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INTERNATIONAL STANDARD

Tests on electric and optical fibre cables under fire conditions –
Part 1-2: Test for vertical flame propagation for a single insulated wire or cable –
Procedure for 1 kW pre-mixed flame

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CONTENTS

FOREWORD 3
1 Scope 5
2 Normative references 5
3 Terms and definitions 5
4 Test apparatus 6
5 Procedure 6
5.1 Sample 6
5.2 Conditioning 6
5.3 Positioning of test piece 6
5.4 Flame application 7
5.4.1 Safety warning 7
5.4.2 Positioning of flame 7
5.4.3 Test duration 7
6 Evaluation of test results 8
7 Performance requirements 8
Annex A (normative) Performance requirements 11
Bibliography 12

Figure 1 – Arrangement of test piece in test apparatus 9
Figure 2 – Application of flame to test piece 10

Table 1 – Time for flame application 8
Table A.1 – Performance requirements 11

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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IEC 60332-1-2 has been prepared by IEC technical committee 20: Electric cables. It is an International Standard.

This second edition cancels and replaces the first edition published in 2004 and Amendment 1:2015. This edition constitutes a technical revision.

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

a) modification in positioning of test pieces, which move out of the flame (5.3);
b) addition of performance requirements (Annex A).

The text of this International Standard is based on the following documents:

Draft	Report on voting
20/2232/FDIS	20/2244/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This document has the status of a group safety publication in accordance with IEC Guide 104.

A list of all parts in the IEC 60332 series, published under the general title *Tests on electric and optical fibre cables under fire conditions*, can be found on the IEC website.

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

- reconfirmed,
- withdrawn, or
- revised.

TESTS ON ELECTRIC AND OPTICAL FIBRE CABLES UNDER FIRE CONDITIONS –

Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1 kW pre-mixed flame

1 Scope

This part of IEC 60332 specifies the procedure for testing the resistance to vertical flame propagation for a single vertical electric insulated conductor or cable, or optical fibre cable, under fire conditions using a 1 kW pre-mixed flame. The apparatus is described in IEC 60332-1-1.

NOTE 1 Testing to IEC 60332-1-2 can be performed simultaneously with that to IEC 60332-1-3, if required.

This group safety publication focusing on test method(s) is primarily intended to be used as a product safety standard for the products mentioned in the scope, but is also intended to be used by technical committees in the preparation of standards for products similar to those mentioned in the scope of this group safety publication, in accordance with the principles laid down in IEC Guide 104 and ISO/IEC Guide 51.

NOTE 2 The performing of this test method on a single insulated conductor or cable or optical fibre cable does not provide compliance with fire propagation requirements in relevant standards in the case that the single insulated conductor or cable or optical fibre cable is installed with or amongst other cables as a group. (See the IEC 60332-3 series).

One of the responsibilities of a technical committee is, wherever applicable, to make use of basic safety publications and/or group safety publications in the preparation of its publications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60332-1-1, *Tests on electric and optical fibre cables under fire conditions – Part 1-1: Test for vertical flame propagation for a single insulated wire or cable – Apparatus*

IEC 60811-203, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 203: General tests – Measurement of overall dimensions*