Irish Standard
I.S. EN 60626-2:2009

Combined flexible materials for electrical insulation -- Part 2: Methods of test (IEC 60626-2:2009 (EQV))

I.S. EN 60626-2:2009

Incorporating amendments/corrigenda issued since publication:

This document replaces:	*This document is based on:*	*Published:*
EN 60626-2:1995	EN 60626-2:2009 EN 60626-2:1995	9 December, 2009 20 November, 1998

This document was published under the authority of the NSAI and comes into effect on:

9 February, 2010

ICS number:
17.220.99
29.035.01

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

I.S. EN 60626-2:2009

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60626-2

December 2009

ICS 17.220.99; 29.035.01

Supersedes EN 60626-2:1995

English version

Combined flexible materials for electrical insulation - Part 2: Methods of test

(IEC 60626-2:2009)

Matériaux combinés souples destinés à l'isolement électrique - Partie 2: Méthodes d'essai (CEI 60626-2:2009)

Flexible Mehrschichtisolierstoffe zur elektrischen Isolierung - Teil 2: Prüfverfahren (IEC 60626-2:2009)

This European Standard was approved by CENELEC on 2009-10-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, 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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60626-2:2009 E

Foreword

The text of document 15/470/CDV, future edition 3 of IEC 60626-2, prepared by IEC TC 15, Solid electrical insulating materials, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60626-2 on 2009-10-01.

This European Standard supersedes EN 60626-2:1995.

The main changes from EN 60626-2:1995 are as follows: some tests such as for edge tearing and stiffness, actually not used and not listed in the requirements of Part 3, were deleted.

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)	2010-07-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2012-10-01

Annex ZA has been added by CENELEC.

———————

Endorsement notice

The text of the International Standard IEC 60626-2:2009 was approved by CENELEC as a European Standard without any modification.

———————

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.

Publication	Year	Title	EN/HD	Year
IEC 60216-4-1	2006	Electrical insulating materials - Thermal endurance properties - Part 4-1: Ageing ovens - Single-chamber ovens	EN 60216-4-1	2006
IEC 60243-1	1998	Electrical strength of insulating materials - Test methods - Part 1: Tests at power frequencies	EN 60243-1	1998
IEC 60626-3	2008	Combined flexible materials for electrical insulation - Part 3: Specifications for individual materials	EN 60626-3 + corr. October	2008 2008
ISO 536	1995	Paper and board - Determination of grammage	-	-

This page is intentionally left BLANK.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMBINED FLEXIBLE MATERIALS FOR ELECTRICAL INSULATION –

Part 2: Methods of test

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60626-2 has been prepared by IEC technical committee 15: Solid electrical insulating materials.

This third edition cancels and replaces the second edition published in 1995 and constitutes a major technical revision. The main changes from the previous edition are as follows: some tests such as for edge tearing and stiffness, actually not used and not listed in the requirements of Part 3, were deleted.

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

CDV	Report on voting
15/470/CDV	15/512/RVC

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 IEC 60626 series, under the general title *Combined flexible materials for electrical insulation*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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

This International standard deals with test methods of combined flexible materials consisting of two or more different insulating materials laminated together as described in IEC 60626-1. The components of flexible combined materials are polymer film and fibrous sheet material. This standard does not include materials based on mica paper, as primary component, covered by IEC 60371, but mica paper may be used as complementary material.

The series has three parts describing:

Part 1: Definitions and general requirements (IEC 60626-1)

Part 2: Methods of test (IEC 60626-2)

Part 3: Specifications for individual materials (IEC 60626-3)

COMBINED FLEXIBLE MATERIALS FOR ELECTRICAL INSULATION –

Part 2: Methods of test

1 Scope

This International Standard provides the test methods for combined flexible materials for electrical insulation. Some properties and relevant test methods, according to the perfomance requirements of IEC 60626-3, were confirmed. Other test methods are described as a supplement of guidance for further specification that could be agreed between customer and supplier to meet specific needs of the end use.

Materials which conform to this specification meet established levels of performance. However, the selection of material by a user for a specific application should be based on the actual requirements necessary for adequate performance in that application and not based on this specification alone.

SAFETY WARNING

It is the responsibility of the user of the methods contained or referred to in this document to ensure that they are used in a safe manner.

2 Normative references

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 60216-4-1:2006, *Electrical insulating materials – Thermal endurance properties – Part 4: Ageing ovens – Section 1: Single-chamber ovens*

IEC 60243-1:1998, *Electrical strength of insulating materials – Test methods – Part 1: Tests at power frequencies*

IEC 60626-3:2008, *Combined flexible materials for electrical insulation – Part 3: Specifications for individual materials*

ISO 536: 1995, *Paper and board – Determination of grammage*

3 General requirements on tests

Unless otherwise specified, the test specimens, after being cut, shall be conditioned for 24 h at (23 ± 2) °C and (50 ± 5) % relative humidity. If the test is not conducted in this standard atmosphere, the test shall be made within 5 min after removal from the standard atmosphere.