-1-3.
IEC 60332-2-1	NOTE	Harmonized as EN 60332-2-1.
IEC 60332-2-2	NOTE	Harmonized as EN 60332-2-2.
IEC 60332-3-10	NOTE	Harmonized as EN 60332-3-10.
IEC 60332-3-21	NOTE	Harmonized as EN 60332-3-21.
IEC 60332-3-22	NOTE	Harmonized as EN 60332-3-22.
IEC 60332-3-23	NOTE	Harmonized as EN 60332-3-23.
IEC 60332-3-24	NOTE	Harmonized as EN 60332-3-24.
IEC 60332-3-25	NOTE	Harmonized as EN 60332-3-25.

## Annex ZA (normative)

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

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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>
IEC 60695-4	-	Fire hazard testing - Part 4: Terminology concerning fire tests for electrotechnical products	EN 60695-4	-
IEC 60695-9-1	-	Fire hazard testing - Part 9-1: Surface spread of flame - General guidance	EN 60695-9-1	-
IEC Guide 104	-	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-
ISO/IEC Guide 51	-	Safety aspects - Guidelines for their inclusion in standards	-	-
ISO 13943	2008	Fire safety - Vocabulary	EN ISO 13943	2010

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**IEC 60695-9-2**

Edition 1.0 2014-03

# **INTERNATIONAL STANDARD**

# **NORME INTERNATIONALE**

**BASIC SAFETY PUBLICATION**

**PUBLICATION FONDAMENTALE DE SÉCURITÉ**

**Fire hazard testing –**

**Part 9-2: Surface spread of flame – Summary and relevance of test methods**

**Essais relatifs aux risques du feu –**

**Partie 9-2: Propagation des flammes en surface – Résumé et pertinence des méthodes d'essai**



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**IEC 60695-9-2**

Edition 1.0 2014-03

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

BASIC SAFETY PUBLICATION

PUBLICATION FONDAMENTALE DE SÉCURITÉ

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## CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references .....	6
3 Terms and definitions .....	7
4 Summary of published test methods .....	11
4.1 Small-scale and intermediate-scale burning tests.....	11
4.1.1 Horizontal and vertical 50 W and 500 W flame tests – IEC 60695-11-10 and IEC 60695-11-20 .....	11
4.1.2 Vertical burning test for cables – IEC 60332-1 [3] .....	12
4.1.3 Vertical burning test for cables – IEC 60332-2 [4] .....	13
4.1.4 Lateral flame spread on building and transport products – ISO 5658-2 [5] .....	13
4.1.5 Intermediate scale test of vertical flame spread – ISO 5658-4 [8].....	14
4.1.6 Fire propagation apparatus, ISO 12136 [9] .....	15
4.1.7 Vertical burning test for aircraft materials – FAR 25 [19] .....	16
4.1.8 Horizontal burning rate for road vehicle materials – ISO 3795 [20].....	17
4.2 Large-scale burning tests.....	17
4.2.1 General .....	17
4.2.2 Vertical burning tests for cables (ladder tests) .....	17
4.2.3 Vertical burning test for cables – NF C 32-070 [40].....	18
4.2.4 Vertical burning test for riser cables – UL 1666 [41].....	23
4.2.5 Horizontal flame spread test for cables – EN 50289-4-11 and NFPA 262 .....	23
Annex A (informative) Repeatability and reproducibility data – ISO 5658-2 .....	25
Annex B (informative) Repeatability and reproducibility data – ISO 5658-4 .....	26
Annex C (informative) Repeatability and reproducibility data – NFPA 262 .....	27
Bibliography.....	28
Table 1 – Summary and comparison of IEC 60332 vertical ladder test methods [21] <sup>a)</sup> .....	19
Table 2 – Summary and comparison of non-IEC vertical ladder test methods.....	21
Table A.1 – Interlaboratory test data for ISO 5658-2 .....	25
Table B.1 – Reproducibility and repeatability data for ISO 5658-4.....	26
Table C.1 – Repeatability and reproducibility data for NFPA 262 .....	27

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## FIRE HAZARD TESTING –

**Part 9-2: Surface spread of flame –  
Summary and relevance of test methods**

## FOREWORD

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International Standard IEC 60695-9-2 has been prepared by IEC technical committee 89: Fire hazard testing.

It has the status of a basic safety publication in accordance with IEC Guide 104 and ISO/IEC Guide 51.

This first edition cancels and replaces the second edition of IEC TS 60695-9-2 published in 2005. This edition constitutes a technical revision.

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

FDIS	Report on voting
89/1202/FDIS	89/1209/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.

A list of all the parts in the 60695 series, under the general title *Fire hazard testing*, can be found on the IEC web site.

This International standard is to be used in conjunction with IEC 60695-9-1.

The committee has decided that the contents of this 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.

## INTRODUCTION

The risk of fire needs to be considered in any electrical circuit. The objective of component, circuit and equipment design, as well as the choice of materials, is to reduce the likelihood of fire, even in the event of foreseeable abnormal use, malfunction or failure.

Electrotechnical products, primarily as victims of fire, may nevertheless contribute to the fire. Fire hazard increases as the burning area increases, leading in some cases to flashover and a fully developed fire. This is a typical fire scenario in buildings. It is therefore useful to measure the rate and extent of the surface spread of flame.

This part of IEC 60695-9 describes surface spread of flame test methods in common use to assess electrotechnical products or materials used in electrotechnical products. It forms part of the IEC 60695-9 series which gives guidance to product committees wishing to incorporate test methods for surface spread of flame in product standards.

IEC 60695-9 consists of the following parts:

- Part 9-1: *Surface spread of flame – General guidance*
- Part 9-2: *Surface spread of flame – Summary and relevance of test methods.*

## **FIRE HAZARD TESTING –**

### **Part 9-2: Surface spread of flame – Summary and relevance of test methods**

#### **1 Scope**

This part of IEC 60695 presents a summary of published test methods that are used to determine the surface spread of flame of electrotechnical products or materials from which they are formed.

It represents the current state of the art of the test methods and, where available, includes special observations on their relevance and use.

The list of test methods is not to be considered exhaustive, and test methods that were not developed by IEC TC89 are not to be considered as endorsed by IEC TC89 unless this is specifically stated.

This summary cannot be used in place of published standards which are the only valid reference documents.

This basic safety publication is intended for use by technical committees in the preparation of standards in accordance with the principles laid down in IEC Guide 104 and ISO/IEC Guide 51.

One of the responsibilities of a technical committee is, wherever applicable, to make use of basic safety publications in the preparation of its publications. The requirements, test methods or test conditions of this basic safety publication will not apply unless specifically referred to or included in the relevant publications.

#### **2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

IEC 60695-9-1, *Fire hazard testing – Part 9-1: Surface spread of flame – General guidance*

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

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

ISO 13943:2008, *Fire Safety – Vocabulary*

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