



**NSAI**  
Standards

Irish Standard  
I.S. EN 60811-406:2012

Electric and optical fibre cables - Test methods for non-metallic materials -- Part 406: Miscellaneous tests - Resistance to stress cracking of polyethylene and polypropylene compounds (IEC 60811-406:2012 (EQV))

## I.S. EN 60811-406:2012

*Incorporating amendments/corrigenda issued since publication:*

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English version

**Electric and optical fibre cables -  
Test methods for non-metallic materials -  
Part 406: Miscellaneous tests -  
Resistance to stress cracking of polyethylene and polypropylene  
compounds  
(IEC 60811-406:2012)**

Câbles électriques et à fibres optiques -  
Méthodes d'essai pour les matériaux non-  
métalliques -  
Partie 406: Essais divers -  
Résistance des mélanges polyéthylène et  
polypropylène aux craquelures  
(CEI 60811-406:2012)

Kabel, isolierte Leitungen und  
Glasfaserkabel -  
Prüfverfahren für nichtmetallene  
Werkstoffe -  
Teil 406: Sonstige Prüfungen -  
Prüfung der Spannungsrissbeständigkeit  
von Polyethylen- und  
Polypropylenmischungen  
(IEC 60811-406:2012)

This European Standard was approved by CENELEC on 2012-04-16. 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.

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

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

**I.S. EN 60811-406:2012**

EN 60811-406:2012

- 2 -

**Foreword**

The text of document 20/1290/FDIS, future edition 1 of IEC 60811-406, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60811-406:2012.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2013-01-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-04-16

This document supersedes Clause 8 of EN 60811-4-1:2004 (partially). Full details of the replacements are shown in Annex A of EN 60811-100:2012.

There are no technical changes with respect to EN 60811-4-1:2004, but see the Foreword to EN 60811-100:2012.

This standard is to be read in conjunction with EN 60811-100.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC)

**Endorsement notice**

The text of the International Standard IEC 60811-406:2012 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 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 60811-100	2012	Electric and optical fibre cables - Test methods for non-metallic materials - Part 100: General	EN 60811-100	2012

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## CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references .....	6
3 Terms and definitions .....	6
4 Test method .....	6
4.1 General.....	6
4.2 Method A.....	7
4.2.1 Reagent.....	7
4.2.2 Apparatus.....	7
4.2.3 Test pieces preparation .....	8
4.2.4 Test procedure .....	8
4.2.5 Evaluation of results .....	8
4.3 Method B.....	9
4.3.1 Reagent.....	9
4.3.2 Apparatus.....	9
4.3.3 Test pieces preparation .....	9
4.3.4 Test procedure .....	9
4.3.5 Evaluation of results .....	9
5 Test report.....	9
Annex A (normative) Test sheet preparation .....	13
Annex B (informative) Tools and reagents.....	15
Bibliography.....	16
Figure 1 – Notching device .....	10
Figure 2 – Blade .....	10
Figure 3 – Bend clamp assembly .....	11
Figure 4 – Transfer tool assembly.....	11
Figure 5 – Brass channel test piece holder .....	11
Figure 6 – Test tube with inserted brass channel test piece holder as in 4.2.2 h)), containing ten test pieces .....	12
Figure 7 – Notched test pieces .....	12
Table 1 – Summary of test conditions and requirements .....	7
Table 2 – Notched test pieces size according to polyethylene density.....	8

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**ELECTRIC AND OPTICAL FIBRE CABLES –  
TEST METHODS FOR NON-METALLIC MATERIALS –**

**Part 406: Miscellaneous tests –  
Resistance to stress cracking of polyethylene  
and polypropylene compounds**

FOREWORD

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International Standard IEC 60811-406 has been prepared by IEC technical committee 20: Electric cables.

This Part 406 of IEC 60811 cancels and replaces Clause 8 of IEC 60811-4-1:2004, which is withdrawn. Full details of the replacements are shown in Annex A of IEC 60811-100:2012.

There are no specific technical changes with respect to the previous edition, but see the Foreword to IEC 60811-100:2012.



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

FDIS	Report on voting
20/1290/FDIS	20/1339/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.

This part of IEC 60811 shall be used in conjunction with IEC 60811-100.

A list of all the parts in the IEC 60811 series, published under the general title *Electric and optical fibre cables – Test methods for non-metallic materials*, can be found on the IEC website.

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 IEC 60811 series specifies the test methods to be used for testing non-metallic materials of all types of cables. These test methods are intended to be referenced in standards for cable construction and for cable materials.

NOTE 1 Non-metallic materials are typically used for insulating, sheathing, bedding, filling or taping within cables.

NOTE 2 These test methods are accepted as basic and fundamental and have been developed and used over many years principally for the materials in all energy cables. They have also been widely accepted and used for other cables, in particular optical fibre cables, communication and control cables and cables for ships and offshore applications.

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