



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 50265-2-2:1999

ICS 13.220.40

29.060.20

**COMMON TESTS METHODS FOR CABLES
UNDER FIRE CONDITIONS - TEST FOR
RESISTANCE TO VERTICAL FLAME
PROPAGATION FOR A SINGLE INSULATED
CONDUCTOR OR CABLE
PART 2-2: PROCEDURES - DIFFUSION
FLAME**

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*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland
and comes into effect on
January 8, 1999*

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Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50265-2-2

July 1998

ICS 13.220.40; 29.060.20

Supersedes HD 405.2 S1:1991

Descriptors: Electrical installation, electrical cables, insulated conductors, insulated cables, fire tests, flammability tests, flame propagation, testing conditions, procedures

English version

**Common tests methods for cables under fire conditions - Test for resistance to vertical flame propagation for a single insulated conductor or cable
Part 2-2: Procedures - Diffusion flame**

Méthodes d'essai communes aux câbles soumis au feu - Essai de résistance à la propagation verticale de la flamme sur un conducteur ou câble isolé
Partie 2-2: Procédures - Flamme de type à diffusion

Allgemeine Prüfverfahren für das Verhalten von Kabeln und isolierten Leitungen im Brandfall - Prüfung der vertikalen Flammenausbreitung an einer Ader oder einem Kabel
Teil 2-2: Prüfverfahren - Leuchtende Flamme

This European Standard was approved by CENELEC on 1998-04-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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CENELEC

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

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FOREWORD

This European Standard was prepared by the Technical Committee CENELEC TC 20, Electric Cables.

When used in conjunction with EN 50265-1 this European Standard supersedes HD 405.2 S1.

Significant technical differences are:

- a) improved arrangements for support and testing of optical fibre cables;
- b) transfer of requirements to an informative annex, as recommendations only.

The text of the draft was submitted to the *Unique Acceptance Procedure* and was approved by CENELEC as EN 50265-2-2 on 1998-04-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 1999-03-01
- latest date by which national standards conflicting
with the EN have to be withdrawn (dow) 2000-03-01

Annexes designated "informative" are given for information only. In this standard annexes A and B are *informative*.

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1 Scope

EN 50265 specifies a method of test for resistance to vertical flame propagation for a single electrical insulated conductor or cable, or optical cable, under fire conditions. Part 1 specifies the test apparatus, and Part 2 specifies various test methods and procedures.

EN 50265-2-2 specifies the procedure for testing small optical fibre cables or a small insulated conductor or cable when the method specified in EN 50265-2-1 is not suitable because some small fibre cables may break or small conductors may melt during the application of the flame. The recommended range of application is for the testing of single insulated conductors or cables of less than 0,5 mm² cross-section.

This standard includes an informative annex of recommended requirements for conformity.

NOTE: Since the use of insulated conductor or cable which retards flame propagation and complies with the recommended requirements of this standard is not sufficient by itself to prevent propagation of fire under all conditions of installation, it is recommended that wherever the risk of propagation is high, for example in long vertical runs of bunches of cables, special installation precautions should also be taken. It cannot be assumed that because the sample of cable complies with the performance requirements recommended in this standard a bunch of cables will behave in a similar manner. (See EN 50266 - under preparation.)

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 50265-1 Common test methods for cables under fire conditions - Test for resistance to vertical flame propagation for a single insulated conductor or cable -- Part 1: Apparatus

EN 60695-4 Fire hazard testing -- Part 4: Terminology concerning fire tests

NOTE. IEC 60695 is in the course of re-numbering its Parts and Sections. This will also affect the equivalent ENs.

3 Definitions

For the purposes of EN 50265-2-2 the following definitions apply. The definitions are taken from EN 60695-4.

3.1 **ignition source:** A source of energy that initiates combustion.

3.2 **char:** Carbonaceous residue resulting from pyrolysis or incomplete combustion.

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